

Session Title	Session Code	Session Details	Date	Room	Start Time	End Time	Paper Title	Authors
Active Antennas for Onboard Space Applications	CS01	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B5	08:30	08:50	Active Antenna Developments, Challenges and the Future	Sonya Amos (Airbus Defence and Space, United Kingdom (Great Britain)); Glyn Thomas (Airbus Defence and Space, United Kingdom (Great Britain)); Carolina Tienda (Airbus Defence and Space, United Kingdom (Great Britain)); David Dupuy (Airbus Defence and Space, United Kingdom (Great Britain))
Active Antennas for Onboard Space Applications	CS01	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B5	08:50	09:10	Front End Radiating Module for Advanced Active Antenna	Benoit Lejay (Thales Alenia Space, France)
Active Antennas for Onboard Space Applications	CS01	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B5	09:10	09:30	Active Antennas Radiated Spurious	Jonathan Hill (MDA Corporation, Canada); Michel Bellemare (MDA, Canada); Yves Demers (MDA Corporation, Canada); Nicholas Boudreau (MDA, Canada); Jean-Daniel Dea (MDA, Canada); Eric Amyotte (MDA, Canada)
Active Antennas for Onboard Space Applications	CS01	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B5	09:30	09:50	Additive Manufacturing: Enabling Technology for Active Antennas in LEO and GEO Satellites	Esteban Menargues (SWISSto12, Switzerland); Santiago Capdevila (SWISSto12, Switzerland); Tomislav Debgovic (SWISSto12 SA, Switzerland); Maria Garcia-Vigueras (IETR-INSa Rennes, France); Emile de Rijk (SWISSto12 SA, Switzerland)
Active Antennas for Onboard Space Applications	CS01	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B5	09:50	10:10	Potential Applications of Active Antenna Technologies for Emerging NASA Space Communications Scenarios	Felix Miranda (NASA John H. Glenn Research Center, USA)
Active Antennas for Onboard Space Applications	CS01	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B5	10:40	11:00	Active Antennas for Earth Observation Missions in Thales Alenia Space Italia	Pasquale Capece (Thales Alenia Space Italia, Italy); Giovanni Gasparro (THALES ALENIA SPACE ITALIA, Italy); Roberto Giordani (Thales Alenia Space Italia, Italy); Roberto Mizzoni (Thales Alenia Space Italia, Italy); Alberto Meschini (ThalesAleniaSpace-Italia, Italy); Giovanni Mannocchi (THALES ALENIA SPACE ITALIA, Italy); Andrea Suriani (THALES ALENIA SPACE, Italy); Salvatore Contu (Thales Alenia Space, Italy)
Active Antennas for Onboard Space Applications	CS01	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B5	11:00	11:20	AIRBUS DS SPAIN Active Antennas for Earth Observation, Telecom, and Deep Space: Past and Future Challenges	Antonio Montesano (AIRBUS DS, Spain)
Active Antennas for Onboard Space Applications	CS01	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B5	11:20	11:40	Rigid-Flexible Antenna Array (RFAA) for Lightweight Deployable Apertures	William F. Moulder (MIT Lincoln Laboratory, USA); Rabindra N. Das (MIT Lincoln Laboratory, USA); Andrew C. Maccabe (MIT Lincoln Laboratory, USA); Landen A. Bowen (MIT Lincoln Laboratory, USA); Erik M Thompson (MIT Lincoln Laboratory, USA); Patrick J Bell (MIT Lincoln Laboratory, USA)
Active Antennas for Onboard Space Applications	CS01	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B5	11:40	12:00	NISAR Flight Feed Passive Antenna Measurements	Paolo Focardi (Jet Propulsion Laboratory & California Institute of Technology, USA); Jefferson Harrell (Jet Propulsion Laboratory, USA)
Active Antennas for Onboard Space Applications	CS01	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B5	12:00	12:20	Multibeam Array Antennas Based on Evanescent-Mode Ridge-Waveguide Radiating Filters	Daniel Sanchez (Universidad de Valencia, Spain); Mariano Baquero-Escudero (Universidad Polit�cnica de Valencia, Spain); Pablo Soto (Universidad Polit�cnica de Valencia, Spain); Vicente Boria (Universidad Polit�cnica de Valencia, Spain); Giovanni Toso (European Space Agency, ESA ESTEC, The Netherlands); Piero Angeletti (European Space Agency, The Netherlands); Marco Guglielmi (University of Valencia, Spain)
Advanced Antenna Arrays for 5G and Beyond	CS02	T02 Millimetre wave 5G / Convened Session / Antennas	16 Mar 2020	A2	13:30	13:50	Beam Steerable Reflectarray Enabling CubeSat Internet of Space: Conceptualization and Design	Junbo Wang (University of California, Los Angeles, USA); Vignesh Manohar (University of California, Los Angeles, USA); Yahya Rahmat-Samii (University of California Los Angeles (UCLA) & UCLA, USA)
Advanced Antenna Arrays for 5G and Beyond	CS02	T02 Millimetre wave 5G / Convened Session / Antennas	16 Mar 2020	A2	13:50	14:10	A Wideband Differentially Fed Multi-beam Antenna Array	He Zhu (University of Technology Sydney, Australia); Y. Jay Guo (University of Technology Sydney, Australia)
Advanced Antenna Arrays for 5G and Beyond	CS02	T02 Millimetre wave 5G / Convened Session / Antennas	16 Mar 2020	A2	14:10	14:30	On the Design of a 27-dBi Phased Array for 5G Point-to-Point Communications	Huasheng Zhang (Delft University of Technology, The Netherlands); Sjoerd Bosma (Delft University of Technology, The Netherlands); Andrea Neto (Delft University of Technology, The Netherlands); Ulrik Imberg (Huawei Technologies, Sweden AB, Sweden); Nuria Lombart (Delft University of Technology, The Netherlands)
Advanced Antenna Arrays for 5G and Beyond	CS02	T02 Millimetre wave 5G / Convened Session / Antennas	16 Mar 2020	A2	14:30	14:50	3-D Printed High-Efficiency Wideband 2X2 and 4X4 Double-Ridged Waveguide Antenna Arrays for Ku-Band Satcom-On-The-Move Applications	Francesco Filice (Polytech'Lab, University of Nice & ST Microelectronics Crolles, France); Nour Nachabe (University of Nice Sophia Antipolis, France); Fr�d�ric Giansello (STMicroelectronics, France); Guillermo Alvarez Narciandi (University of Oviedo, Spain); Jaime Laviada (Universidad de Oviedo, Spain); Fernando Las-Heras (University of Oviedo, Spain); Cyril Luxey (University Nice Sophia-Antipolis, France)
Advanced Antenna Arrays for 5G and Beyond	CS02	T02 Millimetre wave 5G / Convened Session / Antennas	16 Mar 2020	A2	14:50	15:10	Circularly Polarized Antenna Array Based on Microstrip Ridge Gap Waveguide at 60 GHz	Abdelmoniem Hassan (Concordia University, Canada); Ahmed Kishk (Concordia University, Canada)
Advanced Antenna Arrays for 5G and Beyond	CS02	T02 Millimetre wave 5G / Convened Session / Antennas	16 Mar 2020	A2	15:10	15:30	Millimeter-Wave Dual-Polarized Slot Array Antenna Using a TE210 and TE120 Mode	Qingling Yang (University of Kent, United Kingdom (Great Britain)); Steven Gao (University of Kent, United Kingdom (Great Britain)); Lehu Wen (University of Kent, United Kingdom (Great Britain)); Qi Luo (University of Kent, United Kingdom (Great Britain)); Xiaofei Ren (China Research Institute of Radiowave Propagation, China); Jian Wu (China Research Institute of Radiowave Propagation, P. R. China, United Kingdom (Great Britain)); Yong-Ling Ban (University of Electronic Science and Technology of China, China)
Advanced Radar Measurements, Modelling and System Solutions for Vehicular Applications	CS03	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Convened Session / Measurements	17 Mar 2020	B7	16:40	17:00	Bi-static Nearfield Calibration for RCS Measurements in the C-V2X Frequency Range	Andreas Schwind (Technische Universit�t Ilmenau, Germany); Willi Hofmann (Technische Universit�t Ilmenau, Germany); Ralf Stephan (Technische Universit�t Ilmenau, Germany); Reiner S. Thom� (Ilmenau University of Technology, Germany); Matthias Hein (Ilmenau University of Technology, Germany)
Advanced Radar Measurements, Modelling and System Solutions for Vehicular Applications	CS03	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Convened Session / Measurements	17 Mar 2020	B7	17:00	17:20	Extraction of Scattering Centers Using a Greedy Algorithm for Traffic Participant	Sevda Abadpour (Karlsruhe Institute of Technology, Germany); Axel Diewald (Karlsruhe Institute of Technology, Germany); Benjamin Nuss (Karlsruhe Institute of Technology, Germany); Mario Pauli (Karlsruhe Institute of Technology, Germany); Thomas Zwick (Karlsruhe Institute of Technology (KIT), Germany)
Advanced Radar Measurements, Modelling and System Solutions for Vehicular Applications	CS03	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Convened Session / Measurements	17 Mar 2020	B7	17:20	17:40	A Ray Optical Diffraction Model for Car Chassis in V2X Communication	Lennart Thielecke (Technische Universit�t Braunschweig, Germany); Nils Dreyer (TU Braunschweig, Germany); Johannes M. Eckhardt (Technische Universit�t Braunschweig, Germany); Thomas K�rner (Technische Universit�t Braunschweig, Germany)
Advanced Radar Measurements, Modelling and System Solutions for Vehicular Applications	CS03	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Convened Session / Measurements	17 Mar 2020	B7	17:40	18:00	Dynamic Ray Tracing: Introduction and Concept	Denis Bilbashi (University of Bologna, Italy); Enrico M. Vitucci (University of Bologna, Italy); Vittorio Degli-Esposti (University of Bologna, Italy)
Advanced Radar Measurements, Modelling and System Solutions for Vehicular Applications	CS03	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Convened Session / Measurements	17 Mar 2020	B7	18:00	18:20	Physics Based Target Scenario Simulation Using Asymptotic Solver Techniques for Automotive Applications	Markus Laudien (Ansoft Germany, Germany)
Aircraft antennas	T06-A11	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	20 Mar 2020	B7	08:30	08:50	Bandwidth Enhanced Flexible UAV Antenna with 360 Azimuth Coverage for Air to Ground Communication	Azamat Bakytbekov (King Abdullah University of Science and Technology, Saudi Arabia); Atif Shamim (King Abdullah University of Science and Technology, Saudi Arabia)
Aircraft antennas	T06-A11	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	20 Mar 2020	B7	08:50	09:10	Amended Design of Travelling-Wave Slot Arrays	Soumya Sheel (Queensland University of Technology, Australia); Jacob Coetzee (Queensland University of Technology, Australia)
Aircraft antennas	T06-A11	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	20 Mar 2020	B7	09:10	09:30	Study of a Low-Loss Planar Radome for a Wide-Coverage Antenna	Hironaka Nakajima (Mitsubishi Electric Corporation, Japan); Shin-ichi Yamamoto (Mitsubishi Electric Corporation, Japan); Michio Takikawa (Mitsubishi Electric Corporation, Japan); Naofumi Yoneda (Mitsubishi Electric Corporation, Japan)
Aircraft antennas	T06-A11	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	20 Mar 2020	B7	09:30	09:50	Design of Airborne Small Ultra-Wideband Spinning Direction Finding Antennas	Youngju Park (Agency for Defense Development, Korea (South))
Aircraft antennas	T06-A11	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	20 Mar 2020	B7	09:50	10:10	A Novel U-slot Aperture Coupled Annular-Ring Microstrip Patch Antenna for Multiband GNSS Applications	Kush Parikh (Entuple Technologies, India)
Aircraft antennas	T06-A11	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	20 Mar 2020	B7	10:40	11:00	Dual Band GNSS Antenna with High Back Lobe Suppression	Sachit Varma (German Aerospace Center (DLR), Germany); Stefano Caizzone (German Aerospace Center (DLR), Germany)

Aircraft antennas	T06-A11	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	20 Mar 2020	B7	11:00	11:20	Skewed Dipole Linear Array for Angular Filtering	Cristina Yepes (Delft University of Technology, The Netherlands); Erio Gandini (ESA - European Space Agency, The Netherlands); Stefania Monni (TNO Defence Security and Safety, The Netherlands); Frank van Vliet (TNO Defence Security and Safety, The Netherlands); Andrea Neto (Delft University of Technology, The Netherlands); Daniele Cavallo (Delft University of Technology, The Netherlands)
Aircraft antennas	T06-A11	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	20 Mar 2020	B7	11:20	11:40	Edge Truncation Effects in a Wide-Scan Phased Array of Connected Bowtie Antenna Elements	Prabhat Khanal (Chalmers University of Technology, Sweden); Jian Yang (Chalmers University of Technology, Sweden); Marianna Ivashina (Chalmers University of Technology, Sweden); Anders Höök (SAAB AB, Sweden); Ruoshan Luo (SAAB AB, Sweden)
Aircraft antennas	T06-A11	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	20 Mar 2020	B7	11:40	12:00	A Wideband 122 GHz Cavity-Backed Dipole Antenna for Millimeter-Wave Radar Altimetry	Tobias Chaloun (Ulm University, Germany); Philipp Hügler (Ulm University, Germany); Christian Waldschmidt (University of Ulm, Germany)
Aircraft antennas	T06-A11	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	20 Mar 2020	B7	12:00	12:20	Asymmetric Metasurface Antenna with Opposite Currents for Wide Beam and Low Profile Wide-Angle Scanning Phased Array	Yan-He Lv (University of Electronic Science and Technology of China, China); Xiao Ding (University of Electronic Science and Technology of China, China); Bing-Zhong Wang (University of Electronic Science and Technology of China, China)
AMTA Session: Automotive Antenna Measurements and Testing	CS05	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Convened Session / Measurements	16 Mar 2020	B7	13:30	13:50	Recent Developments in Automotive Antenna Measurements	Manuel Sierra-Castañer (Universidad Politécnica de Madrid, Spain)
AMTA Session: Automotive Antenna Measurements and Testing	CS05	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Convened Session / Measurements	16 Mar 2020	B7	13:50	14:10	Exploiting Spatial Derivative Information in Phaseless Near-Field Far-Field Transformations	Alexander Paulus (Technical University of Munich, Germany); Thomas F. Eibert (Technical University of Munich (TUM) & Chair of High-Frequency Engineering (HFT), Germany)
AMTA Session: Automotive Antenna Measurements and Testing	CS05	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Convened Session / Measurements	16 Mar 2020	B7	14:10	14:30	Accurate 3D Phase Recovery of Automotive Antennas Through LTE Power Measurements on A Cylindrical Surface	Philipp Berlt (Technische Universität Ilmenau, Germany); Christian Bornkessel (Technische Universität Ilmenau, Germany); Matthias Hein (Ilmenau University of Technology, Germany)
AMTA Session: Automotive Antenna Measurements and Testing	CS05	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Convened Session / Measurements	16 Mar 2020	B7	14:30	14:50	Modeling of a Far-Field Automotive Antenna Range Using Computational Electromagnetic Tools	Daniel N Aloi (Oakland University, USA); Ehab Abdul-Rahman (Oakland University, USA)
AMTA Session: Automotive Antenna Measurements and Testing	CS05	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Convened Session / Measurements	16 Mar 2020	B7	14:50	15:10	Experimental Comparison of Vehicular Antenna Measurements Performed over Different Floors	Per Iversen (Orbit/FR, USA); John Estrada (MVG, USA); Francesco Saccardi (Microwave Vision Italy, Italy); Lars Foged (Microwave Vision Italy, Italy); Francesca Mici (Consultant, Switzerland); Michael Edgerton (General Motors, USA); Janalee Graham (General Motors, USA)
AMTA Session: Automotive Antenna Measurements and Testing	CS05	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Convened Session / Measurements	16 Mar 2020	B7	15:10	15:30	Wideband Radio Channel Emulation Using Band-stitching Schemes	Yilin Ji (Aalborg University, Denmark); Wei Fan (Aalborg University, Denmark); Gert Pedersen (Aalborg University, Denmark)
AMTA/EurAAP Session: Post Processing Techniques in Antenna Measurements	CS07	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	08:30	08:50	Near-Field to Far-Field Transformation for Fast Linear Slide Measurements	Fernando Rodríguez Varela (Universidad Politécnica de Madrid, Spain); Ruben Tena Sanchez (Technical University of Madrid, Spain); Manuel Jose Lopez Morales (Universidad Carlos III, Spain); Manuel Sierra-Castañer (Universidad Politécnica de Madrid, Spain)
AMTA/EurAAP Session: Post Processing Techniques in Antenna Measurements	CS07	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	08:50	09:10	Fast Single-Cut Antenna Characterization by near Field Measurements	Amedeo Capozzoli (Università di Napoli Federico II, Italy); Claudio Curcio (Università di Napoli Federico II, Italy); Angelo Liso (Università di Napoli Federico II, Italy)
AMTA/EurAAP Session: Post Processing Techniques in Antenna Measurements	CS07	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	09:10	09:30	Single-Cut Near-Field Far-Field Transformation and Implicit Plane-Wave Synthesis for RCS Prediction Including Multiple Scattering Effects	Shuntaro Omi (National Institute of Advanced Industrial Science and Technology, Japan); Michitaka Amezaki (NMIJ/AIST, Japan); Masanobu Hirose (National Institute of Advanced Industrial Science and Technology, Japan); Satoru Kurokawa (National Institute of Advanced Industrial Science and Technology, Japan)
AMTA/EurAAP Session: Post Processing Techniques in Antenna Measurements	CS07	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	09:30	09:50	Experimental Determination of the Total Radiated Power of Automotive Antennas in the Installed State	Muhammad Ehtisham Asghar (Technische Universität Ilmenau, Germany); Christian Bornkessel (Technische Universität Ilmenau, Germany); Matthias Hein (Ilmenau University of Technology, Germany)
AMTA/EurAAP Session: Post Processing Techniques in Antenna Measurements	CS07	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	09:50	10:10	AUT Far-Field Pattern Reconstruction from a Reduced Set of Spherical Near-Field Data Collected in Presence of an Infinite Perfectly Conducting Ground Plane	Francesco D'Agostino (University of Salerno, Italy); Flaminio Ferrara (University of Salerno, Italy); Claudio Gennarelli (University of Salerno, Italy); Rocco Guerriero (University of Salerno, Italy); Massimo Migliozi (University of Salerno, Italy)
AMTA/EurAAP Session: Post Processing Techniques in Antenna Measurements	CS07	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	10:40	11:00	Diagnostics on Electrically Large Structures by a Nested Skeletonization Scheme Enhancement of the Equivalent Current Technique	Lucia Scialacqua (Microwave Vision Italy, Italy); Francesca Mici (Consultant, Switzerland); Lars Foged (Microwave Vision Italy, Italy); Giorgio Giordanengo (LINKS Foundation & Politecnico di Torino, Italy); Marco Righero (LINKS Foundation, Italy); Giuseppe Vecchi (Politecnico di Torino, Italy)
AMTA/EurAAP Session: Post Processing Techniques in Antenna Measurements	CS07	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	11:00	11:20	Suppressing Undesired Echoes by Sparsity Based Time Gating of Reconstructed Sources	Josef Knapp (Technical University of Munich, Germany, Germany); Jonas Kornprobst (Technical University of Munich, Germany); Thomas F. Eibert (Technical University of Munich, Germany, Germany)
AMTA/EurAAP Session: Post Processing Techniques in Antenna Measurements	CS07	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	11:20	11:40	Portable, Freehand System for Antenna Diagnosis Using Amplitude-Only Data	Guillermo Alvarez Nariandi (University of Oviedo, Spain); Jaime Laviada (Universidad de Oviedo, Spain); Yuri Alvarez-Lopez (University of Oviedo, Spain); Guillaume Ducournau (IEMN, University of Lille, France); Cyril Luxey (University Nice Sophia-Antipolis, France); Frédéric Ghanesello (STMicronics, France); Fernando Las-Heras (University of Oviedo, Spain)
AMTA/EurAAP Session: Post Processing Techniques in Antenna Measurements	CS07	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	11:40	12:00	Characterisation of a Fibre-Optic Active Probe for Compensation of the Test-Zone Field	Thomas M Gemmer (RWTH Aachen University, Germany); Wieland Mann (enprobe GmbH, Germany); Dirk Heberling (RWTH Aachen University, Germany)
AMTA/EurAAP Session: Post Processing Techniques in Antenna Measurements	CS07	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	12:00	12:20	Locating Sources of Reflection Errors in an Anechoic Chamber by Creating an Error Surface Plot	Alo-Helene Bester (University of Stellenbosch, South Africa); Petrie Meyer (Stellenbosch University, South Africa)
AMTA/IRACON Session: Over-The-Air Testing of 5G Radios	CS06	T02 Millimetre wave 5G / Convened Session / Measurements	18 Mar 2020	A3	08:30	08:50	Examining and Optimising Far-Field Multi-Probe Anechoic Chambers for 5G NR OTA Testing of Massive MIMO Systems	Stuart F Gregson (Queen Mary, University of London, United Kingdom (Great Britain)); Clive Parini (QOMUL, United Kingdom (Great Britain))
AMTA/IRACON Session: Over-The-Air Testing of 5G Radios	CS06	T02 Millimetre wave 5G / Convened Session / Measurements	18 Mar 2020	A3	08:50	09:10	Mid-field OTA RF Test Method: New Developments and Performance Comparison with the Compact Antenna Test Range (CATR)	Hongwei Kong (Keysight Technologies (China) Co., Ltd., China); Ya Jing (Keysight Technologies, China); Zhu Wen (Keysight Technologies Co. Ltd, China); Li Cao (Keysight Technologies (China) Co., Ltd., China)
AMTA/IRACON Session: Over-The-Air Testing of 5G Radios	CS06	T02 Millimetre wave 5G / Convened Session / Measurements	18 Mar 2020	A3	09:10	09:30	On Noise and Interference Modeling for Over-the-air Testing of MIMO Terminals	Wei Fan (Aalborg University, Denmark); Pekka Kyösti (Keysight Technologies & University of Oulu, Finland); Yilin Ji (Aalborg University, Denmark); Gert Pedersen (Aalborg University, Denmark)
AMTA/IRACON Session: Over-The-Air Testing of 5G Radios	CS06	T02 Millimetre wave 5G / Convened Session / Measurements	18 Mar 2020	A3	09:30	09:50	The Study of 5G Massive MIMO End-to-End MPAC Test Solution	Xiang Zhang (University of Posts and Telecommunications, China); Xiaolong Liu (Beijing University of Post Telecommunications, China); Guiming Wei (China Academy of Information and Communications Technology, China); Yichen Zhao (China Mobile Group Device Co., Ltd, China); Yuhang Guo (Beijing University of Posts and Telecommunications & Intel China Lab, China)
AMTA/IRACON Session: Over-The-Air Testing of 5G Radios	CS06	T02 Millimetre wave 5G / Convened Session / Measurements	18 Mar 2020	A3	09:50	10:10	Chamber Array Antenna Layout for Compact OTA Measurements	Mohammad Poordarab (University of Twente, The Netherlands); Andrés Alayón Glazunov (University of Twente & Chalmers University of Technology, The Netherlands)
AMTA/IRACON Session: Over-The-Air Testing of 5G Radios	CS06	T02 Millimetre wave 5G / Convened Session / Measurements	18 Mar 2020	A3	10:40	11:00	Measurement Characterization of Aperture Correction Technique for EMF	Johan Lundgren (Lund University, Sweden); Jakob Helander (Lund University, Sweden); Mats Gustafsson (Lund University, Sweden)

AMTA/IRACON Session: Over-The-Air Testing of 5G Radios	CS06	T02 Millimetre wave 5G / Convened Session / Measurements	18 Mar 2020	A3	11:00	11:20	OTA Testing of Antennas & Devices Using Plane Wave Generator or Synthesizer	Francesco Scattone (Microwave Vision Group (MVG), Italy); Darko Sekuljica (MVG, Italy); Andrea Giacomini (Microwave Vision Italy, Italy); Francesco Saccardi (Microwave Vision Italy, Italy); Alessandro Scannavini (Microwave Vision Italy, Italy); Lars Foged (Microwave Vision Italy, Italy); Evgenii Kaverine (MVG Industries, France); Nicolas Gross (MVG Industries, France); Per Iversen (Orbit/FR, USA)
AMTA/IRACON Session: Over-The-Air Testing of 5G Radios	CS06	T02 Millimetre wave 5G / Convened Session / Measurements	18 Mar 2020	A3	11:20	11:40	Quiet Zone Verification of Plane Wave Synthesizer Using Polar Near-Field Scanner	Adam Tankielun (Rohde & Schwarz GmbH & Co. KG, Germany); Anes Belkacem (Rohde & Schwarz GmbH & Co. KG, Germany); Mustafa Akincl (Rohde & Schwarz GmbH & Co. KG, Germany); Mert Celik (Rohde & Schwarz GmbH & Co. KG, Germany); Hendrik Bartko (Rohde & Schwarz, Germany); Benoit Derat (Rohde & Schwarz, Spain)
AMTA/IRACON Session: Over-The-Air Testing of 5G Radios	CS06	T02 Millimetre wave 5G / Convened Session / Measurements	18 Mar 2020	A3	11:40	12:00	3D Calibration of an Over-the-Air Testbed for GNSS CRPA Antenna Testing	Renato Zea (Fraunhofer IIS, Germany); Ramona Brochloss-Gerner (Fraunhofer Institute for Integrated Circuits IIS, Germany); Mario Lorenz (Technische Universität Ilmenau, Germany); Markus Landmann (Fraunhofer Institute for Integrated Circuits IIS, Germany); Alexander Rügamer (Fraunhofer IIS, Germany); Giovanni Del Galdo (Fraunhofer Institute for Integrated Circuits IIS & Technische Universität Ilmenau, Germany)
AMTA/IRACON Session: Over-The-Air Testing of 5G Radios	CS06	T02 Millimetre wave 5G / Convened Session / Measurements	18 Mar 2020	A3	12:00	12:20	Comparing Options for 5G MIMO OTA Testing for Frequency Range One	Doug Reed (Spirent Communications, USA); Alfonso Rodriguez-Herrera (Spirent Communications, USA); Jukka-Pekka Nuutinen (Spirent Communications, Finland)
Analysis, Design and Use of Microwave Techniques, Models, Systems, and Antennas for Snowpack Avalanches Monitoring	Convened Poster 1-CS08	T08 Positioning, localization & tracking / Convened Session / Propagation	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Monitoring of Snow Cover Properties Using Active and Passive Microwave Sensors in Boreal Forests: Implications of Variable Canopy Transmissivity	Juha Lemmetyinen (Finnish Meteorological Institute, Finland); Anna Kontu (Finnish Meteorological Institute, Finland); Mike Schwank (German Research Centre for Geosciences (GFZ), Germany); Qinghuan Li (University of Waterloo, Canada); Kimmo Rautialainen (Finnish Meteorological Institute & Arctic Research, Finland); Juho Vehviläinen (Finnish Meteorological Institute, Finland); Jouni Pulliainen (Finnish Meteorological Inst., Finland)
Analysis, Design and Use of Microwave Techniques, Models, Systems, and Antennas for Snowpack Avalanches Monitoring	Convened Poster 1-CS08	T08 Positioning, localization & tracking / Convened Session / Propagation	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Complex Dielectric Constant of Wet Snow Using Bi-Static Synthetic Aperture Radar	Jon Håvard H Eriksrød (University of Oslo, Norway); Kristian G Kjelgård (University of Oslo, Norway); Tor Sverre Lande (University of Oslo, Norway)
Analysis, Design and Use of Microwave Techniques, Models, Systems, and Antennas for Snowpack Avalanches Monitoring	Convened Poster 1-CS08	T08 Positioning, localization & tracking / Convened Session / Propagation	17 Mar 2020	A2 (Poster Area)	13:20	13:20	A Low Cost Active Corner Reflector to Assist Snow Monitoring Through Sentinel/1 Images	Guido Luzi (Centre Tecnològic de Telecomunicacions de Catalunya (CTTC/CERCA), Spain); Enric Fernandez (Centre Tecnològic de Telecomunicacions de Catalunya (CTTC/CERCA), Spain); Fermin Mira Perez (Centre Tecnològic de Telecomunicacions de Catalunya, Spain); Michele Crosetto (Centre Tecnològic de Telecomunicacions de Catalunya (CTTC/CERCA), Spain)
Analysis, Design and Use of Microwave Techniques, Models, Systems, and Antennas for Snowpack Avalanches Monitoring	Convened Poster 1-CS08	T08 Positioning, localization & tracking / Convened Session / Propagation	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Analysis of Snow Water Equivalent (SWE) of Snowpack by an Ultra Wide Band Step Frequency Continuous Wave Radar (SFCW)	Rafael Alonso (University of Zaragoza, Spain); José María García del Pozo (University of Zaragoza, Spain); Ismael Peruga (University of Zaragoza, Spain); Samuel Buísán (Territorial Delegation of AEMET (Spanish State Meteorological Agency) in Aragón, Spain); José Adolfo Álvarez (Ebro River Basin Authority (CHE), Spain)
Analysis, Design and Use of Microwave Techniques, Models, Systems, and Antennas for Snowpack Avalanches Monitoring	Convened Poster 1-CS08	T08 Positioning, localization & tracking / Convened Session / Propagation	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Identification of Multi-Temporal Snow Melting Patterns with Microwave Radars	Marco Pasian (University of Pavia, Italy); Pedro Fidel Espin Lopez (University of Pavia, Italy); Valentina Premier (Eurac Research, Italy); Claudia Notarnicola (EURAC, Italy); Carlo Marin (Eurac Research, Italy)
Analytical and Numerical Methods for Metasurface Analysis and Design	CS09	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	08:30	08:50	Metasurface for Dense Dipole Array Decoupling in Ultra-High Field MRI	Marc Dubois (Institut Fresnel, France); Anna Hurshkainen (ITMO University, Russia); Masoud S. M. Mollaei (Aalto University, Finland); Sergei Kurdjumov (ITMO University, Russia); Redha Abdeddaim (Aix Marseille University, France); Stefan Enoch (CNRS & Institut Fresnel, France); Stanislav Glybovski (ITMO University, Russia); Constantin Simovski (Aalto University, Finland)
Analytical and Numerical Methods for Metasurface Analysis and Design	CS09	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	08:50	09:10	Elliptical Glide-Symmetric Holey Metasurfaces for Wideband Anisotropy	Antonio Alex-Amor (Technical University of Madrid, Spain); Fatemeh Ghasemifard (KTH Royal Institute of Technology, Sweden); Guido Valerio (Sorbonne Université, France); Pablo Padilla (University of Granada, Spain); Jose Manuel Fernández González (Universidad Politécnica de Madrid, Spain); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
Analytical and Numerical Methods for Metasurface Analysis and Design	CS09	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	09:10	09:30	Derivation of Circuit Models Based on an Eigenvalue Problem for Periodic Surfaces with Multiple Resonances	Raúl Rodríguez-Berral (Universidad de Sevilla, Spain); Francisco Mesa (University of Seville, Spain); Francisco Medina (University of Sevilla, Spain)
Analytical and Numerical Methods for Metasurface Analysis and Design	CS09	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	09:30	09:50	IE-GSTC Analysis of Metasurface Cavities and Application to Redirection Cloaking	Mojtaba Dehmolaian (Ecole Polytechnique de Montreal, Canada); Christophe Caloz (Ecole Polytechnique de Montreal, Canada)
Analytical and Numerical Methods for Metasurface Analysis and Design	CS09	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	09:50	10:10	Metasurface Structures with Bianisotropic Characteristics for Wide-Angle Impedance Matching in Phased-Array Antennas	Mohammad Alibakhshienari (Università degli Studi di Roma "Tor Vergata", Roma - ITALY, Italy); Bal Virdee (London Metropolitan University, United Kingdom (Great Britain)); Chan H. Hwang See (Edinburgh Napier University, United Kingdom (Great Britain)); Raed A Abd-Elhameed (University of Bradford, United Kingdom (Great Britain)); Francisco Falcone (Universidad Publica de Navarra, Spain); Ernesto Limiti (University of Rome Tor Vergata, Italy)
Analytical and Numerical Methods for Metasurface Analysis and Design	CS09	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	10:40	11:00	Analysis of Curved Metasurfaces Based on Method of Moments	Dominik Barbaric (Ericsson Nikola Tesla dd, Croatia); Marko Bosiljevac (University of Zagreb, Croatia); Zvonimir Sipus (University of Zagreb, Croatia)
Analytical and Numerical Methods for Metasurface Analysis and Design	CS09	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	11:00	11:20	Multifunctional Nonreciprocal Metasurfaces Based on Spatiotemporal Modulation	Xuchen Wang (Aalto University, Finland); Ana Diaz-Rubio (Aalto University, Finland); Huanan Li (City University of New York, USA); Sergei Tretyakov (Aalto University, Finland); Andrea Alù (The University of Texas at Austin, USA)
Analytical and Numerical Methods for Metasurface Analysis and Design	CS09	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	11:20	11:40	An Artificial Shield for MRI Birdcage Coil with Constructive Interference	Ksenia Lezhennikova (ITMO University, Russia); Anna Hurshkainen (ITMO University, Russia); Marc Dubois (Institut Fresnel, France); Djamel Berrahou (Institut Fresnel, France); Constantin Simovski (Aalto University, Finland); Alexander Raaijmakers (University Medical Center Utrecht, The Netherlands); Irina Melchakova (ITMO University, Russia); Stefan Enoch (CNRS & Institut Fresnel, France); Redha Abdeddaim (Aix Marseille University, France); Stanislav Glybovski (ITMO University, Russia)
Analytical and Numerical Methods for Metasurface Analysis and Design	CS09	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	11:40	12:00	Robust Homogenized Impedance Model for Periodically Modulated Metasurfaces	Enrica Martini (University of Siena, Italy); Francesco Caminita (Wave-Up SRL, Italy); Stefano Maci (University of Siena, Italy)
Analytical and Numerical Methods for Metasurface Analysis and Design	CS09	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	12:00	12:20	Dual-Band Beams Generation with Metasurface Based on the EFIE	Modeste Bodehou (Université Catholique de Louvain, Belgium); David González-Ovejero (Centre National de la Recherche Scientifique - CNRS, France); Christophe Craeye (Université Catholique de Louvain, Belgium); Isabelle Huynen (Université catholique de Louvain, Belgium)
Antenna Array and Integrated Systems for 5G Communication Applications	Convened Poster 1-CS10	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Antenna-Amplifier Co-design: On a Method to Shape the Antenna Impedance	Lars Jonsson (KTH Royal Institute of Technology, Sweden); Ahmad Emadeddin (KTH Royal Institute of Technology, Sweden)
Antenna Array and Integrated Systems for 5G Communication Applications	Convened Poster 1-CS10	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	5G Wideband Magneto-Electric Dipole Antenna Fed by a Single-Layer Corporate-Feed Network Based on Ridge Gap Waveguide	Wai Yan Yong (University of Twente, The Netherlands); Thomas Emanuelsson (Gapwaves AB, Sweden); Andrés Alayón Glazunov (University of Twente & Chalmers University of Technology, The Netherlands)
Antenna Array and Integrated Systems for 5G Communication Applications	Convened Poster 1-CS10	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Design of Millimeter Wave True-Time-Delay Beam-formers for 5G Wireless Systems	Dimitrios I. Lialios (Democritus University of Thrace, Greece); Konstantinos D. Paschaloudis (Democritus University of Thrace, Greece); Anastasios G. Koutinos (Democritus University of Thrace, Greece); Emplouk Zhiat (Democritus University of Thrace, Greece); Nikolaos Metsikas (Democritus University of Thrace, Greece); Vasilis Kassouras (Center for Security Studies (KEMEA), Greece); Konstantinos Kardaras (Intracom Telecom, Greece); Dimitrios S. Kriharidis (Intracom Telecom, Greece); Christos Kallidas (Ericsson, Sweden); George A. Kyriacou (Kimmeria Campus & Democritus University of Thrace, Greece)
Antenna Array and Integrated Systems for 5G Communication Applications	Convened Poster 1-CS10	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Circularly and Linearly Polarized Planar Reconfigurable Active Array Antennas in Ka Band	Alfonso T. Muriel Barrado (Universidad Politécnica de Madrid, Spain); Jorge Calatayud Maeso (Universidad Politécnica de Madrid, Spain); Antonio Rodríguez Gallego (Universidad Politécnica de Madrid, Spain); Jose Manuel Fernández González (Universidad Politécnica de Madrid, Spain); Manuel Sierra-Pérez (Universidad Politécnica de Madrid, Spain); Pablo Sanchez-Olivares (Universidad Politécnica de Madrid, Spain)

Antenna Array and Integrated Systems for 5G Communication Applications	Convened Poster 1-CS10	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Broadband CTS Array in PCB Technology	Michele Del Mastro (University of Rennes 1, France); Adham Mahmoud (Institut d'Électronique et de Télécommunications de Rennes, France); Thomas Potelon (IETR - University of Rennes 1, France); Ronan Sauleau (University of Rennes 1, France); Mauro Ettorre (University of Rennes 1 & UMR CNRS 6164, France)
Antenna Array and Integrated Systems for 5G Communication Applications	Convened Poster 1-CS10	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	A Simplified Extended SIW Supporting TE ₀₁ Integrated with a Feeding Structure	Christos Kolitsidas (Ericsson, Sweden); Darwin Blanco (Ericsson, Sweden)
Antenna Design and Fundamental Bounds with External Constraints	CS11	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B10	08:30	08:50	Physical Bounds on Antennas with Feed Constraints	Mats Gustafsson (Lund University, Sweden); Miloslav Capek (Czech Technical University in Prague, Czech Republic)
Antenna Design and Fundamental Bounds with External Constraints	CS11	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B10	08:50	09:10	Characteristic Mode Analysis of Mobile and Wearable Antennas in Lossy Environment	Pasi Ylä-Ojala (Aalto University, Finland); Anu Lehtovuori (Aalto University, Finland); Rasmus Luomaniemi (Aalto University, Finland)
Antenna Design and Fundamental Bounds with External Constraints	CS11	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B10	09:10	09:30	Adapting Frequency Domain Physical Bounds for the Analysis of Time-Varying Transmitters	Kurt Schab (Santa Clara University, USA)
Antenna Design and Fundamental Bounds with External Constraints	CS11	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B10	09:30	09:50	High Directivity, Omnidirectional Horizontally Polarized Antenna Array for Wireless Power Transfer in Internet-of-Things Applications	Wei Lin (University of Technology Sydney, Australia); Richard Ziolkowski (University of Technology Sydney & University of Arizona, Australia)
Antenna Design and Fundamental Bounds with External Constraints	CS11	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B10	09:50	10:10	Fundamental Bounds for Volumetric Structures and Their Feasibility	Miloslav Capek (Czech Technical University in Prague, Czech Republic); Lukas Jelinek (Czech Technical University in Prague, Czech Republic); Mats Gustafsson (Lund University, Sweden); Kurt Schab (Santa Clara University, USA)
Antenna Design and Fundamental Bounds with External Constraints	CS11	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B10	10:40	11:00	Nesting Dual Tapered Additively Manufactured Helical Antennas for Size Reduction Constraints	Youssef Tawk (American University of Beirut, Lebanon); Joseph Costantine (American University of Beirut, Lebanon)
Antenna Design and Fundamental Bounds with External Constraints	CS11	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B10	11:00	11:20	Experimental Assessment of Q-factor Bounds for Miniature Embedded Antenna	Fabien Ferrero (University Nice Sophia Antipolis, CNRS, LEAT & CREMANT, France); Lars Jonsson (KTH Royal Institute of Technology, Sweden); Philippe Ratajczak (Orange Labs, France)
Antenna Design and Fundamental Bounds with External Constraints	CS11	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B10	11:20	11:40	Optimal Bounds and Matching Networks of Fixed Degree and for Frequency Varying Impedances	David Martinez Martinez (Inria Sophia Antipolis, France); Adam Cooman (Ampleon, The Netherlands); Fabien Seyfert (Inria Sophia Antipolis, France); Martine Olivi (Inria Sophia Antipolis, France); Stéphane Bila (XLIM UMR 7252 Université de Limoges/CNRS, France)
Antenna Design and Fundamental Bounds with External Constraints	CS11	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B10	11:40	12:00	Q-factor Bounds for MIMO Antennas	Casimir Ehrenborg (Lund University, Sweden); Mats Gustafsson (Lund University, Sweden); Miloslav Capek (Czech Technical University in Prague, Czech Republic)
Antenna Design and Fundamental Bounds with External Constraints	CS11	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B10	12:00	12:20	Transparent mm-Wave Array on a Glass Substrate with Surface Wave Reduction	Rocio Rodriguez-Cano (Aalborg University, Denmark); Shuai Zhang (Aalborg University, Denmark); Gert Pedersen (Aalborg University, Denmark)
Antenna theory and system design	T07-A	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	13:30	13:50	Analysis of Compensation Methods and the Capability Boundary for Element Position Errors in Electrically Scanned Arrays	Josel Ydreborg (European Space Agency, ESTEC, The Netherlands); Bengt Svensson (Saab AB, Sweden); Jian Yang (Chalmers University of Technology, Sweden)
Antenna theory and system design	T07-A	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	13:50	14:10	Novel Dual-mode SIHC Based Filtering Antenna	Prasun Chongder (NIT Rourkela, India); Soumava Mukherjee (Indian Institute of Technology Jodhpur, India); Animesh Biswas (IIT Kanpur, India)
Antenna theory and system design	T07-A	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	14:10	14:30	Axial-ratio Tuning in Nano-Dielectric Resonator Antenna for Optical Band Applications	Shaiza Gotra (NIT Delhi, India); Rajesh Yadav (National Institute of Technology Delhi, India); Vinay Pandey (NIT Delhi, India); Rajveer Singh Yaduvanshi (IACT, India)
Antenna theory and system design	T07-A	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	14:30	14:50	Experimental Demonstration of Artificial Magnetic Conductors Constructed of Magnetically Coupled Helices	Pavel Petrov (University of Exeter, United Kingdom (Great Britain)); Alastair Hibbins (University of Exeter, United Kingdom (Great Britain)); Ian Youngs (Platform Systems Division, Dstl, Salisbury, United Kingdom (Great Britain)); Mario Lima (Antenna Applied Research, Electronics Division, Leonardo, United Kingdom (Great Britain)); John Sambles (University of Exeter, United Kingdom (Great Britain))
Antenna theory and system design	T07-A	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	14:50	15:10	3D Printed Broadband Double-Ridged Waveguide to Coax Transition	Karina Hoel (FFI & University of Oslo, Norway); Stein Kristoffersen (FFI, Norway)
Antenna theory and system design	T07-A	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	15:10	15:30	Design of a Wide-Scan Lens Based Focal Plane Array for Sub-millimeter Imaging Systems Using Coherent Fourier Optics	Shahab Oddin Dabironezare (Delft University of Technology, The Netherlands); Muhan Zhang (Delft University of Technology, The Netherlands); Giorgio Carluccio (Delft University of Technology, The Netherlands); Angelo Freni (University of Florence, Italy); Andrea Neto (Delft University of Technology, The Netherlands); Nurlia Llobart (Delft University of Technology, The Netherlands)
Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	13:30	13:50	Two-Element Biomimetic Antenna Array Design for Power Extraction / Phase Amplification Tradeoff	Richard J. Kozick (Bucknell University, USA); Fikadu Dagefu (US Army Research Laboratory, USA); Brian Sadler (Army Research Laboratory, USA)
Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	13:50	14:10	Axially-Corrugated X-Band Horn Design with Integrated TE ₂₁ Monopulse Tracking in Corrugation	Christophe Granet (Lyrebird Antenna Research Pty Ltd, Australia); John Kot (Young & Kot Engineering Research, Australia)
Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	14:10	14:30	Adaptive GNSS Antenna Matching for Low-Cost Applications	Thomas Kaufmann (U-blox AG, Switzerland); Rod Bryant (U-blox AG, Switzerland)
Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	14:30	14:50	Phase-based Variant Maximum Likelihood Positioning for Passive UHF-RFID Tags	Chenglong Li (Ghent University, Belgium); Emmeric Tanghe (Ghent University, Belgium); David Plets (Ghent University - imec, Belgium); Pieter Suanet (Aucis, Belgium); Nico Podevin (University of Ghent, Belgium); Jeroen Hoebeke (Ghent University - imec, Belgium); Eli De Poorter (Ghent University & imec, Belgium); Luc Martens (Ghent University - imec, Belgium); Wout Joseph (Ghent University/IMEC, Belgium)
Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	14:50	15:10	Element Mutual Coupling Effect in a Wideband Planar Aperiodic Sparse Phased Array	Shaoqing Hu (Queen Mary University of London, United Kingdom (Great Britain)); Chao Shu (Queen Mary University of London, United Kingdom (Great Britain)); Xiaodong Chen (Queen Mary University of London, United Kingdom (Great Britain)); Kai Wang (East China Research Institute of Electronic Engineering, China)
Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	15:10	15:30	A Broadband Circularly Polarized Antenna with Triple-Mode Characteristics	Wei Hu (Xidian University, China); Xuekang Liu (Xidian University, China); Hao Wu (Xidian University, China); Steven Gao (University of Kent, United Kingdom (Great Britain)); Lehu Wen (University of Kent, United Kingdom (Great Britain)); Yuan-Ming Cai (Xidian University, China)
Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	16:00	16:20	A Method of Side-lobe Suppression for Reactance Modulated Antennas	Peng-Yuan Wang (University of Duisburg-Essen, Germany); Meng Fan-Yi (Harbin Institute of Technology, China); Yue-Long Lyu (The 14th Research Institute, CETGC, China); Andreas Rennings (University of Duisburg-Essen, Germany); Daniel Erni (University of Duisburg-Essen, Germany)
Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	16:20	16:40	Pattern Shifting and Size Control in Offset Reflector Antennas with Microstrip Array as Matched Feed	Kaushik Debbarma (IIT Guwahati, India); Ratnajit Bhattacharjee (Indian Institute of Technology, Guwahati, India)
Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	16:40	17:00	Impact of UWB Antennas on Ranging Accuracy	David Veit (Graz University of Technology, Austria); Michael Gadringer (Graz University of Technology, Austria); Erich Leitgeb (Graz University of Technology, Austria)
Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	17:00	17:20	RSS-based AoA Estimation System for IoT Applications Using Rotman Lens	Noori BnILam (University of Antwerp - imec, IDLab Research Group, Belgium); Arne Aerts (University of Antwerp - imec, IDLab Research Group, Belgium); Dennis Joosens (University of Antwerp - imec, IDLab Research Group, Belgium); Jan Steckel (University of Antwerp - Cosys-lab Research Group, Belgium); Maarten Weyn (University of Antwerp - imec, Belgium)

Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	17:20	17:40	RSS-Based DoA Estimation Using ESPAR Antenna for V2X Applications in 802.11P Frequency Band	Damian Dural (Gdansk University of Technology, Poland); Mateusz Rzymowski (Gdansk University of Technology & WiComm Center of Excellence, Poland); Krzysztof Nyka (Gdansk University of Technology, Poland); Lukasz Kulas (Gdansk University of Technology, Faculty of Electronics, Telecommunications and Informatics, Poland)
Antennas and techniques for positioning and direction finding	T08-A17	T08 Positioning, localization & tracking / Regular Session / Antennas	16 Mar 2020	B5	17:40	18:00	Frequency Diverse Array Information Geometry Analysis	Haifeng Yu (Beijing Institute of Space Craft System Engineering, China); Qinglong Han (Beijing Institute of Space Craft System Engineering, China); Xiaoning Ji (Air Force Research Institute, China); Zhibin Wang (Beijing Institute of Space Craft System Engineering, China); Wen-Qin Wang (University of Electronic Science and Technology of China, China)
Antennas for Harsh Environment	Convened Poster 2-CS14	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Optimal Frequency of Operation and Radiation Efficiency Limitations of Implantable Antennas	Densy Nikolayev (École Polytechnique Fédérale de Lausanne, Switzerland); Zvonimir Sipus (University of Zagreb, Croatia); Marko Bosiljevac (University of Zagreb, Croatia); Wout Joseph (Ghent University/IMEC, Belgium); Maxim Zhadobov (University of Rennes 1, France); Ronan Sauleau (University of Rennes 1, France); Luc Martens (Ghent University - imec, Belgium); Anja K. Skrivervik (EPFL, Switzerland)
Antennas for Harsh Environment	Convened Poster 2-CS14	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	3D Printed Ceramic Antennas for Space Applications	Gautier Mazingue (Anywaves, France); Benedikt Byrne (ANYWAVES, France); Maxime Romier (Anywaves, France); Nicolas Capet (ANYWAVES FRANCE, France)
Antennas for Harsh Environment	Convened Poster 2-CS14	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Mechanical and Environmental Aspects of Antennas for a Novel Maritime Search and Rescue System	Taher Badawy (Fraunhofer Institute for High Frequency Physics FHR, Germany); Alexander Kremring (Fraunhofer Institute for High Frequency Physics FHR, Germany); Dawood Nulwala (Fraunhofer Institute for High Frequency Physics FHR, Germany); Thomas Bertuch (Fraunhofer FHR, Germany)
Antennas for Harsh Environment	Convened Poster 2-CS14	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Transmit-Arrays at Ka-band for Harsh Environment	Trung Kien Pham (International University, VNU-HCM, Ho Chi Minh City 70000, Vietnam, Vietnam); Ronan Sauleau (University of Rennes 1, France); Erwan Fourn (INSA of Rennes & IETR, France); Antonio Clemente (CEA-LETI Minatex, France)
Antennas for Harsh Environment	Convened Poster 2-CS14	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Telemetry Antennas Withstanding Very High Accelerations and Centrifugal Forces	Loic Bernard (ISL, France); Hrvoje Covic (ISL, France); Andreas Zeiner (ISL, France); Armin Schneider (ISL, France)
Antennas for Radio Astronomy	CS15	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B8	16:40	17:00	Characteristic Mode Analysis of Multi-Octave Asymmetric Dipoles	Alberto Tibaldi (Politecnico di Torino, Italy); Giuseppe Virone (Consiglio Nazionale delle Ricerche, Italy); Pietro Bolli (INAF - Osservatorio Astrofisico di Arcetri, Italy); Fabio Paonessa (National Research Council of Italy (CNR - IEIT), Italy); Giuseppe Addamo (Istituto di Elett. e di Ingegneria dell'Inform. e delle Telecom. (IEIT-CNR), Italy); Oscar A. Peverini (Istituto di Elett. e di ingegneria dell'Inform. e delle Telecom. (IEIT-CNR), Italy); Mauro Lumia (CNR, Italy); Lorenzo Giorba (Institute of Electronics, Computer and Telecommunication Engineering (IEIT-CNR), Torino & Politecnico di Torino, Torino, Italy)
Antennas for Radio Astronomy	CS15	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B8	17:00	17:20	Analysis of the Loading Effect of Faulty LNAs on Embedded Element Patterns in the Murchison Widefield Array	Maria Kovaleva (Curtin University & Macquarie University, Australia); Daniel Ung (Curtin University, Australia); Adrian Sutnjo (Curtin University, Australia); Budi Juswardy (Curtin University, Australia); David B Davidson (Curtin University & Stellenbosch University, Australia); Randall Wayth (International Centre for Radio Astronomy Research (ICRAR), Australia)
Antennas for Radio Astronomy	CS15	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B8	17:20	17:40	A Beamforming Approach to the Self-Calibration of Phased Arrays	Quentin Gueuning (University of Cambridge, United Kingdom (Great Britain)); Anthony Keith Brown (University of Manchester, United Kingdom (Great Britain)); Christophe Craeye (Université Catholique de Louvain, Belgium); Eloy de Lera Acedo (University of Cambridge, United Kingdom (Great Britain))
Antennas for Radio Astronomy	CS15	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B8	17:40	18:00	Parallel Plate Waveguide Simulator of a Dense Connected Dipole Array	Rene A. C. Baelemans (International Centre for Radio Astronomy Research, Curtin University & Eindhoven University of Technology, Australia); David S Prinsloo (ASTRON & Netherlands Institute for Radio Astronomy, The Netherlands); A. B. (Bart) Smolders (Eindhoven University of Technology, The Netherlands); Adrian Sutnjo (Curtin University, Australia); David B Davidson (Curtin University & Stellenbosch University, Australia); Randall Wayth (International Centre for Radio Astronomy Research (ICRAR), Australia)
Antennas for Radio Astronomy	CS15	T09 Space (incl. cubesat) / Convened Session / Antennas	17 Mar 2020	B8	18:00	18:20	Investigations of Quadruple-Ridge Flared Horn Performance for ngVLA Band 2	Dirk de Villiers (Stellenbosch University, South Africa); Robert Lehmsiensiek (EMSS Antennas, South Africa, South Africa); Fahmi Mokhupuki (Stellenbosch University, South Africa)
Antennas for WLAN Applications	T03-A11	T03 Wireless LANs / Regular Session / Antennas	19 Mar 2020	B1	16:40	17:00	Dual Polarized Dual Band Collocated Beam Switching Antennas for WLAN Applications	Halim Boutayeb (Huawei Technologies, Canada); Fayez Hyjazie (Huawei Technologies Co. Ltd., Canada); Matthew Milyavsky (Huawei Technologies, Canada); Teyan Chen (Huawei Technologies CO. Ltd, China); Tao Wu (Huawei Technologies Co., Ltd, China)
Antennas for WLAN Applications	T03-A11	T03 Wireless LANs / Regular Session / Antennas	19 Mar 2020	B1	17:00	17:20	Adapted Low-Footprint Biasing Circuit for Switched Beam Antenna Steering Usable in Wireless Sensor Networks	Aurelien Surier (Université du Québec en Abitibi-Témiscamingue, Canada, France); Muamba Mukendi Leingthone (Université du Québec en Abitibi-Témiscamingue, Canada); Nadir Hakem (Université du Québec en Abitibi Témiscamingue & LRTCS Research Laboratory Télébec in Underground Communications, Canada); Michel Misson (Université de Clermont Auvergne, France)
Antennas for WLAN Applications	T03-A11	T03 Wireless LANs / Regular Session / Antennas	19 Mar 2020	B1	17:20	17:40	Wideband Dual-polarized Antenna for Wi-Fi Communication Networks	Oleg Soykin (Radio Gigabit LLC, Russia); Aleksey Artemenko (Radio Gigabit LLC, Russia); Vladimir Skorin (Radio Gigabit LLC, Russia); Artem Kolobov (Radio Gigabit LLC, Russia); Roman Maslennikov (Radio Gigabit LLC, Russia)
Antennas for WLAN Applications	T03-A11	T03 Wireless LANs / Regular Session / Antennas	19 Mar 2020	B1	17:40	18:00	Embedded MTM-EBGs in Patch Antenna for Simultaneously Dual-Band and Dual-Polarized Operation	Braden P. Smyth (University of Alberta, Canada); Ashwin K. Iyer (University of Alberta, Canada)
Antennas for WLAN Applications	T03-A11	T03 Wireless LANs / Regular Session / Antennas	19 Mar 2020	B1	18:00	18:20	A Compact Folded Air Patch Antenna with Low Cross-Polarization	Hao Chen (The Chinese University of Hong Kong, Hong Kong); Ke-Li Wu (The Chinese University of Hong Kong, Hong Kong)
Antennas in IoT Wireless Devices: Modelling and Industrial Considerations	CS16	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B2	08:30	08:50	A Small Metamaterial Dual-Band Dipole Antenna Fed by Small Metamaterial Balanced-Feed	Changhyeong Lee (Incheon National University, Korea (South)); Heejun Park (Incheon National University, Korea (South)); Gwang-Gyun Namgung (Incheon National University, Korea (South)); Yejune Seo (Incheon National University, Korea (South)); Sungtek Kahng (University of Incheon, Korea (South))
Antennas in IoT Wireless Devices: Modelling and Industrial Considerations	CS16	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B2	08:50	09:10	Design of a Quad Band CPW - Fed Compact Flexible Patch Antenna for Wearable Applications	Bashar Bahaa Qas Elias (Universiti Malaysia Perlis (UniMAP), Malaysia); Ping Jack Soh (Universiti Malaysia Perlis (UniMAP) & Katholieke Universiteit Leuven, Malaysia); Azemi Abdullah Al-Hadi (University Malaysia Perlis, Malaysia); Rahil Joshi (Heriot Watt University, United Kingdom (Great Britain)); Yuepei Li (Heriot Watt University, United Kingdom (Great Britain)); Symon K. Podlichak (Heriot-Watt University, United Kingdom (Great Britain))
Antennas in IoT Wireless Devices: Modelling and Industrial Considerations	CS16	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B2	09:10	09:30	From Optimal to Industrial Antenna: The Designer Dilemma for Compact NB-IoT Terminal	Fabien Ferrero (University Nice Sophia Antipolis, CNRS, LEAT & CREMANT, France); Lars Jonsson (KTH Royal Institute of Technology, Sweden); Leonardo Luzzi (University Côte d'Azur, CNRS, LEAT, France)
Antennas in IoT Wireless Devices: Modelling and Industrial Considerations	CS16	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B2	09:30	09:50	Implementation and Use of Physical Bounds for Antenna Optimization	Mats Gustafsson (Lund University, Sweden); Miloslav Capek (Czech Technical University in Prague, Czech Republic)
Antennas in IoT Wireless Devices: Modelling and Industrial Considerations	CS16	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B2	09:50	10:10	Design Concerns for In-body Antennas Based on Frequency Analysis of Fundamental Radiation Limitations	Zvonimir Sipus (University of Zagreb, Croatia); Marko Bosiljevac (University of Zagreb, Croatia); Densy Nikolayev (École Polytechnique Fédérale de Lausanne, Switzerland); Anja K. Skrivervik (EPFL, Switzerland)
Antennas in IoT Wireless Devices: Modelling and Industrial Considerations	CS16	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B2	10:40	11:00	Requirements for Accurate Design of Matching Circuits at 5 GHz	Jussi Rahola (Optenni Ltd, Finland); Joni Lappalainen (Optenni Ltd, Finland); Jaakko Juntunen (Optenni Ltd., Finland)
Antennas in IoT Wireless Devices: Modelling and Industrial Considerations	CS16	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B2	11:00	11:20	3D EM Simulation Environment for Development, Testing, and Functioning of Internet of Things	Branko Kolundzija (University of Belgrade, Serbia); Tomislav Milosevic (WIPL-D, Serbia); Milos Pavlovic (WIPL-D DO, Serbia); Branko Mrdakovic (WIPL-D, Serbia)

Antennas in IoT Wireless Devices: Modelling and Industrial Considerations	CS16	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B2	11:20	11:40	Embedded Antennas in Cellular IoT Platforms	Jaume Anguera (Fractus Antennas & Universitat Ramon Llull, Spain); Aurora Andújar (Fractus, Spain); José Leiva (Fractus Antennas, Spain); Rosa Mateos (Fractus, Spain)
Antennas in IoT Wireless Devices: Modelling and Industrial Considerations	CS16	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B2	11:40	12:00	Performance Investigation of a Handset Antenna Using a C-tuner for Aperture Tuning	Lukas Grundmann (Leibniz University Hannover, Germany); Anthony Thomas (Infineon Technologies, Germany); Valenty Solomko (Infineon Technologies, Germany); Winfried Bakalski (Infineon Technologies, Germany); Dirk Manteuffel (University of Hannover, Germany)
Antennas in IoT Wireless Devices: Modelling and Industrial Considerations	CS16	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B2	12:00	12:20	Radiative Loss in Small Inverted-F Antenna Transmission Line Model	Rana Berro (Grenoble Alpes University & CEA LETI, France); Serge Bories (CEA, France); Christophe Delaveaud (CEA-LETI, France)
Antennas with Multi-Port/Distributed Feeding and On-Antenna Power-Combining for Efficient Integration and Reconfigurability	Convened Poster 1-CS17	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Efficient Waveguide Power Combiners at mm-Wave Frequencies	Ralph van Schelven (Delft University of Technology, The Netherlands); Marco Spirito (Delft University of Technology, The Netherlands); Daniele Cavallo (Delft University of Technology, The Netherlands)
Antennas with Multi-Port/Distributed Feeding and On-Antenna Power-Combining for Efficient Integration and Reconfigurability	Convened Poster 1-CS17	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Reducing User Effect on Mobile Antenna Systems with Antenna Cluster Technique	Rasmus Luomaniemi (Aalto University, Finland); Albert Salmi (Aalto University, Finland); Anu Lehtovuori (Aalto University, Finland); Ville Viikari (Aalto University & School of Electrical Engineering, Finland)
Antennas with Multi-Port/Distributed Feeding and On-Antenna Power-Combining for Efficient Integration and Reconfigurability	Convened Poster 1-CS17	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Theory, Design and Validation of a Tunable, Injection-Matched, 2-Port Antenna	Long Shen (University of Birmingham, United Kingdom (Great Britain)); Peter Mgaya Kihogo (University of Birmingham, United Kingdom (Great Britain)); Peter Gardner (University of Birmingham, United Kingdom (Great Britain)); Costas Constantinou (University of Birmingham, United Kingdom (Great Britain))
Antennas with Multi-Port/Distributed Feeding and On-Antenna Power-Combining for Efficient Integration and Reconfigurability	Convened Poster 1-CS17	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Filter Design Considerations for an Integrated Doherty Power Amplifier - Antenna for Telecommunication Applications	Petrie Meyer (Stellenbosch University, South Africa)
Antennas with Multi-Port/Distributed Feeding and On-Antenna Power-Combining for Efficient Integration and Reconfigurability	Convened Poster 1-CS17	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	High Power mm-Wave Spatial Power Combiner Employing On-Chip Isolation Resistors	Artem Roev (Chalmers University of Technology, Sweden); Rob Maaskant (CHALMERS, Sweden); Marion Matters-Kammerer (Eindhoven University of Technology, The Netherlands); Marianna Ivashina (Chalmers University of Technology, Sweden)
Antennas with Multi-Port/Distributed Feeding and On-Antenna Power-Combining for Efficient Integration and Reconfigurability	Convened Poster 1-CS17	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	In-Antenna Power Combining for Highly-Integrated Millimeter-Wave Transmitters	Benjamin Göttel (Wellenzahl Radar- und Sensortechnik GmbH & Co KG, Germany); Akanksha Bhutani (Karlsruhe Institute of Technology, Germany); Sören Marahrens (Karlsruhe Institute of Technology (KIT), Germany); Thomas Zwick (Karlsruhe Institute of Technology (KIT), Germany)
Antennas with Multi-Port/Distributed Feeding and On-Antenna Power-Combining for Efficient Integration and Reconfigurability	Convened Poster 1-CS17	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Circuit-antenna Interactions in Multi-port Active Antennas	Peter Gardner (University of Birmingham, United Kingdom (Great Britain)); Yi Wang (University of Birmingham, United Kingdom (Great Britain)); Costas Constantinou (University of Birmingham, United Kingdom (Great Britain)); Long Shen (University of Birmingham, United Kingdom (Great Britain)); Peter Mgaya Kihogo (University of Birmingham, United Kingdom (Great Britain))
Antennas with Multi-Port/Distributed Feeding and On-Antenna Power-Combining for Efficient Integration and Reconfigurability	Convened Poster 1-CS17	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Phase Distribution Optimization for 1-Bit Transmitarrays with Near-Field Coupling Feeding Technique	Artem Vilenksiy (Samsung Research Institute Russia, Russia); Mikhail Makurin (Samsung Research Institute Russia, Russia); Chongmin Lee (Samsung Electronics Co., Ltd, Korea (South))
Antennas with Multi-Port/Distributed Feeding and On-Antenna Power-Combining for Efficient Integration and Reconfigurability	Convened Poster 1-CS17	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Outspacing Phased Arrays for Mm-Wave 5G Base Stations	B. G. M. (Bart) Van Ark (Eindhoven University of Technology, The Netherlands); A. B. (Bart) Smolders (Eindhoven University of Technology, The Netherlands); Peter Smulders (Eindhoven University of Technology, The Netherlands)
Applications of mm-Wave Gap Waveguide Technology-I	Convened Poster 1-CS18	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Microstrip to Ridge Gap Waveguide Transition for 28 GHz Steerable Slot Array Antennas	Alireza Bagheri (Gapwaves AB & University of Twente, Sweden); Hanna Karlsson (Gapwaves AB, Sweden); Carlo Benicenni (Gapwaves AB, Sweden); Abolfazl Haddadi (Gapwaves AB, Sweden, Sweden); Thomas Emanuelsson (Gapwaves AB, Sweden, Sweden); Andrés Alayón Glazunov (University of Twente & Chalmers University of Technology, The Netherlands)
Applications of mm-Wave Gap Waveguide Technology-I	Convened Poster 1-CS18	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Groove Gap Waveguide Slot Array Based on Glide-Symmetric Holes	Qingbi Liao (KTH Royal Institute of Technology, Sweden); Eva Rajo-Iglesias (University Carlos III of Madrid, Spain); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
Applications of mm-Wave Gap Waveguide Technology-I	Convened Poster 1-CS18	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Packaging Technique of Highly Integrated Circuits Based on EBG Structure for +100 GHz Applications	Ahmed Hassona (Chalmers University of Technology, Sweden); Vessan Vassilev (Chalmers University of Technology, Sweden); Ashraf Uz Zaman (Chalmers University of Technology, Sweden); Herbert Zirath (Chalmers University of Technology, Sweden)
Applications of mm-Wave Gap Waveguide Technology-II	Convened Poster 1-CS19	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	A Compact Double-Layer Groove Gap Waveguide Power Divider with High Isolation	Enlin Wang (National Key Laboratory of Antennas and Microwave Technology, Xidian University, China); Tianling Zhang (Xidian University, China); Lei Chen (Xidian University, China); Ashraf Uz Zaman (Chalmers University of Technology, Sweden); Jian Yang (Chalmers University of Technology, Sweden)
Applications of mm-Wave Gap Waveguide Technology-II	Convened Poster 1-CS19	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Mechanical Phase Shifter in Gap-Waveguide Technology	Daniel Sánchez-Escuderos (Universitat Politècnica de València, Spain); José Ignacio Herranz-Herruzo (Universidad Politécnica de Valencia, Spain); Miguel Ferrando-Rocher (Universitat Politècnica de València, Spain); Alejandro Valero-Nogueira (Universidad Politécnica de Valencia, Spain)
Applications of mm-Wave Gap Waveguide Technology-II	Convened Poster 1-CS19	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Considerations in Designing Inverted Microstrip Gap Waveguide Components	Francisco Pizarro (Pontificia Universidad Católica de Valparaíso, Chile); Carlos Sanchez-Cabello (Universidad Carlos III de Madrid, Spain); Jose-Luis Vazquez-Roy (University Carlos III of Madrid, Spain); Eva Rajo-Iglesias (University Carlos III of Madrid, Spain)
Assessment and Modeling of Antennas and Radio Channels Jointly	CS20	T10 EM modelling and simulation tools / Convened Session / Antennas	20 Mar 2020	B11	08:30	08:50	Including the Aircraft and the Antenna in a Wide Band Aeronautical LMS Channel Model	Capucine Amielh (ENAC, France); Alexandre Chabory (ENAC, France); Christophe Macabiau (ENAC, France); Laurent Azoulai (Airbus Commercial Aircraft, France)
Assessment and Modeling of Antennas and Radio Channels Jointly	CS20	T10 EM modelling and simulation tools / Convened Session / Antennas	20 Mar 2020	B11	08:50	09:10	Antenna Perturbation Modelling and Impact on Radio Channel	Laura Pometcu (CEA, LETI, Minatex Campus & Univ., Grenoble-Alpes, France); Raffaele D'Errico (CEA, LETI, Minatex Campus & Univ., Grenoble-Alpes, France)
Assessment and Modeling of Antennas and Radio Channels Jointly	CS20	T10 EM modelling and simulation tools / Convened Session / Antennas	20 Mar 2020	B11	09:10	09:30	The Influence of Self-User Shadowing in the Intra-Metro Communication Scenario at 28 GHz	Yuxuan Xu (Beijing Jiaotong University, China); Danping He (Beijing Jiaotong University, China); Haofan Yi (Beijing Jiaotong University, China); Ke Guan (Beijing Jiaotong University, China); Mikko Heino (Aalto University, Finland); Marko Sonkki (University of Oulu, Finland)
Assessment and Modeling of Antennas and Radio Channels Jointly	CS20	T10 EM modelling and simulation tools / Convened Session / Antennas	20 Mar 2020	B11	09:30	09:50	Joint Antenna-Channel Modelling for in-to-out-Body Propagation of Dairy Cows at 868 MHz	Said Benaisa (Ghent University/imec, Belgium); Leen Verloock (IBBT - Ghent University, Belgium); Denys Nikolaev (École Polytechnique Fédérale de Lausanne, Switzerland); Margot Deruyck (Ghent University - IMEC, Belgium); Gunter Vermeeren (Ghent University, Belgium); Luc Martens (Ghent University, Belgium); Frank Tuytens (Institute for Agricultural and Fisheries Research (ILVO), Belgium); Bart Sonck (Institute for Agricultural and Fisheries Research (ILVO), Belgium); David Plets (Ghent University - imec, Belgium); Wout Joseph (Ghent University/IMEC, Belgium)
Assessment and Modeling of Antennas and Radio Channels Jointly	CS20	T10 EM modelling and simulation tools / Convened Session / Antennas	20 Mar 2020	B11	09:50	10:10	A Practical Deconvolution Antenna Method to Retrieve Scattering Profile in Complex Random Media - A Vegetation Case Study at 28 GHz	Nuno R. Leonor (Instituto de Telecomunicações, Portugal); Telmo R. Fernandes (IIPLeiria / Institute of Telecommunications & ESTG/IT-DL, Portugal); Rafael F. S. Caldeirinha (Polytechnic Institute of Leiria & Instituto de Telecomunicações, Portugal)
Assessment and Modeling of Antennas and Radio Channels Jointly	CS20	T10 EM modelling and simulation tools / Convened Session / Antennas	20 Mar 2020	B11	10:40	11:00	Towards Hybrid Statistical-Deterministic Wireless Channel Modelling of Multiroom Environments	Valon Blakaj (Research Associate, United Kingdom (Great Britain)); Shukai Ma (University of Maryland, USA); Steven Anlage (Center for Nanophysics and Advanced Materials, USA); Gabriele Gradosi (University of Nottingham, United Kingdom (Great Britain)); Thomas Antonsen (University of Maryland, USA); Stephen Creagh (University of Nottingham, United Kingdom (Great Britain)); Gregor Tanner (University of Nottingham, United Kingdom (Great Britain))
Assessment and Modeling of Antennas and Radio Channels Jointly	CS20	T10 EM modelling and simulation tools / Convened Session / Antennas	20 Mar 2020	B11	11:00	11:20	Directionally Resolved UWB Channel Modeling for Environment-Aware Positioning	Michael Rath (Graz University of Technology, Austria); Erik Leitinger (Graz University of Technology, Austria); Anh Nguyen (Hanoi University of Science and Technology, Vietnam); Klaus Wtritsl (Graz University of Technology, Austria)
Assessment and Modeling of Antennas and Radio Channels Jointly	CS20	T10 EM modelling and simulation tools / Convened Session / Antennas	20 Mar 2020	B11	11:20	11:40	Millimeter-Wave Indoor Channel Measurement and Intra-Cluster Modelling	Minseok Kim (Niigata University, Japan); Satoru Kishimoto (Niigata University, Japan); Keita Akasaka (Niigata University, Japan)

Assessment and Modeling of Antennas and Radio Channels Jointly	CS20	T10 EM modelling and simulation tools / Convened Session / Antennas	20 Mar 2020	B11	11:40	12:00	Massive Radio Channel Sounder Architecture for 5G Mobility Scenarios: MaMIMOSA	Pierre Laly (University of Lille, France); Davy P. Gallot (University of Lille, France); Gauthier Delbarre (University of Lille, France); Matthias Van den Bossche (Ghent University, Belgium, Belgium); Gunter Vermeeren (Ghent University, Belgium); Frédéric Chailita (University of Lille & IEMN Lab, France); Emmeric Tanghe (Ghent University, Belgium); Eric P. Simon (University of Lille, France); Wout Joseph (Ghent University/IMEC, Belgium); Luc Martens (Ghent University, Belgium); Martine Liénard (University of Lille, France)
Assessment and Modeling of Antennas and Radio Channels Jointly	CS20	T10 EM modelling and simulation tools / Convened Session / Antennas	20 Mar 2020	B11	12:00	12:20	Smart Dipole Arrays for Radio Channel Enhancement	Juan Bucheli Garcia (Huawei Technologies & Telecom Paristech, France); Alain Sibille (Telecom ParisTech, France); Mohamed Kamoun (Huawei France, France)
Automotive antennas	T06-A17	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	18 Mar 2020	B7	08:30	08:50	Transparent Glass Antenna for 28 GHz and Its Signal Reception Characteristics in Urban Environment	Minoru Inomata (NTT DCOMO, INC., Japan); Toshiaki Sayama (AGC Inc., Japan); Takeshi Motegi (AGC Inc., Japan); Osamu Kagaya (ASAHI GLASS CO., LTD., Japan); Hideaki Shoji (AGC Asahi Glass, Japan); Shoichi Takeuchi (AGC Inc., Japan); Kiyoshi Nobuoka (AGC Inc, Japan)
Automotive antennas	T06-A17	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	18 Mar 2020	B7	08:50	09:10	Optically Transparent Antenna Integrated Inside a Headlamp for Automotive Radar Application	Sofian Hamid (RWTH Aachen University, Germany); Dirk Heberling (RWTH Aachen University, Germany); Manuela Jungbänel (Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology, Germany); Thomas Preussner (Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology, Germany); Patrick Gretzki (Fraunhofer Institute for Laser Technology, Germany); Ludwig Pongratz (Fraunhofer Institute for Laser Technology, Germany); Christian Hördermann (Fraunhofer Institute for Laser Technology, Germany); Arnold Gillner (Fraunhofer Institute for Laser Technology, Germany)
Automotive antennas	T06-A17	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	18 Mar 2020	B7	09:10	09:30	A Capacitively Coupled Patch Antenna Array for an Enlarged Bandwidth at 77 GHz	Jonathan Mayer (Karlsruhe Institute of Technology, Germany); Manuel Martina (Schweizer Electronic AG, Germany); Jerzy Kowalewski (Karlsruhe Institute of Technology, Germany); Jue Chen (Schweizer Electronic AG, Germany); Thomas Zwick (Karlsruhe Institute of Technology (KIT), Germany)
Automotive antennas	T06-A17	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	18 Mar 2020	B7	09:30	09:50	Broadband Frequency Reconfigurable Antenna Using Capacitive Loading for K-band Applications	Muhammad S. Anwar (University of Kassel, Germany); Axel Bangert (University of Kassel, Germany)
Automotive antennas	T06-A17	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	18 Mar 2020	B7	09:50	10:10	An Efficient Low-Profile Low-VHF Antenna for Small Unmanned Ground Vehicles	Jihun Choi (Army Research Lab & Booz Allen Hamilton, USA); Fikadu Dagefu (US Army Research Laboratory, USA); Brian Sadler (Army Research Laboratory, USA)
Automotive antennas	T06-A17	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	18 Mar 2020	B7	10:40	11:00	A Triband Wire Antenna for All Radio and TV Bands	Johan Wettergren (Qamcom Research and Technology, Sweden); Robert Petersson (Qamcom Research and Technology, Sweden); Roman Iustin (Volvo Technology, Sweden)
Automotive antennas	T06-A17	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	18 Mar 2020	B7	11:00	11:20	Ka-Band Planar Magic-T Based on E-plane Groove Gap Waveguide for Monopulse Antenna System	Arefeh Kalantari Khandani (Intelligent Boards Electronic Company, Iran); Ali Farahbakhsh (Graduate University of Advanced Technology, Iran)
Automotive antennas	T06-A17	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	18 Mar 2020	B7	11:20	11:40	Harness Connection and Immediate Environment Impact on RF Automotive Receivers Antenna BW	Ahmadreza Jafari (Renault S.A.S, France); Gregory Siguer (Continental Automotive S.A.S, France); Clément Prince (Continental Automotive S.A.S, I BS RD RF, France); Philippe Boutier (Renault sas, France); Imene Elfeki (Expleo, France); Xavier Bunlon (Renault sas, France)
Automotive antennas	T06-A17	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	18 Mar 2020	B7	11:40	12:00	Three Port Circular Patch Antenna with Pattern and Polarisation Agility	Peter J James (University of Bristol, United Kingdom (Great Britain))
Automotive antennas	T06-A17	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Antennas	18 Mar 2020	B7	12:00	12:20	Wide-Angular Scanning Performance Enhancement in Linear Arrays via Combining Integrated In-line Subarrays and Amplitude Tapering	Fannush Shofi Akbar (Institut Teknologi Sepuluh Nopember, Indonesia); Gamanyo Hendranto (Institut Teknologi Sepuluh Nopember, Indonesia); Leo P. Uthart (em. prof. Delft University of Technology & Universitas Indonesia, Beijing Institute of Technology, ITS Surabaya, The Netherlands); Ioan E. Lager (Delft University of Technology, The Netherlands)
Body area antennas and sensor systems	T05-A12/3	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	16:40	17:00	Multichip RFID Epidermal Sensor for Body Temperature Monitoring	Sara Parrella (University of Roma "Tor Vergata", Italy); Cecilia Occhiuzzi (University of Roma Tor Vergata & DiCil, Italy); Gaetano Marrocco (University of Rome Tor Vergata, Italy)
Body area antennas and sensor systems	T05-A12/3	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	17:00	17:20	Full Analysis of Wearable Textile Sensor for Biomedical Applications: Preliminary Validations Towards a Pre-Clinical Assessment	Sandra Costanzo (University of Calabria, Italy); Vincenzo Cioffi (University of Calabria, Italy)
Body area antennas and sensor systems	T05-A12/3	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	17:20	17:40	Passive RFID-based Textile Touchpad	Han He (Tampere University, Finland); Xiaochen Chen (Tampere University, Finland); Leevi Raivio (Tampere University, Finland); Heikki Huttunen (Tampere University, Finland); Johanna Virkki (Tampere University, Finland)
Body area antennas and sensor systems	T05-A12/3	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	17:40	18:00	A Dual-band Repeater Antenna for On-Body Receiver Unit of Wireless Capsule Endoscope	Md Miah (Aalto University & School of Electrical Engineering, Finland); Clemens Ichein (Aalto University & School of Electrical Engineering, Finland); Katsuyuki Haneda (Aalto University, Finland)
Body area antennas and sensor systems	T05-A12/3	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	18:00	18:20	UWB Planar Bias-switched Imaging Array for Breast-Cancer Screening	Natalia Nikolova (McMaster University, Canada); Farzad Foroutan (McMaster University, Canada); Vartika Tyagi (McMaster University, Canada); Chih-Hung Chen (McMaster University, Canada); Charl Baard (McMaster University, Canada)
Challenges in Leaky Wave Antennas and Novel Approaches to Solve Them	CS21	T11 Fundamental research and emerging technologies / Convened Session / Antennas	16 Mar 2020	B2	13:30	13:50	Quasi-Optical Excitation of a Circularly-Polarized Metasurface Antenna at K-band	Jorge Ruiz Garcia (Université de Rennes, France); Marco Faenzi (Université de Rennes 1, France); Adham Mahmoud (Institut d'Electronique et de Télécommunications de Rennes, France); Mauro Ettorre (University of Rennes 1 & UMR CNRS 6164, France); Patrick Potier (DGA, France); Poulliguen Philippe (DGA, France); Ronan Sauleau (University of Rennes 1, France); David González-Ovejero (Centre National de la Recherche Scientifique - CNRS, France)
Challenges in Leaky Wave Antennas and Novel Approaches to Solve Them	CS21	T11 Fundamental research and emerging technologies / Convened Session / Antennas	16 Mar 2020	B2	13:50	14:10	Leaky Wave Analysis of Periodic Corrugated Metallic Plates with Complex Shapes	Despoina Kampouridou (University of Birmingham, United Kingdom (Great Britain)); Alexandros Feresidis (University of Birmingham, United Kingdom (Great Britain))
Challenges in Leaky Wave Antennas and Novel Approaches to Solve Them	CS21	T11 Fundamental research and emerging technologies / Convened Session / Antennas	16 Mar 2020	B2	14:10	14:30	Near-field Focusing Through Higher-order Cylindrical Leaky Waves	Davide Comite (Sapienza University of Rome, Italy); Walter Fuscaldo (Sapienza University of Rome, Italy); Paolo Burghignoli (Sapienza University of Rome, Italy); Paolo Baccarelli (Roma Tre University, Italy); Alessandro Galli (Sapienza University of Rome 1, Italy)
Challenges in Leaky Wave Antennas and Novel Approaches to Solve Them	CS21	T11 Fundamental research and emerging technologies / Convened Session / Antennas	16 Mar 2020	B2	14:30	14:50	Near-Field Beamforming in Leaky-Wave Resonant Antennas	Sjoerd Bosma (Delft University of Technology, The Netherlands); Huasheng Zhang (Delft University of Technology, The Netherlands); Andrea Neto (Delft University of Technology, The Netherlands); Nuria Llombart (Delft University of Technology, The Netherlands)
Challenges in Leaky Wave Antennas and Novel Approaches to Solve Them	CS21	T11 Fundamental research and emerging technologies / Convened Session / Antennas	16 Mar 2020	B2	14:50	15:10	Prism-based Leaky-Lens Antennas at 60 GHz for 5G Point-to-Point Communication Links	Qiao Chen (KTH Royal Institute of Technology & State Key Laboratory of Millimeter Wave, Southeast University, Sweden); Oskar Zetterstrom (KTH Royal Institute of Technology, Sweden); Francisco Mesa (University of Seville, Spain); Pablo Padilla (University of Granada, Spain); Angel Palomares-Caballero (Universidad de Granada, Spain); Elena Pucci (Ericsson AB, Sweden); Xiaoxing Yin (State Key Laboratory of Millimeter Waves, China); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
Challenges in Leaky Wave Antennas and Novel Approaches to Solve Them	CS21	T11 Fundamental research and emerging technologies / Convened Session / Antennas	16 Mar 2020	B2	15:10	15:30	Direct Synthesis of Frequency-Scanned Monopulse Half-Width Microstrip Leaky-Wave Antennas	Alejandro Gil Martinez (Technical University of Cartagena Cartagena, Spain); Miguel Poveda-Garcia (Technical University of Cartagena, Spain); Jose-Luis Gómez-Tornero (Polytechnic University of Cartagena, Spain)
Channel Modelling for Massive MIMO and Near-Field Communication Systems	T11-P02/1	T11 Fundamental research and emerging technologies / Regular Session / Propagation	17 Mar 2020	B10	16:40	17:00	Study on Beamforming V2I Scenarios for Sub-6 GHz and mmWave Channels	Christian Ballesteros (Universitat Politècnica de Catalunya, Spain); German Ramirez Arroyave (Universidad Nacional de Colombia, Colombia); Luca Montero Bayo (Universitat Politècnica de Catalunya, Spain); Jordi Romeu (Universitat Politècnica de Catalunya, Spain); Luis Jofre (Universitat Politècnica de Catalunya, Spain)
Channel Modelling for Massive MIMO and Near-Field Communication Systems	T11-P02/1	T11 Fundamental research and emerging technologies / Regular Session / Propagation	17 Mar 2020	B10	17:00	17:20	An Electromagnetic Framework for the Deployment of Reconfigurable Intelligent Surfaces to Control Massive MIMO Channel Characteristics	Debdeep Sarkar (Royal Military College Canada, Canada); Said Mikki (University of New Haven, USA); Yahia Antar (Royal Military College of Canada, Canada)

Channel Modelling for Massive MIMO and Near-Field Communication Systems	T11-P02/1	T11 Fundamental research and emerging technologies / Regular Session / Propagation	17 Mar 2020	B10	17:20	17:40	WBAN Channel Modeling on Electromagnetic Interaction in Biological Tissues for Estimating Path Loss Characteristics	Prapti Ganguly (A. K. Choudhury School of Information Technology, University of Calcutta, India); Ananya Dey (Institute of Radio Physics and Electronics, University of Calcutta, India); Debarati Ganguly (Institute of Radio Physics and Electronics, University of Calcutta, India); Chinmoy Saha (Indian Institute of Space Science and Technology & Royal Military College of Canada, India); Jawad Y Siddiqui (University of Calcutta & Royal Military College of Canada, India)
Channel Modelling for Massive MIMO and Near-Field Communication Systems	T11-P02/1	T11 Fundamental research and emerging technologies / Regular Session / Propagation	17 Mar 2020	B10	17:40	18:00	Measurement Based Millimeter Wave Massive MIMO Channel Parameter Comparison	Heng Zhang (Chongqing University of Posts and Telecommunications, China); Yu Shao (Chongqing University of Posts and Telecommunications, China); Xi Liao (Chongqing University of Posts and Telecommunications, China); Jiliang Zhang (The University of Sheffield, United Kingdom (Great Britain)); Jie Zhang (University of Sheffield, Dept. of Electronic and Electrical Engineering, United Kingdom (Great Britain))
Channel Modelling for Massive MIMO and Near-Field Communication Systems	T11-P02/1	T11 Fundamental research and emerging technologies / Regular Session / Propagation	17 Mar 2020	B10	18:00	18:20	Massive MIMO Channel Measurement and Characterization for Manufacturing Scenario	Zhimeng Zhong (Huawei Technologies Co., Ltd., China); Yuntian Pan (Huawei Technologies CO., Ltd., China); Jianyao Zhao (Huawei Technologies Co., Ltd., China)
Computational and numerical techniques 1	T10-E03/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	17 Mar 2020	B11	10:40	11:00	An Iterative Method for the Analysis of Large Disjoint Antenna Arrays	Matthews Chose (Stellenbosch University & University of Stellenbosch, South Africa); Matthys M. Botha (Stellenbosch University, South Africa)
Computational and numerical techniques 1	T10-E03/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	17 Mar 2020	B11	11:00	11:20	Directional Method to Compute Reduced Matrix System in MBF Solvers	Keshav Sewraj (Stellenbosch University, South Africa); Matthys M. Botha (Stellenbosch University, South Africa)
Computational and numerical techniques 1	T10-E03/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	17 Mar 2020	B11	11:20	11:40	An Efficient Parallelization Strategy for the Adaptive Integral Method Based on Graph Partitioning	Damian Marek (University of Toronto, Canada); Shashwat Sharma (University of Toronto, Canada); Piero Triverio (University of Toronto, Canada)
Computational and numerical techniques 1	T10-E03/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	17 Mar 2020	B11	11:40	12:00	A False-Resonance-Free Integral Equation Formulation for the Electromagnetic Transmission Problem	Anders Karlsson (Lund University, Sweden); Johan Helsing (Lund University, Sweden)
Computational and numerical techniques 1	T10-E03/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	17 Mar 2020	B11	12:00	12:20	An Explicit Time Domain Finite Element Boundary Integral Method with Element Level Domain Decomposition for Electromagnetic Scattering Analysis	Ming Dong (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Ping Li (The University of Hong Kong, Hong Kong); Hakan Bago (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)
Computational and numerical techniques 2	T10-E03/2	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	17 Mar 2020	B11	16:40	17:00	Floquet Mode Analysis on Groove Gap Waveguide	Jiro Hirokawa (Tokyo Institute of Technology, Japan); Kelsuke Ejiri (Tokyo Institute of Technology, Japan); Takashi Tomura (Tokyo Institute of Technology, Japan)
Computational and numerical techniques 2	T10-E03/2	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	17 Mar 2020	B11	17:00	17:20	Modeling of Quantum-Dot Elliptical Nanowire Single-Photon Sources	Uğur Meriç Gür (Technical University of Denmark, Denmark); Niels Gregersen (Technical University of Denmark, Denmark); Samel Arslanagic (Technical University of Denmark, Denmark); Michael Mattes (Technical University of Denmark, Denmark)
Computational and numerical techniques 2	T10-E03/2	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	17 Mar 2020	B11	17:20	17:40	Mapping Between Complex Eigenmodes and Complex Propagation Constant for Uniform Rectangular Metallic Waveguides	Joao Guilherme Nizer Rahmeier (Carleton University, Canada); Ville Tiukuvaara (Carleton University, Canada); Shulabh Gupta (Carleton University, Canada)
Computational and numerical techniques 2	T10-E03/2	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	17 Mar 2020	B11	17:40	18:00	Time-Domain Modeling and Simulation of EM-Fields Propagation in Anisotropic Dispersive Media with Non-Conformal Meshing	Abdelrahman Abdallah Ijeh (Université Côte d'Azur, France); Marylène Cueille (University of Nice Sophia Antipolis CNRS, France); Jean-Lou Dubard (Université de Nice - Sophia Antipolis, CNRS, France); Michel Ney (IMT Atlantique, France)
Computational and numerical techniques 2	T10-E03/2	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	17 Mar 2020	B11	18:00	18:20	Perturbational Method for Modeling Electromagnetic Propagation Through Non-axisymmetric Geophysical Formations	Liseth Saavedra (Pontifical Catholic University of Rio de Janeiro & Center for Telecommunications Studies, CETUC, Brazil); Guilherme Simon da Rosa (Pontifical Catholic University of Rio de Janeiro, PUC-Rio, Brazil); Jose R Bergmann (PUC-Rio, Brazil)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	13:30	13:50	A Subwavelength Microwave Bandpass Filter Based on a Chiral Waveguide	Malihah Khatibi Moghaddam (École Polytechnique Fédérale de Lausanne (EPFL), Switzerland); Romain Fleury (EPFL, Switzerland)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	13:50	14:10	Broadband Offset-Reflector Beamformer on BCB in the 300-GHz Band	Adham Mahmoud (Institut d'électronique et de Télécommunications de Rennes, France); David González-Ovejero (Centre National de la Recherche Scientifique - CNRS, France); Mauro Ettorre (University of Rennes 1 & UMR CNRS 6164, France); Ronan Sauleau (University of Rennes 1, France); Frédéric Aniel (Université Paris Sud, France); Nicolas Zerounian (Université Paris Sud, France); Anne-sophie Grimalt (Université Paris Sud, France)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	14:10	14:30	Matched Waves at Metaboundaries	Ari Sihvola (Aalto University, Finland); Ismo V Lindell (Aalto University, School of Electrical Engineering, Finland)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	14:30	14:50	Mini- And Multi-Dimensional Metamaterials	Sergei Tretyakov (Aalto University, Finland)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	14:50	15:10	A Method for Extending the Bandwidth of Modulated Metasurface Antennas	Marco Faenzi (Université de Rennes 1, France); David González-Ovejero (Centre National de la Recherche Scientifique - CNRS, France); Stefano Maci (University of Siena, Italy)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	15:10	15:30	Analytic Design of Dual-Band, Dual-Polarized LP-to-CP Polarization Converters	Michele Del Mastro (University of Rennes 1, France); Mauro Ettorre (University of Rennes 1 & UMR CNRS 6164, France); Anthony Grbic (University of Michigan, Ann Arbor, USA)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	16:00	16:20	Graphene Plasmonics with a Drift-Current Bias	Tiago Morgado (Instituto de Telecomunicações and University of Coimbra, Portugal); Mario Silveirinha (Universidade de Lisboa - Instituto de Telecomunicações, Portugal)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	16:20	16:40	Stable Positive/negative Capacitor for Use in Active Artificial Structures	Silvio Hrabar (University of Zagreb, Croatia); Dominik Zanic (University of Zagreb, Croatia); Igor Krois (University of Zagreb, Croatia)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	16:40	17:00	Virtual Perfect Absorption Through Adiabatically Modulated Cavities	Dimitrios Sounas (Wayne State University, USA)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	17:00	17:20	Spatial and Spatio-Temporal Modulations for Advanced Wave Control with Metasurfaces	Younes Radi (CUNY Advanced Science Research Center, USA); Adam Overvig (CUNY Advanced Science Research Center, USA); Yoshiaki Kasahara (University of Texas at Austin, USA); Andrea Alù (CUNY Advanced Science Research Center, USA)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	17:20	17:40	Investigation of Surface Waves on Anisotropic Self-Complementary Metasurfaces	Vladimir Lenets (ITMO University, Russia); Andrey Sayanskiy (ITMO University, Russia); Stanislav Glybovskiy (ITMO University, Russia); Enrica Martini (University of Siena, Italy); Juan Domingo Baena (Universidad Nacional de Colombia, Colombia); Stefano Maci (University of Siena, Italy)
Controlling EM Waves with Low- and High-Dimensional Metamaterials	CS24	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B10	17:40	18:00	High Speed Metasurface Reconfigurability Under Optical Control	Houssemeddine Kraoui (ESPCI, France); Charlotte Tripon-Cansellier (Université Pierre et Marie Curie, France); Stefano Maci (University of Siena, Italy); Jean-Maurice Chazelas (Thales Aerospace Division, France)
Convergence of Mobile Radio and Radar	CS25	T08 Positioning, localization & tracking / Convened Session / Propagation	19 Mar 2020	B5	08:30	08:50	Towards Joint Sensing and Communication for 5G and Beyond Systems	Andrea Massa (University of Trento, Italy); Paolo Rocca (University of Trento, Italy); Marco Salucci (ELEDIA Research Center, Italy); Nicola Anselmi (ELEDIA Research Center, Italy)
Convergence of Mobile Radio and Radar	CS25	T08 Positioning, localization & tracking / Convened Session / Propagation	19 Mar 2020	B5	08:50	09:10	An OCDM Radar-Communication System	Lucas Giroto de Oliveira (Karlsruhe Institute of Technology, Germany); Mohammad Basim Alabd (Karlsruhe Institute of Technology, Germany); Benjamin Nuss (Karlsruhe Institute of Technology, Germany); Thomas Zwick (Karlsruhe Institute of Technology (KIT), Germany)
Convergence of Mobile Radio and Radar	CS25	T08 Positioning, localization & tracking / Convened Session / Propagation	19 Mar 2020	B5	09:10	09:30	IQ-Imbalance Compensation for Wideband OFDM-Radar	Benedikt Schweizer (Ulm University, Germany); Christina Knill (Ulm University, Germany); Daniel Schindler (Robert Bosch GmbH, Germany); Christian Waldschmidt (University of Ulm, Germany)

Convergence of Mobile Radio and Radar	CS25	T08 Positioning, localization & tracking / Convened Session / Propagation	19 Mar 2020	B5	09:30	09:50	A MIMO Joint Communication-Radar Measurement Platform at the Millimeter-Wave Band	Preeti Kumari (UT Austin, USA); Amine Mezghani (Electrical and Computer Engineering & University of Manitoba, Canada); Robert Heath (The University of Texas at Austin, USA)
Convergence of Mobile Radio and Radar	CS25	T08 Positioning, localization & tracking / Convened Session / Propagation	19 Mar 2020	B5	09:50	10:10	Mutual Over-The-Air Synchronization of Radar Sensors	Thomas Dallmann (Fraunhofer Institute for High Frequency Physics and Radar Techniques FHR, Germany)
Convergence of Mobile Radio and Radar	CS25	T08 Positioning, localization & tracking / Convened Session / Propagation	19 Mar 2020	B5	10:40	11:00	System Level Synchronization of Phase-Coded FMCW Automotive Radars for RadCom	Franz Lampel (Eindhoven University of Technology, The Netherlands); Faruk Uysal (Delft University of Technology, The Netherlands); Recep Firat Tigrek (Eindhoven University of Technology, The Netherlands); Simone Orru (Delft University of Technology, The Netherlands); Alex Alvarado (Eindhoven University of Technology (TU/e), The Netherlands); Frans MJ Willems (Technical University Eindhoven, The Netherlands); Alexander Yarovoy (TU Delft, The Netherlands)
Convergence of Mobile Radio and Radar	CS25	T08 Positioning, localization & tracking / Convened Session / Propagation	19 Mar 2020	B5	11:00	11:20	Performance of OFDMA Resource Scheduling in Joint Mobile Radio and Radar Networks	Steffen Schieler (Ilmenau University of Technology, Germany); Michael Döbereiner (Technische Universität Ilmenau & Fraunhofer IIS, Germany); Reiner S. Thomä (Ilmenau University of Technology, Germany); Christian Schneider (Ilmenau University of Technology, Germany); Giovanni Del Galdo (Fraunhofer Institute for Integrated Circuits IIS & Technische Universität Ilmenau, Germany)
Convergence of Mobile Radio and Radar	CS25	T08 Positioning, localization & tracking / Convened Session / Propagation	19 Mar 2020	B5	11:20	11:40	Stepped-Carrier OFDM V2V Resource Allocation for Sensing and Communication Convergence	Musa Furkan Keskin (Chalmers University of Technology, Sweden); Canan Aydogdu (Chalmers University of Technology, Sweden); Henk Wymeersch (Chalmers University of Technology, Sweden)
Convergence of Mobile Radio and Radar	CS25	T08 Positioning, localization & tracking / Convened Session / Propagation	19 Mar 2020	B5	11:40	12:00	Accuracy Requirements for Cooperative Radar with Sensor Fusion	Mehdi Ashury (TU Wien, Austria); Christian Eliasch (Vienna University of Technology, Austria); Thomas Blazek (TU Wien, Austria); Christoph F Mecklenbräuer (TU Wien, Austria)
Convergence of Mobile Radio and Radar	CS25	T08 Positioning, localization & tracking / Convened Session / Propagation	19 Mar 2020	B5	12:00	12:20	Physical Modeling for Device-Free Localization Exploiting Multipath Propagation of Mobile Radio Signals	Martin Schmidhammer (German Aerospace Center (DLR), Germany); Michael Walter (German Aerospace Center (DLR), Germany); Christian Gentner (German Aerospace Center (DLR), Germany); Stephan Sand (German Aerospace Center (DLR), Germany)
COST Session CA15104 (IRACON): Measurements and Simulations in Channel Modelling in Wireless Body Area Networks	SW01	T05 Biomedical and health / Convened Session / Propagation	17 Mar 2020	B6	16:40	17:00	Human Body Modelling for Wireless Body Area Network Optimization	Lukasz Januszkiewicz (Lodz University of Technology, Institute of Electronics, Poland); Slawomir Hausman (Lodz University of Technology, Poland); Paolo Di Barba (University of Pavia, Italy)
COST Session CA15104 (IRACON): Measurements and Simulations in Channel Modelling in Wireless Body Area Networks	SW01	T05 Biomedical and health / Convened Session / Propagation	17 Mar 2020	B6	17:00	17:20	Preliminary Empirical Validation of a Polarized Off-Body Channel Model with Dynamic Users	Kenan Turbic (INESC-ID / IST, University of Lisbon, Portugal); Slawomir J. Ambrozjak (Gdańsk University of Technology, Poland); Luis M. Correia (IST/INESC-ID - University of Lisbon & INESC, Portugal)
COST Session CA15104 (IRACON): Measurements and Simulations in Channel Modelling in Wireless Body Area Networks	SW01	T05 Biomedical and health / Convened Session / Propagation	17 Mar 2020	B6	17:20	17:40	Real-Time Demonstration of Antenna Effects on Emulated Wireless Capsule Endoscope Links	Rytis Stasiunas (Aalto University, Finland); Pasi Koivumäki (Aalto University, Finland); Md Miah (Aalto University & School of Electrical Engineering, Finland); Mikko Heino (Aalto University, Finland); Katsuyuki Haneda (Aalto University, Finland); Clemens Icheln (Aalto University & School of Electrical Engineering, Finland)
COST Session CA15104 (IRACON): Measurements and Simulations in Channel Modelling in Wireless Body Area Networks	SW01	T05 Biomedical and health / Convened Session / Propagation	17 Mar 2020	B6	17:40	18:00	Human Posture Effects of WBAN Measurement in a Reverberation Chamber	Takahiro Aoyagi (Tokyo Institute of Technology, Japan)
COST Session CA15104 (IRACON): Measurements and Simulations in Channel Modelling in Wireless Body Area Networks	SW01	T05 Biomedical and health / Convened Session / Propagation	17 Mar 2020	B6	18:00	18:20	Experimental Parameter Optimization for Adaptive LoRa Modulation in Body-Centric Applications	Thomas Ameloot (Ghent University - imec, Belgium); Patrick Van Torre (Ghent University, Belgium); Hendrik Rogier (Ghent University, Belgium)
COST Session CA17115 (MyWAVE): Developments in Electromagnetic-Based Medical Technologies	SW02	T05 Biomedical and Health / Convened Session / Electromagnetics	17 Mar 2020	B7	08:30	08:50	Loco-regional Hyperthermia Delivery: Patient-specific Set-Up Procedures for Treatment Optimisation	Johannes Crezee (Academic Medical Center / University of Amsterdam, The Netherlands); Remko Zweije (Academic Medical Center / University of Amsterdam, The Netherlands); Petra Kok (Academic Medical Center / University of Amsterdam, The Netherlands)
COST Session CA17115 (MyWAVE): Developments in Electromagnetic-Based Medical Technologies	SW02	T05 Biomedical and Health / Convened Session / Electromagnetics	17 Mar 2020	B7	08:50	09:10	Hyperthermia Treatment Planning: Clinical Application and Ongoing Research	Petra Kok (Academic Medical Center / University of Amsterdam, The Netherlands); Johannes Crezee (Academic Medical Center / University of Amsterdam, The Netherlands)
COST Session CA17115 (MyWAVE): Developments in Electromagnetic-Based Medical Technologies	SW02	T05 Biomedical and Health / Convened Session / Electromagnetics	17 Mar 2020	B7	09:10	09:30	Influence of the BSD-2000 3D/MR Hyperthermia Applicator on MR Image Quality: A Quantitative Assessment	Kemal Sumser (Erasmus MC Cancer Institute, The Netherlands); Margarethus M. Paulides (Eindhoven University of Technology, The Netherlands); Gennaro G. Bellizzi (Erasmus University Medical Center, Italy); Gerard C. van Rhooen (Erasmus MC Cancer Institute, The Netherlands); Juan Hernandez-Tamames (Erasmus University Medical Center, The Netherlands); Sergio Curto (Erasmus University Medical Center, The Netherlands)
COST Session CA17115 (MyWAVE): Developments in Electromagnetic-Based Medical Technologies	SW02	T05 Biomedical and Health / Convened Session / Electromagnetics	17 Mar 2020	B7	09:30	09:50	The Required Patient Modeling Realism in Radiofrequency Heating Simulation Studies	Gennaro G. Bellizzi (Erasmus University Medical Center, Italy); Kemal Sumser (Erasmus MC Cancer Institute, The Netherlands); Margarethus M. Paulides (Eindhoven University of Technology, The Netherlands)
COST Session CA17115 (MyWAVE): Developments in Electromagnetic-Based Medical Technologies	SW02	T05 Biomedical and Health / Convened Session / Electromagnetics	17 Mar 2020	B7	09:50	10:10	Monitoring Microwave Thermal Ablation Using Electrical Impedance Tomography: An Experimental Feasibility Study	Anna Bottiglieri (Translational Medical Device Lab & National University of Ireland, Galway, Ireland); Eoghan Dunne (National University of Ireland & Translational Medical Device Lab, Ireland); Barry McDermott (Translational Medical Device Lab, National University of Ireland Galway, Ireland); Marta Cavagnaro (Sapienza University of Rome, Italy); Emily Porter (University of Texas at Austin, USA); Laura Farina (National University of Ireland Galway & CURAM, Ireland)
COST Session CA17115 (MyWAVE): Developments in Electromagnetic-Based Medical Technologies	SW02	T05 Biomedical and Health / Convened Session / Electromagnetics	17 Mar 2020	B7	10:40	11:00	Effects of Choke in Minimally-Invasive Small-Profile Microwave Ablation Applicators	Giuseppe Ruvio (National University of Ireland, Galway, Ireland); Marta Cavagnaro (Sapienza University of Rome, Italy)
COST Session CA17115 (MyWAVE): Developments in Electromagnetic-Based Medical Technologies	SW02	T05 Biomedical and Health / Convened Session / Electromagnetics	17 Mar 2020	B7	11:00	11:20	Characterization of Esophageal Temperature Profiles During Cardiac Radiofrequency Ablation	Jan Sebek (Kansas State University & Czech Technical University, USA); Faraz Chamani (Kansas State University, USA); Jie Cheng (Texas Heart Institute, USA); Dhanunjaya Lakireddy (Kansas City Heart Rhythm Institute and Research Foundation, USA); Punit Prakash (Kansas State University, USA)
COST Session CA17115 (MyWAVE): Developments in Electromagnetic-Based Medical Technologies	SW02	T05 Biomedical and Health / Convened Session / Electromagnetics	17 Mar 2020	B7	11:20	11:40	Portable 3-D Microwave Imaging System for Cerebrovascular Diseases Monitoring	Jorge Alberto Tobon Vasquez (Politecnico di Torino, Italy); Rosa Scapaticci (CNR-National Research Council of Italy, Italy); Giovanna Turvani (Politecnico di Torino, Italy); Gennaro Bellizzi (University of Naples Federico II, Italy); David O. Rodriguez Duarte (Politecnico di Torino, Italy); Nadine Joachimowicz (Group of Electrical Engineering - Paris / CentraleSupélec, France); Bernard Duchêne (Laboratoire des Signaux et Systèmes/Supélec/CNRS, France); Mario Roberto Casu (Politecnico di Torino, Italy); Lorenzo Crocco (CNR - National Research Council of Italy, Italy); Francesca Vipiana (Politecnico di Torino, Italy)
COST Session CA17115 (MyWAVE): Developments in Electromagnetic-Based Medical Technologies	SW02	T05 Biomedical and Health / Convened Session / Electromagnetics	17 Mar 2020	B7	11:40	12:00	Potentialities of Inverse Scattering Techniques for Breast Cancer Imaging at Millimeter-Waves Frequencies	Martina Teresa Bevacqua (Università Mediterranea di Reggio Calabria, Italy); Simona Di Meo (University of Pavia, Italy); Lorenzo Crocco (CNR - National Research Council of Italy, Italy); Tommaso Isernia (University of Reggio Calabria, Italy); Giulia Matrone (University of Pavia, Italy); Marco Pasian (University of Pavia, Italy)
COST Session CA17115 (MyWAVE): Supporting Medical Device Development via Dielectric and Thermal Tissue Characterization	SW03	T05 Biomedical and health / Convened Session / Measurements	18 Mar 2020	B6	08:30	08:50	Thermal Properties of Ex Vivo Biological Tissue at Room and Body Temperature	Nuno P. Silva (National University of Ireland Galway & Faculdade de Ciências da Universidade de Lisboa, Ireland); Anna Bottiglieri (Translational Medical Device Lab & National University of Ireland, Galway, Ireland); Raquel C. Conceição (Instituto de Biotecnologia e Engenharia Biomédica, Faculdade de Ciências, Universidade de Lisboa, Portugal); Martin O'Halloran (National University of Ireland, Galway, Ireland); Laura Farina (National University of Ireland Galway & CURAM, Ireland)
COST Session CA17115 (MyWAVE): Supporting Medical Device Development via Dielectric and Thermal Tissue Characterization	SW03	T05 Biomedical and health / Convened Session / Measurements	18 Mar 2020	B6	08:50	09:10	Investigation on Temperature-Dependent Changes of Tissue Thermal Properties on Microwave Ablation Treatments	Marta Cavagnaro (Sapienza University of Rome, Italy); Rosanna Pinto (ENEA, Italy); Vanni Lopresto (ENEA, Italian National Agency for New Technologies, Energy and Sustainable Economic Development, Italy)

COST Session CA17115 (MyWAVE): Supporting Medical Device Development via Dielectric and Thermal Tissue Characterization	SW03	T05 Biomedical and health / Convened Session / Measurements	18 Mar 2020	B6	09:10	09:30	Fast Measurements of Dielectric Properties with Small Size Microwave Transceiver	Niko Ištut (National University of Ireland, Galway & Translational Medical Device Lab, Ireland); Ferry Kienberger (Keysight Technologies, Austria); Emily Porter (University of Texas at Austin, USA); Martin O'Halloran (National University of Ireland, Galway, Ireland); Adam Santorelli (National University of Ireland, Galway & Translational Medical Device Lab, Ireland); Ivan Alic (Keysight Technologies, Austria); Mykolas Ragulskis (Keysight Technologies, Austria); Amin Moradpour (Keysight Technologies, Austria); Manuel Kasper (Keysight Technologies, Austria)
COST Session CA17115 (MyWAVE): Supporting Medical Device Development via Dielectric and Thermal Tissue Characterization	SW03	T05 Biomedical and health / Convened Session / Measurements	18 Mar 2020	B6	09:30	09:50	Advanced Temperature Dielectric Spectroscopy of Muscle Phantom at Microwave Frequencies	Ondrej Fiser (Czech Technical University in Prague & Faculty of Biomedical Engineering, Czech Republic); Michaela Kantova (CTU in Prague, Czech Republic); Sebastian Ley (Technische Universität Ilmenau, Germany); Alexandra Prokhorova (Technische Universität Ilmenau, Germany); Marko Helbig (Technische Universität Ilmenau, Germany); Jan Vrba (Czech Technical University, Czech Republic)
COST Session CA17115 (MyWAVE): Supporting Medical Device Development via Dielectric and Thermal Tissue Characterization	SW03	T05 Biomedical and health / Convened Session / Measurements	18 Mar 2020	B6	09:50	10:10	Dielectric Properties of Biological Tissues at Frequencies Below 1 MHz: Development of an Improved Measurement Technique	Azadeh Peyman (Public Health England, United Kingdom (Great Britain)); Nishtha Chopra (UK Government, United Kingdom (Great Britain))
COST Session CA17115 (MyWAVE): Supporting Medical Device Development via Dielectric and Thermal Tissue Characterization	SW03	T05 Biomedical and health / Convened Session / Measurements	18 Mar 2020	B6	10:40	11:00	On the Dielectric/Thermal Characterization and Calibration of Solutions and Materials for Biomedical Applications	Simona Di Mico (University of Pavia, Italy); Julian Bonello (University of Malta, Malta); Matteo Lodi (University of Cagliari, Italy); Iman Farhat (University of Malta, Malta); Lourdes Farrugia (University of Malta, Malta); Alessandro Fanti (University of Cagliari, Italy); Marco Pasian (University of Pavia, Italy); Francesco Desogus (University of Cagliari, Italy); Charles Sammut (University of Malta, Malta)
COST Session CA17115 (MyWAVE): Supporting Medical Device Development via Dielectric and Thermal Tissue Characterization	SW03	T05 Biomedical and health / Convened Session / Measurements	18 Mar 2020	B6	11:00	11:20	Extracting Dielectric Properties for MRI-based Phantoms for Axillary Microwave Imaging Device	Daniela M. Godinho (Instituto de Biofísica e Engenharia Biomédica, Faculdade de Ciências, Universidade de Lisboa, Portugal); Joao M. Felicio (Instituto de Telecomunicações, Portugal); Tiago Castela (Departamento de Radiologia, Hospital da Luz Lisboa, Luz Saúde, Lisbon, Portugal); Nuno Silva (Hospital da Luz Learning Health, Luz Saúde, Portugal); M Lurdes Orvalho (Departamento de Radiologia, Hospital da Luz Lisboa, Luz Saúde, Lisbon, Portugal); Carlos A. Fernandes (Instituto de Telecomunicações, Instituto Superior Técnico, Portugal); Raquel C. Conceição (Instituto de Biofísica e Engenharia Biomédica, Faculdade de Ciências, Universidade de Lisboa, Portugal)
COST Session CA17115 (MyWAVE): Supporting Medical Device Development via Dielectric and Thermal Tissue Characterization	SW03	T05 Biomedical and health / Convened Session / Measurements	18 Mar 2020	B6	11:20	11:40	Broadband Dielectric Measurements of Ex-Vivo Uterine Fibroid Tissues over the Ablative Temperature Range	Ghina Zia (Kansas State University, USA); Jan Sebek (Kansas State University & Czech Technical University, USA); Punit Prakash (Kansas State University, USA)
COST Session CA17115 (MyWAVE): Supporting Medical Device Development via Dielectric and Thermal Tissue Characterization	SW03	T05 Biomedical and health / Convened Session / Measurements	18 Mar 2020	B6	11:40	12:00	Microwave Calcaneus Phantom for Bone Imaging Applications	Bilal Amin (National University of Ireland, Galway & Translational Medical Device Lab, Ireland); Daniel Kelly (School of Medicine, National University of Ireland Galway, Ireland); Atif Shahzad (National University of Ireland, Galway, Ireland); Martin O'Halloran (National University of Ireland, Galway, Ireland); Muhammad Adnan Elahi (National University of Ireland, Galway, Ireland)
COST Session CA17115 (MyWAVE): Supporting Medical Device Development via Dielectric and Thermal Tissue Characterization	SW03	T05 Biomedical and health / Convened Session / Measurements	18 Mar 2020	B6	12:00	12:20	Dielectric Properties of Tissues Historical Aspects and Measurement Challenges	Azadeh Peyman (Public Health England, United Kingdom (Great Britain))
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	13:30	13:50	High Scanning Rate Leaky Wave Antenna Based on Glide Symmetry for 77 GHz Automotive Radar	Adrián Tamayo-Domínguez (Universidad Politécnica de Madrid, Spain); Jose Manuel Fernández González (Universidad Politécnica de Madrid, Spain); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	13:50	14:10	Holey Glide-Symmetric Waveguide Filters for 5G Communication Systems at Millimetre Wave Frequencies	Alberto Monje-Real (KTH Royal Institute of Technology, Sweden); Nelson Fonseca (European Space Agency, The Netherlands); Oskar Zetterstrom (KTH Royal Institute of Technology, Sweden); Elena Pucci (Ericsson AB, Sweden); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	14:10	14:30	Ultra-Wide Band Non-Dispersive Leaky-Wave Antenna Based on Glide-Symmetric Meandered Transmission Lines	Mahsa Ebrahimpouri (KTH Royal Institute of Technology, Sweden); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden); Mauro Ettorre (University of Rennes 1 & UMR CNRS 6164, France); Anthony Grbic (University of Michigan, Ann Arbor, USA)
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	14:30	14:50	A Frequency-Controlled Fast Beam-Scanning Antenna with Glide-Symmetric Feeding	Wenxuan Tang (Southeast University, China); Qiangqiang Shi (Southeast University, China); Qiang Cheng (Southeast University, China); Tie Jun Cui (Southeast University, China)
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	14:50	15:10	Holey and Pinned Structures Comparison for Waveguide Phase Shifters	Angel Palomares-Caballero (Universidad de Granada, Spain); Antonio Alex-Amor (Technical University of Madrid, Spain); Juan Valenzuela-Valdés (Universidad de Granada, Spain); Pablo Padilla (University of Granada, Spain)
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	15:10	15:30	Design of Antenna Arrays Using Groove Gap Waveguide Technology Implemented with Glide Symmetric Holes	Luis Fernando Herran (University of Oviedo, Spain); Astrid Algaba Brazález (Ericsson Research, Ericsson AB, Sweden); Malcolm Ng Mou Keh (National Chiao Tung University, Taiwan); Eva Rajo-Iglesias (University Carlos III of Madrid, Spain)
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	16:00	16:20	Reconfigurable Microwave Components Using Glide-symmetric Pin-loaded Parallel Plates	Mohammad Bagheriasl (Sorbonne University, France); Julien Sarrazin (Sorbonne Université, France); Guido Valerio (Sorbonne Université, France)
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	16:20	16:40	Higher-Order Cylindrical Leaky Waves in Planar Structures	Paolo Burghignoli (Sapienza University of Rome, Italy); Walter Fuscaldo (Sapienza University of Rome, Italy); Davide Comite (Sapienza University of Rome, Italy); Paolo Baccarelli (Roma Tre University, Italy); Alessandro Galli (Sapienza University of Rome, Italy)
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	16:40	17:00	Mode-matching Analysis of Loaded Transmission Lines with Twist Symmetries	Oskar Zetterstrom (KTH Royal Institute of Technology, Sweden); Guido Valerio (Sorbonne Université, France); Francisco Mesa (University of Seville, Spain); Fatemeh Ghasemifard (KTH Royal Institute of Technology, Sweden); Martin Norgren (KTH Royal Institute of Technology, Sweden); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	17:00	17:20	Dual-band Polarizing Screen Based on Self-Supported Metallic Structures	Carlos Molero (IETR-INSA Rennes, France); Lionel Simon (SWISSto12 SA, Switzerland); Esteban Menargues (SWISSto12, Switzerland); Tomislav Debgovic (SWISSto12 SA, Switzerland); María García-Vigueras (IETR- INSA Rennes, France)
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	17:20	17:40	Exceptional Points of Degeneracy in Electromagnetic Waveguides and the Role of Symmetries	Tarek Mealy (University of California, Irvine, USA); Mohamed Y Nada (University of California, Irvine, USA); Ahmed F. Abdelshafy (University of California, Irvine, USA); Ehsan Hafezi (University of California, Irvine, USA); Filippo Capolino (University of California, Irvine, USA)
COST Session CA18223 (SyMat): Periodic Structures with Higher Symmetries	SW04	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B1	17:40	18:00	Analysis of Glide-Symmetric Dielectric Corrugated Structures - Properties of TE and TM Propagating Modes	Zvonimir Sipus (University of Zagreb, Croatia); Marko Bosiljevac (University of Zagreb, Croatia)
Dosimetry, exposure, and SAR assessment	T05-M06	T05 Biomedical and health / Regular Session / Measurements	20 Mar 2020	B2	08:30	08:50	Frequency Selective EMF Measurements and Exposure Assessment in Indoor Office Environments	Nektarios Moraitis (National Technical University of Athens & Institute of Communications and Computers Systems, Greece); Ileana Popescu (National Technical University of Athens, Greece); Konstantina Nikita (National Technical University of Athens, Greece)
Dosimetry, exposure, and SAR assessment	T05-M06	T05 Biomedical and health / Regular Session / Measurements	20 Mar 2020	B2	08:50	09:10	Human Exposure to Electromagnetic Signals with Continuous Spectra	Dragan Poljak (University of Split, Croatia); Marin Galic (Centar za Mjerjenja u Okolišu, Croatia); Lara Pajewski (Sapienza University of Rome, Italy)
Dosimetry, exposure, and SAR assessment	T05-M06	T05 Biomedical and health / Regular Session / Measurements	20 Mar 2020	B2	09:10	09:30	Maximum Exposure Assessment of millimeter-Wave Array Antennas	Sylvain Rebaud (ZHT Zurich MedTech AG, Switzerland); Serge Pfeiffer (Foundation for Research on Information Technologies in Society (ITIS Foundation), Switzerland); Niels Kuster (Foundation for Research on Information Technologies in Society, ITIS Foundation, Switzerland)
Dosimetry, exposure, and SAR assessment	T05-M06	T05 Biomedical and health / Regular Session / Measurements	20 Mar 2020	B2	09:30	09:50	On the Focusing Technique for Hyperthermia Treatment Planning	Morteza Ghaderi Aram (Chalmers University of Technology, Sweden); Massimiliano Zanoli (Chalmers University of Technology, Sweden); Hana Dobšiček Trefná (Chalmers University of Technology, Sweden)

Dosimetry, exposure, and SAR assessment	T05-M06	T05 Biomedical and health / Regular Session / Measurements	20 Mar 2020	B2	09:50	10:10	A Fast and Rigorous Assessment of the Specific Absorption Rate (SAR) for MIMO Cellular Equipment Based on Vector Near-Field Measurements	Mounir Teniou (ART-Fi, France); Ourouk Jawad (ART-Fi, France); Stephane Pannetret (ART-Fi, France); Lyazid Aberbour (Art-Fi, France)
Education in Electromagnetics, Antennas, and Microwaves	CS26	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B4	08:30	08:50	Federated Non-Traditional Practical Work for Engineering Education	Timothy D Drysdale (The University of Edinburgh, United Kingdom (Great Britain))
Education in Electromagnetics, Antennas, and Microwaves	CS26	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B4	08:50	09:10	Teaching Wireless Communications Courses: An Experiential Learning Approach	Hugo G Espinosa (Griffith University, Australia); Thomas Fickenscher (Helmut Schmidt University, Germany); Nickolas Littman (Griffith University, Australia); David V Thiel (Griffith University, Australia)
Education in Electromagnetics, Antennas, and Microwaves	CS26	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B4	09:10	09:30	A Modern Approach to Teaching and Learning Electromagnetics at DTU	Samel Arslanagic (Technical University of Denmark, Denmark)
Education in Electromagnetics, Antennas, and Microwaves	CS26	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B4	09:30	09:50	Teaching Radar Systems: Wave Propagation, Scattering, Antennas, and Electronics	Daniel Sjöberg (Lund University, Sweden)
Education in Electromagnetics, Antennas, and Microwaves	CS26	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B4	09:50	10:10	Grading Written Exams in Electromagnetic Theory: Depth Versus Width	Martin Norgren (KTH Royal Institute of Technology, Sweden)
Education in Electromagnetics, Antennas, and Microwaves	CS26	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B4	10:40	11:00	Modern Challenges for EE Students Pursuing Fundamental Research in Metamaterials	Ashwin K. Iyer (University of Alberta, Canada)
Education in Electromagnetics, Antennas, and Microwaves	CS26	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B4	11:00	11:20	Advanced Teaching in Electromagnetics at the ELEDIA Research Center	Nicola Anselmi (ELEDIA Research Center, Italy); Renzo Azaro (ELEDIA Research Center, Italy); Federico Boulos (ELEDIA@UnitN - DISI, University of Trento, Italy); Luca Dall'Asta (ELEDIA Research Center, Italy); Giorgio Gottardi (ELEDIA Research Center, University of Trento, Italy); Mohammad Hannan (ELEDIA Research Center, University of Trento, Italy); Baozu Li (Nanjing Normal University, Italy); Giulia Mansutti (Università degli Studi di Padova, Italy); Davide Marcantonio (ELEDIA Research Center, Italy); Giacomo Oliveri (University of Trento & ELEDIA Research Center, Italy); Lorenzo Poli (ELEDIA Research Center, University of Trento, Italy); Alessandro Polo (ELEDIA Research Center, University of Trento, Italy); Paolo Rocca (University of Trento, Italy); Marco Salucci (ELEDIA Research Center, Italy); Andrea Massa (University of Trento, Italy)
Education in Electromagnetics, Antennas, and Microwaves	CS26	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B4	11:20	11:40	Brewster Angle and Vanishing Polarization of Wave Reflected by Conductor-Backed Water Slab	Hsinju Chen (National Taiwan University, Taiwan); Shih-Yuan Chen (National Taiwan University, Taiwan)
Education in Electromagnetics, Antennas, and Microwaves	CS26	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B4	11:40	12:00	Teaching Applied Mathematics for Electromagnetics by Means of a Simple Scattering Problem	Nikolaos L. Tsitsas (Aristotle University of Thessaloniki, Greece); George Fikioris (National Technical University of Athens, Greece)
Education in Electromagnetics, Antennas, and Microwaves	CS26	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B4	12:00	12:20	In Favor of Re-Introducing and/or Expanding Rectangular Waveguides in Bachelor's and Master's Level Electromagnetic Courses	Mariangela Baggio (Aalto University, Finland); Zachary D Taylor (Aalto University, Finland)
Electromagnetic Methods for Direct and Inverse Scattering Involving Stratified Media	T10-E05/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	08:30	08:50	Electromagnetic Excitation of a Layered Medium by N Magnetic Dipoles	Andreas Kalogeropoulos (Aristotle University of Thessaloniki, Greece); Nikolaos L. Tsitsas (Aristotle University of Thessaloniki, Greece)
Electromagnetic Methods for Direct and Inverse Scattering Involving Stratified Media	T10-E05/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	08:50	09:10	Cloaking and Magnifying Using Radial Anisotropy in Non-Integer Dimensional Space	Sidra Batool (Sapienza University of Rome, Italy); Methwish Nisar (Sapienza University of Rome, Italy); Fabio Mangini (Sapienza University of Rome, Italy); Fabrizio Frezza (Sapienza University of Rome, Italy)
Electromagnetic Methods for Direct and Inverse Scattering Involving Stratified Media	T10-E05/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	09:10	09:30	Reflected Wave Fields from a Fluctuating Earth Surface - a Phase-Space Approach	Valon Blakaj (Research Associate, United Kingdom (Great Britain)); Gabriele Gradoni (University of Nottingham, United Kingdom (Great Britain)); Stephen Creagh (University of Nottingham, United Kingdom (Great Britain)); Gregor Tanner (University of Nottingham, United Kingdom (Great Britain)); Manohar Deshpande (NASA, USA)
Electromagnetic Methods for Direct and Inverse Scattering Involving Stratified Media	T10-E05/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	09:30	09:50	Towards Asteroid Tomography: Modellings and Measurements Using an Analogue Model	Christelle Eyraud (Institut Fresnel, Aix Marseille Université, CNRS, Centrale Marseille, France); Lisa-Ida Sorsa (Tampere University, France); Alain Hérique (Université Grenoble Alpes, CNRS, IPAG, France); Jean-Michel Geffrin (Institut Fresnel & Aix Marseille Univ, CNRS, Centrale Marseille, France); Sampsa Pursiainen (Tampere University, France); Wlodek Kofman (Université Grenoble Alpes, CNRS, IPAG/Space Research Centre, PAS, France)
Electromagnetic Methods for Direct and Inverse Scattering Involving Stratified Media	T10-E05/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	09:50	10:10	Modeling Cylindrical Slot Antenna for Borehole GPR	Alexei Popov (IZMIRAN, Russia); Vladimir Garbatsevich (IZMIRAN, Russia); Pavel Morozov (IZMIRAN, Russia); Fedor Morozov (JSC VNISI, Russia); Igor Prokopovich (IZMIRAN, Russia)
Electromagnetic Methods for Direct and Inverse Scattering Involving Stratified Media	T10-E05/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	10:40	11:00	GPR Probing of Smoothly Layered Subsurface Medium: 3D Analytical Model	Alexei Popov (Pushkov Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation, Russia); Pavel Morozov (IZMIRAN, Russia); Marian Marciniak (National Institute of Telecommunications, Poland); Igor Prokopovich (IZMIRAN, Russia)
Electromagnetic Methods for Direct and Inverse Scattering Involving Stratified Media	T10-E05/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	11:00	11:20	Qualitative Imaging of Experimental Multistatic Ground Penetrating Radar Data	Michele Ambrosiano (Università di Napoli Parthenope, Italy); Martina Teresa Bevacqua (Università Mediterranea di Reggio Calabria, Italy); Vito Pascazio (Università di Napoli Parthenope, Italy); Tommaso Isernia (University of Reggio Calabria, Italy)
Electromagnetic Methods for Direct and Inverse Scattering Involving Stratified Media	T10-E05/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	11:20	11:40	Multi-Resolution Through-the-Wall Microwave Imaging of Strong Scatterers	Federico Boulos (ELEDIA@UnitN - DISI, University of Trento, Italy); Marco Salucci (ELEDIA Research Center, Italy); Kuiwen Xu (Hangzhou Dianzi University, China); Yu Zhong (A*STAR IHP, Singapore); Andrea Massa (University of Trento, Italy)
Electromagnetic Methods for Direct and Inverse Scattering Involving Stratified Media	T10-E05/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	11:40	12:00	Forward and Inverse Scattering Models Applied to Through-Wall Imaging	Alessandro Fedeli (University of Genoa, Italy); Matteo Pastorino (University of Genoa, Italy); Cristina Ponti (Roma Tre University, Italy); Andrea Randazzo (University of Genoa, Italy); Giuseppe Schettini (Roma Tre University, Italy)
Electromagnetic Methods for Direct and Inverse Scattering Involving Stratified Media	T10-E05/1	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	12:00	12:20	Image Radar Determining the Nominal Body Contour for Characterization of Concealed Person-Worn Explosives	Mohammad M. Tajdini (Northeastern University, USA); Kurt Jaisle (Northeastern University, USA); Carey Rappaport (Northeastern University, USA)
Electromagnetics in MRI Applications	Convened Poster 1-CS27	T05 Biomedical and health / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Design of Distributed Spiral Resonators for the Decoupling of MRI Array Coils	Daniilo Brizi (University of Pisa, Italy); Nunzia Fontana (University of Pisa, Italy); Filippo Costa (University of Pisa, Italy); Rocco Matera (University of Pisa, Italy); Gianluigi Tiberi (London South Bank University, London, UK, Italy); Angelo Galante (University of L'Aquila, Italy); Marcello Alecci (University of L'Aquila and INFN-LNGS L'Aquila, Italy); Agostino Monorchio (University of Pisa & CNIT, Italy)
Electromagnetics in MRI Applications	Convened Poster 1-CS27	T05 Biomedical and health / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Hybridized Electric Dipoles Applications in Ultra-High Field MRI	Marc Dubois (Institut Fresnel, France); Tania Vergara Gomez (Aix Marseille Univ, CRMBM, France); Frank Kober (Aix Marseille Univ, CRMBM, France); Luisa Cobanu (DRF/I2BM/Neurospin/UNIRS, France); Alexandre Vignaud (Commissariat à l'Energie Atomique & NeuroSpin, France); Redha Abdeddaim (Aix Marseille University, France); Stefan Enoch (CNRS & Institut Fresnel, France)
Electromagnetics in MRI Applications	Convened Poster 1-CS27	T05 Biomedical and health / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	A Nesting Approach for the Numerical Analysis of MRI Birdcage Antennas in the Presence of the Human Head	Farzad Jabbari gargari (Université Catholique de Louvain, Belgium); Chan-Sun Park (Yonsei University, Korea (South)); Donia Oueslati (ICTEAM Institute, Université Catholique de Louvain, Belgium); Denis Thion (University of Cambridge, Belgium); Clément Durochat (Multiwave Imaging SAS, Marseille, Belgium); Thibaut Letertre (Aix Marseille University, CNRS, Centrale Marseille, Institut Fresnel, France); Pierre Sabouroux Pierre Sabouroux (Institut Fresnel, France); Christophe Craeye (Université Catholique de Louvain, Belgium)

Electromagnetics in MRI Applications	Convened Poster 1-CS27	T05 Biomedical and health / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Experimental Validation of the Concept of an Openage Head Coil for Ultra-High Field MRI	Anton Nikulin (PSL Research University, France); Marc Dubois (Institut Fresnel, France); Tania Vergara Gomez (Aix Marseille Univ, CRMBM, France); Djamel Berrahou (Multiwave Innovation SAS, France); Alexandre Vignaud (Commissariat à l'Energie Atomique & NeuroSpin, France); Redha Abdeddaim (Aix Marseille University, France); Julien de Rosny (CNRS, ESPCI Paris, PSL Research University, France); Abdelwaheb Ourir (Institut Langevin ESPCI Paris CNRS, France)
Electromagnetics in MRI Applications	Convened Poster 1-CS27	T05 Biomedical and health / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Matching and Decoupling Networks for Receive-only MRI Arrays	Wenjun Wang (Technical University of Denmark, Denmark); Vitaliy Zhurbenko (Technical University of Denmark, Denmark); Juan Diego Sánchez-Heredia (Technical University of Denmark, Denmark); Jan Henrik Ardenkjær-Larsen (Technical University of Denmark, Denmark)
Electromagnetics in MRI Applications	Convened Poster 1-CS27	T05 Biomedical and health / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Enhanced Low Frequency MRI Using Flexible Shape Arrays Made of Standard Wire	Juan Diego Sánchez-Heredia (Technical University of Denmark, Denmark); Wenjun Wang (Technical University of Denmark, Denmark); Rie Beck Olin (Technical University of Denmark, Denmark); Vitaliy Zhurbenko (Technical University of Denmark, Denmark); Jan Henrik Ardenkjær-Larsen (Technical University of Denmark, Denmark)
Electromagnetics in MRI Applications	Convened Poster 1-CS27	T05 Biomedical and health / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Design and Implementation of Solenoid and Alderman-Grant Coils for Magnetic Resonance Microscopy at 7T	Marios Masouridis (Technical University of Denmark, Denmark); Tim Dyrby (Technical University of Denmark, Denmark); Vitaliy Zhurbenko (Technical University of Denmark, Denmark)
Electromagnetics in MRI Applications	Convened Poster 1-CS27	T05 Biomedical and health / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Design of a Quadrature Coil for MRI of Carbon in Human Liver at 7T	Alajdin Rustemi (Technical University of Denmark, DTU, Copenhagen, Denmark, Denmark); Vincent Boer (Danish Research Centre for Magnetic Resonance, Denmark); Vitaliy Zhurbenko (Technical University of Denmark, Denmark)
EM Theory	T11-E01	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	19 Mar 2020	B11	10:40	11:00	Multiple Scattering by a Collection of Randomly Located Obstacles Distributed in a Dielectric Slab	Gerhard Kristensson (Lund University, Sweden); Niklas Wellander (Swedish Defence Research Agency, Sweden)
EM Theory	T11-E01	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	19 Mar 2020	B11	11:00	11:20	Radiation of Planar Dielectric Waveguide Eigenwaves Scattered by Graphene Strip Grating in THz Range	Mstyslav Kaliberda (Karazin National University of Kharkiv, Ukraine); Sergey Pogarsky (Karazin National University of Kharkiv, Ukraine); Lubov Kaliberda (Kharkiv Petro Vasylenko National Technical University of Agriculture, Ukraine)
EM Theory	T11-E01	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	19 Mar 2020	B11	11:20	11:40	Analytical Modeling and Multiphysics Simulation of Acousto-Electromagnetic Interaction	Niklas Wingren (Lund University, Sweden); Daniel Sjöberg (Lund University, Sweden)
EM Theory	T11-E01	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	19 Mar 2020	B11	11:40	12:00	Re-moving the Scattered Energy from Dielectric Objects in Spatial and Frequency Domain for Cloaking Techniques	Giuseppe Labate (Wave Up S. R. L., Italy); Roberta Palmeri (Università Mediterranea di Reggio Calabria, Italy); Tommaso Isernia (University of Reggio Calabria, Italy); Andrea Ali (CUNY Advanced Science Research Center, USA)
EM Theory	T11-E01	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	19 Mar 2020	B11	12:00	12:20	On the Optical Theorem and Optimal Extinction, Scattering and Absorption in Lossy Media	Sven Nordebo (Linnaeus University, Sweden); Mats Gustafsson (Lund University, Sweden); Yevhen Ivenenko (Linnaeus University, Sweden)
EMI/EMC/PIM chambers, instrumentation, and measurements	T11-M05	T11 Fundamental research and emerging technologies / Regular Session / Measurements	20 Mar 2020	B5	08:30	08:50	Diffuse Field Cross-Correlation in a Reverberation Chamber Stirred with Reconfigurable Reflectarray Metasurfaces	Philipp del Hougne (Institut de Physique de Nice, France); Philippe Besnier (IETR, France); Fabrice Mortessagne (Institut de Physique de Nice, France); Ulrich Kuhl (Institut de Physique de Nice, France); Olivier Legrand (Institut de Physique de Nice, France); Matthieu Davy (University of Rennes 1 & IETR, France)
EMI/EMC/PIM chambers, instrumentation, and measurements	T11-M05	T11 Fundamental research and emerging technologies / Regular Session / Measurements	20 Mar 2020	B5	08:50	09:10	Characterization of Stirrer Performance in Reverberation Chamber Using Characteristic Modes	Huolin Huang (Xi'an Jiaotong University, China); Xiaoming Chen (Xi'an Jiaotong University, China); Mengting Li (Xi'an Jiaotong University, China); Juan Chen (Xi'an Jiaotong University, China); Qinglong Li (Xi'an Jiaotong University, China)
EMI/EMC/PIM chambers, instrumentation, and measurements	T11-M05	T11 Fundamental research and emerging technologies / Regular Session / Measurements	20 Mar 2020	B5	09:10	09:30	Evaluation of the Purity of OAM Modes Using the Reverberation Chamber Technique	Wei Xue (Xi'an Jiaotong University, China); Xiaoming Chen (Xi'an Jiaotong University, China); Hongyu Shi (Xi'an Jiaotong University, China); Huolin Huang (Xi'an Jiaotong University, China); Juan Chen (Xi'an Jiaotong University, China); Anxue Zhang (Xi'an Jiaotong University, China)
EMI/EMC/PIM chambers, instrumentation, and measurements	T11-M05	T11 Fundamental research and emerging technologies / Regular Session / Measurements	20 Mar 2020	B5	09:30	09:50	A Dual-Polarized Asymptotic Conical Dipole (ACD) Sensor for Ultra-Wideband E-field Measurement	Mingxiang Gao (Xi'an Jiaotong University, China, Switzerland); Yanzhao Xie (Xi'an Jiaotong University, China)
ESA Session: Selected Papers from the 40th ESA Workshop on Antenna Developments for Terrestrial and Small-Space Platforms	SW05	T09 Space (incl. cubesat) / Regular Session / Antennas	19 Mar 2020	B11	16:40	17:00	A 1X3 Circular Polarized Linear Array with High-Gain near Horizon Scanning and Full Azimuth Coverage for Land Vehicles to Satellite Communications	
ESA Session: Selected Papers from the 40th ESA Workshop on Antenna Developments for Terrestrial and Small-Space Platforms	SW05	T09 Space (incl. cubesat) / Regular Session / Antennas	19 Mar 2020	B11	17:00	17:20	Design of Advanced Reflectarrays for Future CubeSat Applications	Min Zhou (TICRA, Denmark); Erik Jørgensen (TICRA, Denmark); Stig Sørensen (TICRA, Denmark); Niels Vesterdal (TICRA, Denmark); Michael F. Palvig (TICRA, Denmark); Andreas Ericsson (TICRA, Denmark); Oscar Borries (TICRA, Denmark); Tonny Rubæk (TICRA, Denmark); Peter Meincke (TICRA, Denmark)
ESA Session: Selected Papers from the 40th ESA Workshop on Antenna Developments for Terrestrial and Small-Space Platforms	SW05	T09 Space (incl. cubesat) / Regular Session / Antennas	19 Mar 2020	B11	17:20	17:40	Experimental Validation of a Water Drop Geodesic Lens Design at Ka-Band	Nelson Fonseca (European Space Agency, The Netherlands)
ESA Session: Selected Papers from the 40th ESA Workshop on Antenna Developments for Terrestrial and Small-Space Platforms	SW05	T09 Space (incl. cubesat) / Regular Session / Antennas	19 Mar 2020	B11	17:40	18:00	Outdoor Unit for Satcom Next Generation Non-GEO Satellite	Pasquale Nicolai (Space Engineering S.p.A., Italy)
ESA Session: Selected Papers from the 40th ESA Workshop on Antenna Developments for Terrestrial and Small-Space Platforms	SW05	T09 Space (incl. cubesat) / Regular Session / Antennas	19 Mar 2020	B11	18:00	18:20	Novel Design of Deployable Mesh Reflector Antenna for Mini Satellites	Oleksandr Sushko (EOS Ukraine, Ukraine)
EuMA/EurAAP Session: From Radiating Section to Digital Interface - Research and Design Trends for an End-To-End Approach of Highly Integrated Active Antenna Systems	CS28	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B5	16:40	17:00	Active Antenna Architectures for Enhanced 5G System Performance	Bruno Biscontin (Huawei Technologies, Germany); Alejandro Murillo (Huawei Technologies, Germany); Juan Segador (Huawei Technologies, Germany); Ignacio Gonzalez (Huawei Technologies, Germany)
EuMA/EurAAP Session: From Radiating Section to Digital Interface - Research and Design Trends for an End-To-End Approach of Highly Integrated Active Antenna Systems	CS28	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B5	17:00	17:20	Machine Learning-aided Design of Thinned Antenna Arrays for Optimized Network Level Performance	Mattia Lecci (University of Padova, Italy); Paolo Testolina (University of Padova, Italy); Mattia Rebato (Università degli Studi di Padova, Italy); Alberto Testolin (University of Padova, Italy); Michele Zorzi (Università degli Studi di Padova, Italy)
EuMA/EurAAP Session: From Radiating Section to Digital Interface - Research and Design Trends for an End-To-End Approach of Highly Integrated Active Antenna Systems	CS28	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B5	17:20	17:40	Reconfigurable Metasurface Antenna for 5G Base Stations	Cristian Della Giovampola (Wave Up srl, Italy); Francesco Caminita (Wave-Up SRL, Italy); Giuseppe Labate (Wave Up S. R. L., Italy); Enrica Martini (University of Siena, Italy); Stefano Maci (University of Siena, Italy)
EuMA/EurAAP Session: From Radiating Section to Digital Interface - Research and Design Trends for an End-To-End Approach of Highly Integrated Active Antenna Systems	CS28	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B5	17:40	18:00	ML Based Fully Digital UWB Antenna for Direction Finding Systems	Antonio Manna (Elettronica SpA, Italy)
EuMA/EurAAP Session: From Radiating Section to Digital Interface - Research and Design Trends for an End-To-End Approach of Highly Integrated Active Antenna Systems	CS28	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B5	18:00	18:20	A 5G Active Antenna Tile and Its Characterization in a Reverberation Chamber	Eduardo Anjos (KU Leuven, Belgium); Marzieh Salarahimi (KU Leuven, Belgium); Robert Rehammar (Bluetest AB & Chalmers University of Technology, Sweden); Dominique Schreurs (KU Leuven, Belgium); Guy Vandenbosch (Katholieke Universiteit Leuven (KU Leuven), Belgium); Marcel Geurts (NXP Semiconductors, The Netherlands)
Exotic Antennas from Nano to Macro Scales	Convened Poster 2-CS29	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Metamaterial-inspired Near-Field Resonant Parasitic Dipole Antennas on High Permittivity Dielectrics	Richard Ziolkowski (University of Technology Sydney & University of Arizona, Australia)
Exotic Antennas from Nano to Macro Scales	Convened Poster 2-CS29	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Using Superdirectivity to Enhance the Performance of Different Scattering Processes	Iligo Liberal (Public University of Navarre, Spain)
Exotic Antennas from Nano to Macro Scales	Convened Poster 2-CS29	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	A Concept of Flexible Non-Metallic Dielectric Resonator Antenna for Conformal Applications	Shengjian Jammy Chen (The University of Adelaide, Australia); Christophe Fumeaux (The University of Adelaide & School of Electrical and Electronic Engineering, Australia)

Exotic Antennas from Nano to Macro Scales	Convened Poster 2-CS29	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Water-Based Microwave Antennas	Rasmus Elkjaer Jacobsen (Technical University of Denmark, Denmark); Mads Vandborg (Technical University of Denmark, Denmark); Andrei Lavrinenko (Technical University of Denmark, Denmark); Samel Arslanagic (Technical University of Denmark, Denmark)
Exotic Antennas from Nano to Macro Scales	Convened Poster 2-CS29	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Design of a Tunable Subwavelength Plasma-Based Resonator for Electrically Small Antenna Applications in L-band	Adrien Laffont (CEA, DAM, CEA-Gramat, France); Théo Delage (ISAE-SUPAERO, Université de Toulouse, France); Romain Pascaud (ISAE-SUPAERO, Université de Toulouse, France, France); Marjorie Grzeskowiak (ISAE-SUPAERO, Université de Toulouse, France, France); Cyril Cahilol (ISAE-SUPAERO, Université de Toulouse, France); Thierry Callegari (LAPLACE, CNRS, UPS, INP, Université de Toulouse, France, France); Laurent Liard (LAPLACE, CNRS, UPS, INP, Université de Toulouse, France, France); Olivier Pascal (LAPLACE, CNRS, UPS, INP, Université de Toulouse, France, France); Jean-Pierre Adam (CEA, DAM, CEA-Gramat, France, France)
Experimental methods and campaigns	T11-P04	T11 Fundamental research and emerging technologies / Regular Session / Propagation	18 Mar 2020	B10	10:40	11:00	Possibility of Signal Reflection from the Northern Crest of EIA: Case Study	Maria A Sergeeva (CONACYT, SCIESMEX, LANCE, UNAM, Mexico); Alexey S Kalishin (Arctic and Antarctic Research Institute, Russia); Olga Maltseva (Institute for Physics & Southern Federal University, Russia); Donat Blagoveshchensky (Saint-Petersburg State University of Aerospace Instrumentation, Russia); Juan Americo Gonzalez-Esparza (Universidad Nacional Autonoma de Mexico, Mexico); Pedro Corona-Romero (Instituto de Geofísica, Universidad Nacional Autonoma de Mexico, Mexico); Victor Jose Gatica-Acevedo (Instituto Politécnico Nacional, Mexico)
Experimental methods and campaigns	T11-P04	T11 Fundamental research and emerging technologies / Regular Session / Propagation	18 Mar 2020	B10	11:00	11:20	Measured Activity in 860 MHz Channels	Jesper Ø Nielsen (Aalborg University, Denmark); Maria Fresia (Intel Deutschland, Germany); Gert Pedersen (Aalborg University, Denmark)
Experimental methods and campaigns	T11-P04	T11 Fundamental research and emerging technologies / Regular Session / Propagation	18 Mar 2020	B10	11:20	11:40	Signal Reception Measurements Using Mobile HD Radio and DRM Systems in Two Urban Regions in Brazil	Elizabeth Verdugo (PUC RIO, Brazil); Luiz da Silva Mello (CETUC-PUC-Rio & Inmetro, Brazil); Marta Pudwell Chaves de Almeida (Inmetro, Brazil)
Experimental methods and campaigns	T11-P04	T11 Fundamental research and emerging technologies / Regular Session / Propagation	18 Mar 2020	B10	11:40	12:00	Aircraft Measurements of the Marine Surface Layer Refractive Index During the TAPS Campaign	Andrew Kulesa (Airborne Research Australia, Australia); Jorg Hacker (Airborne Research Australia & Flinders University, Australia); Hedley J Hansen (Defence Science Technology, Australia); Marion Kerrmann (Airborne Research South Australia, Australia); Alex Vanderklugt (DST, Australia); Jacques Clavier (CREC St-Cyr & IETR, France)
Experimental methods and campaigns	T11-P04	T11 Fundamental research and emerging technologies / Regular Session / Propagation	18 Mar 2020	B10	12:00	12:20	Observations and Modelling of Propagation Loss in the Turbulent Sea Surface Environment	Hedley J Hansen (Defence Science Technology, Australia); Alex Vanderklugt (DST, Australia); Andrew Kulesa (Airborne Research Australia, Australia); Jorg Hacker (Airborne Research Australia & Flinders University, Australia); Stephen Salamon (University of Adelaide & Telstra Corporation, Australia); Martin Veasey (MET Office, United Kingdom (Great Britain))
Fundamental Challenges and Novel Methodologies in the Next-Generation Computational Electromagnetics	CS30	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	19 Mar 2020	B8	08:30	08:50	Numerical Synthesis of Translation Operators for the Multi-Level Fast Multipole Method	Arslan Azhar (Technical University of Munich (TUM) & Chair of High-Frequency Engineering (HFT), Germany); Thomas F. Elbert (Technical University of Munich (TUM) & Chair of High-Frequency Engineering (HFT), Germany)
Fundamental Challenges and Novel Methodologies in the Next-Generation Computational Electromagnetics	CS30	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	19 Mar 2020	B8	08:50	09:10	Characteristic Mode Equations for Non-Symmetric Surface Integral Operators	Pasi Ylä-Ojala (Aalto University, Finland); Henrik Wallén (Aalto University, Finland)
Fundamental Challenges and Novel Methodologies in the Next-Generation Computational Electromagnetics	CS30	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	19 Mar 2020	B8	09:10	09:30	Analytic Expressions for Matrix Elements of Integral Equation Operators and Aspects of Their Numerical Implementation	Elizabeth Bleszynski (Monopole Research, USA); Marek Bleszynski (Monopole Research, USA); Thomas Jaroszewicz (Monopole Research, USA)
Fundamental Challenges and Novel Methodologies in the Next-Generation Computational Electromagnetics	CS30	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	19 Mar 2020	B8	09:30	09:50	Reducing the Dimensionality of 6-D MoM Integrals Applying Twice the Divergence Theorem	Javier Rivero (Politecnico di Torino, Italy); Francesca Vipiana (Politecnico di Torino, Italy); Donald Wilton (University of Houston, USA); William Johnson (Private Consultant, USA)
Fundamental Challenges and Novel Methodologies in the Next-Generation Computational Electromagnetics	CS30	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	19 Mar 2020	B8	09:50	10:10	Toward Extremely Scalable IE-DDM for Distributed Computing	Victor Martín (Universidad de Extremadura, Spain); Diego M Solís (University of Pennsylvania, USA); David Larios (Universidad de Extremadura, Spain); Luis Landesa (University of Extremadura, Spain); Fernando Obelleiro (University of Vigo, Spain); Jose M. Taboada (University of Extremadura, Spain)
Fundamental Challenges and Novel Methodologies in the Next-Generation Computational Electromagnetics	CS30	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	19 Mar 2020	B8	10:40	11:00	Overview of Surface-Volume-Surface Electric Field Integral Equation Formulations for 3-D Composite Metal-Dielectric Objects	Reza Gholami (University of Toronto & University of Manitoba, Canada); Shucheng Zheng (University of Manitoba, Canada); Vladimir Okhmatovskii (University of Manitoba, Canada)
Fundamental Challenges and Novel Methodologies in the Next-Generation Computational Electromagnetics	CS30	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	19 Mar 2020	B8	11:00	11:20	On the Information Entropy of Diffusive Multipath Scattering Environments	Shen Lin (University of Illinois at Urbana Champaign, USA); Zhen Peng (University of Illinois at Urbana-Champaign, USA)
Fundamental Challenges and Novel Methodologies in the Next-Generation Computational Electromagnetics	CS30	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	19 Mar 2020	B8	11:20	11:40	Modal Characterization of Thermal Emitters Using the Method of Moments	Denis Tihon (University of Cambridge, Belgium); Stafford Withington (Cavendish Laboratory, United Kingdom (Great Britain)); Christophe Craeye (Université Catholique de Louvain, Belgium)
Fundamental Challenges and Novel Methodologies in the Next-Generation Computational Electromagnetics	CS30	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	19 Mar 2020	B8	11:40	12:00	A Numerically Efficient Technique for the Analysis of Metamaterial- And Metasurface-based Antennas	Abdelhak Nasri (Research Unit of Mechatronic Systems and Signals, National Engineering School of Carthage, Tunisia); Raj Mittra (Penn State University, USA)
Fundamental Challenges and Novel Methodologies in the Next-Generation Computational Electromagnetics	CS30	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	19 Mar 2020	B8	12:00	12:20	Fast and Accurate Analysis of Multilayered Periodic Structures Used in the Design of Reflectarray and Metasurface Antennas	Miguel Camacho (University of Pennsylvania, USA); Rafael R. Boix (University of Seville, Spain); Francisco Medina (University of Sevilla, Spain)
General Antenna Measurements	T10-M10	T10 EM modelling and simulation tools / Regular Session / Measurements	17 Mar 2020	B4	10:40	11:00	Fast Antenna Array Characterization with Numerical Basis Functions	Marco Righero (LINKS Foundation, Italy); Andrea Scarabosio (LINKS Foundation, Italy); Giorgio Giordanengo (LINKS Foundation & Politecnico di Torino, Italy); Giuseppe Vecchi (Politecnico di Torino, Italy)
General Antenna Measurements	T10-M10	T10 EM modelling and simulation tools / Regular Session / Measurements	17 Mar 2020	B4	11:00	11:20	Near-to-Near- And Near-to-Far-Field Transformation for Millimeter-Wave Frequencies	Serge Pfeifer (Foundation for Research on Information Technologies in Society (ITIS Foundation), Switzerland); Jingtan Xi (The Foundation for Research on Information Technologies in Society (ITIS), ETH Zurich, Switzerland); Sven Kuhn (ITIS Foundation, Switzerland); Beyhan Kochali (Schmid&Partner Engineering AG, Switzerland); Niels Kuster (ITIS Foundation, Switzerland)
General Antenna Measurements	T10-M10	T10 EM modelling and simulation tools / Regular Session / Measurements	17 Mar 2020	B4	11:20	11:40	Fast Antenna Measurement via Model Order Reduction	Benjamin Fuchs (University of Rennes 1 - IETR, France); Athanasios Polymeridis (Q bio, USA)
General Antenna Measurements	T10-M10	T10 EM modelling and simulation tools / Regular Session / Measurements	17 Mar 2020	B4	11:40	12:00	Singularity Extraction of Electric-Field Integral Equations in Spherical Near-Field Antenna Measurement	Rezan Rafiee Alavi (University of Alberta, Canada); Rashid Mirzavand (University of Alberta, Canada); Pedram Mousavi (University of Alberta, Canada)
General Antenna Measurements	T10-M10	T10 EM modelling and simulation tools / Regular Session / Measurements	17 Mar 2020	B4	12:00	12:20	Revisiting the Poincaré Sphere as a Representation of Polarization State	Brett Walkenhorst (NSI-MI Technologies, USA); Steven R Nichols (NSI-MI Technologies, USA)
GNSS Antennas and Systems for Challenged RF Environment	CS31	T08 Positioning, localization & tracking / Convened Session / Antennas	19 Mar 2020	B5	16:40	17:00	Interference Mitigation for Robust Automotive Satellite Navigation Achieved with Compact Distributed Antenna Sub-Arrays	Syed Naser Hasnain (Technische Universität Ilmenau, Germany); Ralf Stephan (Technische Universität Ilmenau, Germany); Marius Brachvogel (RWTH Aachen University, Germany); Michael Meurer (German Aerospace Center (DLR) & RWTH Aachen University, Germany); Matthias Hein (Ilmenau University of Technology, Germany)
GNSS Antennas and Systems for Challenged RF Environment	CS31	T08 Positioning, localization & tracking / Convened Session / Antennas	19 Mar 2020	B5	17:00	17:20	Comparison of Adaptive Null-Steering Algorithms for Low Power GNSS Phased Arrays	Elizabeth Lloyd (University of Bath, United Kingdom (Great Britain)); Robert J Watson (University of Bath, United Kingdom (Great Britain))
GNSS Antennas and Systems for Challenged RF Environment	CS31	T08 Positioning, localization & tracking / Convened Session / Antennas	19 Mar 2020	B5	17:20	17:40	3D Printed All-GNSS Bands Miniaturized Antenna and Array for Robust Satellite Navigation	Stefano Calzone (German Aerospace Center (DLR), Germany); Sachit Varma (German Aerospace Center (DLR), Germany)
GNSS Antennas and Systems for Challenged RF Environment	CS31	T08 Positioning, localization & tracking / Convened Session / Antennas	19 Mar 2020	B5	17:40	18:00	A Testing Platform for Investigation of GNSS Antenna Diversity Systems	Sebastian Matthie (Universität der Bundeswehr München, Germany); Stefan Lindenmeier (Universität der Bundeswehr, Germany)
GNSS Antennas and Systems for Challenged RF Environment	CS31	T08 Positioning, localization & tracking / Convened Session / Antennas	19 Mar 2020	B5	18:00	18:20	Novel Wideband Antenna for GNSS and Satellite Communications	Slobodan Jović (Defence R&D Canada, Canada); Michel Clénet (Defence Research and Development Canada, Canada); Yahia Antar (Royal Military College of Canada, Canada)

H2020 Session ID764479 (EMERALD): Electromagnetic Imaging for a Novel Generation of Medical Devices	SW06	T05 Biomedical and health / Convened Session / Electromagnetics	20 Mar 2020	B6	08:30	08:50	Detailed Dielectric Characterisation of the Heart and Great Vessels	Niko Ištук (National University of Ireland, Galway & Translational Medical Device Lab, Ireland); Barry McDermott (Translational Medical Device Lab, National University of Ireland Galway, Ireland); Emily Porter (University of Texas at Austin, USA); Adam Santorelli (National University of Ireland, Galway & Translational Medical Device Lab, Ireland); Soroush Abedi (Group of Electrical Engineering - Paris, France); Martin O'Halloran (National University of Ireland, Galway, Ireland); Nadine Joachimowicz (Group of Electrical Engineering - Paris / CentraleSupélec, France); Hélène Roussel (Sorbonne Université, France)
H2020 Session ID764479 (EMERALD): Electromagnetic Imaging for a Novel Generation of Medical Devices	SW06	T05 Biomedical and health / Convened Session / Electromagnetics	20 Mar 2020	B6	08:50	09:10	Head Phantoms for Microwave Imaging of Brain Strokes	Soroush Abedi (Group of Electrical Engineering - Paris, France); Nadine Joachimowicz (Group of Electrical Engineering - Paris / CentraleSupélec, France); Nicolas Phillips (Geeps, France); Hélène Roussel (Sorbonne Université, France)
H2020 Session ID764479 (EMERALD): Electromagnetic Imaging for a Novel Generation of Medical Devices	SW06	T05 Biomedical and health / Convened Session / Electromagnetics	20 Mar 2020	B6	09:10	09:30	Homogenization of Voxel Models Using Material Mixing Formulas	Tushar Singh (University of Belgrade & WIPL-D, Serbia); Mladjen Stevanetic (WIPL-D, Serbia); Marija Stevanovic (University of Belgrade, Serbia); Branko Kolundzija (University of Belgrade, Serbia)
H2020 Session ID764479 (EMERALD): Electromagnetic Imaging for a Novel Generation of Medical Devices	SW06	T05 Biomedical and health / Convened Session / Electromagnetics	20 Mar 2020	B6	09:30	09:50	Electromagnetic Virtual Prototyping of a Realistic 3-D Microwave Scanner for Brain Stroke Imaging	David O. Rodriguez Duarte (Politecnico di Torino, Italy); Jorge A. Tobon Vasquez (Politecnico di Torino, Italy); Francesca Vigiàna (Politecnico di Torino, Italy)
H2020 Session ID764479 (EMERALD): Electromagnetic Imaging for a Novel Generation of Medical Devices	SW06	T05 Biomedical and health / Convened Session / Electromagnetics	20 Mar 2020	B6	09:50	10:10	Image Improvement Through Metamaterial Technology for Brain Stroke Detection	Olympia Karadima (King's College London, United Kingdom (Great Britain)); Eleonora Razzicchia (King's College, United Kingdom (Great Britain)); Panagiotis Kosmas (King's College London, United Kingdom (Great Britain))
H2020 Session ID764479 (EMERALD): Electromagnetic Imaging for a Novel Generation of Medical Devices	SW06	T05 Biomedical and health / Convened Session / Electromagnetics	20 Mar 2020	B6	10:40	11:00	Investigation of S-parameter Calibration Effects on Image Reconstruction in Microwave Imaging Systems	Manuel Kasper (Keysight Technologies, Austria); Mykolas Ragulskis (Keysight Technologies, Austria); Ferry Kienberger (Keysight Technologies, Austria); Amin Moradpour (Keysight Technologies, Austria)
H2020 Session ID764479 (EMERALD): Electromagnetic Imaging for a Novel Generation of Medical Devices	SW06	T05 Biomedical and health / Convened Session / Electromagnetics	20 Mar 2020	B6	11:00	11:20	Initial Guidelines to the Design of a Microwave Imaging System for Ablation Monitoring	Mengchu Wang (National Research Council-Institute for Electromagnetic Sensing of the Environment, Italy); Marta Cagnano (Sapienza University of Rome, Italy); Lorenzo Crocco (CNR - National Research Council of Italy, Italy)
H2020 Session ID764479 (EMERALD): Electromagnetic Imaging for a Novel Generation of Medical Devices	SW06	T05 Biomedical and health / Convened Session / Electromagnetics	20 Mar 2020	B6	11:20	11:40	Temperature Dependent Dielectric Properties of Tissue Mimicking Phantom Material in the Microwave Frequency Range	Alexandra Prokhorova (Technische Universität Ilmenau, Germany); Sebastian Ley (Technische Universität Ilmenau, Germany); Ondrej Fiser (Czech Technical University in Prague & Faculty of Biomedical Engineering, Czech Republic); Jan Vrba (Czech Technical University, Czech Republic); Jürgen Sachs (Ilmenau University of Technology, Germany); Marko Helbig (Technische Universität Ilmenau, Germany)
H2020 Session ID764479 (EMERALD): Electromagnetic Imaging for a Novel Generation of Medical Devices	SW06	T05 Biomedical and health / Convened Session / Electromagnetics	20 Mar 2020	B6	11:40	12:00	Monitoring Tumor Response During Chemotherapy Treatment with Microwave Imaging	Aleksandar Janjic (Istanbul Technical University, Turkey); Tuba Yilmaz (Istanbul Technical University, Turkey); Mehmet Çayören (Istanbul Technical University, Turkey); Ibrahim Akduman (Istanbul Technical University, Turkey); Lorenzo Crocco (CNR - National Research Council of Italy, Italy)
H2020 Session ID764479 (EMERALD): Electromagnetic Imaging for a Novel Generation of Medical Devices	SW06	T05 Biomedical and health / Convened Session / Electromagnetics	20 Mar 2020	B6	12:00	12:20	Development of a Transmission-Based Open-Ended Coaxial-Probe Suitable for Axillary Lymph Node Dielectric Measurements	Matteo Savazzi (Universidade de Lisboa, Portugal); Emily Porter (University of Texas at Austin, USA); Martin O'Halloran (National University of Ireland, Galway, Ireland); Jorge R. Costa (Instituto de Telecomunicações / ISCTE-IUL, Portugal); Carlos A. Fernandes (Instituto de Telecomunicações, Instituto Superior Técnico, Portugal); Ivo M. Felício (Instituto de Telecomunicações, Portugal); Raquel C. Conceição (Instituto de Biofísica e Engenharia Biomédica, Faculdade de Ciências, Universidade de Lisboa, Portugal)
High-Frequency Methods and Applications	CS32	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	16:40	17:00	Asymptotic Expansion of the Reciprocity Integral in a Bidirectional Ray-Tracing Approach	Mehmet Mert Taygur (Technical University of Munich, Germany); Thomas F. Eibert (Technical University of Munich (TUM) & Chair of High-Frequency Engineering (HFT), Germany)
High-Frequency Methods and Applications	CS32	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	17:00	17:20	A Uniform Theory of Diffraction for a Curved PEC Wedge Excited by an Obliquely Incident Astigmatic Electromagnetic Gaussian Beam	Prabhakar H. Pathak (The Ohio State University, USA); Hsi-Tseng Chou (National Taiwan University, Taiwan)
High-Frequency Methods and Applications	CS32	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	17:20	17:40	Radiation Shaping by Using Lattice Modes in a Dual-feed Dielectric Structure	Silvio Ceccuzzi (Roma Tre University, Italy); Ludovica Tognolatti (Roma Tre University, Italy); Paolo Baccarelli (Roma Tre University, Italy); Vakhtang Jandieri (General and Theoretical Electrical Engineering (ATE), Faculty of Engineering, Germany); Cristina Ponti (Roma Tre University, Italy); Giuseppe Schettini (Roma Tre University, Italy)
High-Frequency Methods and Applications	CS32	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	17:40	18:00	3D Diffraction of a Complex Source Beam by a PEC Wedge	Ludger Klinkenbusch (Christian-Albrechts-Universität zu Kiel, Germany); Giuliano Manara (University of Pisa, Italy); Sergio Terranova (University of Pisa, Italy)
High-Frequency Methods and Applications	CS32	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	17 Mar 2020	B9	18:00	18:20	Wiener-Hopf Analysis of the Scattering from an Abruptly Ended Dielectric Slab Waveguide	Vito Daniele (Polytechnic of Turin, Italy); Guido Lombardi (Politecnico di Torino, Italy); Rodolfo Zich (Politecnico di Torino & ISMB, Italy)
History of Electromagnetism 1	BC/1	T13 Bicentennial Session / Electromagnetics	17 Mar 2020	B11	08:30	08:50	The Road to Electromagnetism	Andrew D Jackson (University of Copenhagen, Denmark)
History of Electromagnetism 1	BC/1	T13 Bicentennial Session / Electromagnetics	17 Mar 2020	B11	08:50	09:10	The Discovery of Electromagnetism by Hans Christian Ørsted 200 Years Ago	Olav Breinbjerg (Technical University of Denmark, Denmark)
History of Electromagnetism 1	BC/1	T13 Bicentennial Session / Electromagnetics	17 Mar 2020	B11	09:10	09:30	Electromagnetism Before Maxwell: From Ørsted to Weber	Ovidio Mario Bucci (University of Naples, Italy)
History of Electromagnetism 1	BC/1	T13 Bicentennial Session / Electromagnetics	17 Mar 2020	B11	09:30	09:50	After Ørsted's Discovery: Johan Jacob Nevander and the Quantification of Electric Current	Ari Sihvola (Aalto University, Finland)
History of Electromagnetism 1	BC/1	T13 Bicentennial Session / Electromagnetics	17 Mar 2020	B11	09:50	10:10	Oliver Heaviside, Maxwell's Apostle of Eccentric Elegance	Ismo V Lindell (Aalto University, School of Electrical Engineering, Finland)
History of Electromagnetism 2	BC/2	T13 Bicentennial Session / Electromagnetics	18 Mar 2020	B11	08:30	08:50	History of URSI Commission B and the Young Scientist Program	Edward V. Jull (University of British Columbia, Canada)
History of Electromagnetism 2	BC/2	T13 Bicentennial Session / Electromagnetics	18 Mar 2020	B11	08:50	09:10	EM Modeling of Stratified Media: From Radio Propagation over Ground to THz Graphene Antennas	Juan R Mosig (Ecole Polytechnique Fédérale de Lausanne, Switzerland); Krzysztof Michalski (Texas A&M University, USA)
History of Electromagnetism 2	BC/2	T13 Bicentennial Session / Electromagnetics	18 Mar 2020	B11	09:10	09:30	A Brief History of Ray Methods from Ancient to Modern Times and Their Impact on Electromagnetic Engineering Applications	Prabhakar H. Pathak (The Ohio State University, USA); Hsi-Tseng Chou (National Taiwan University, Taiwan)
History of Electromagnetism 2	BC/2	T13 Bicentennial Session / Electromagnetics	18 Mar 2020	B11	09:30	09:50	Beam Frame Representations: New Alternatives to the Plane Wave and Green Function Representations in the Frequency and Time Domains	Ehud Heyman (Tel Aviv University, Israel)
History of Electromagnetism 2	BC/2	T13 Bicentennial Session / Electromagnetics	18 Mar 2020	B11	09:50	10:10	Maxwell's Derivation of the Lorentz Force from Faraday's Law	Arthur D Yaghjian (Electromagnetics Research Consultant, USA)
History of Electromagnetism 3	BC/3	T13 Bicentennial Session / Electromagnetics	19 Mar 2020	B11	08:30	08:50	The Amazing History of Reflector Antennas: From Hertz to Modern CubeSats and Beyond	Yahya Rahmat-Samii (University of California Los Angeles (UCLA) & UCLA, USA); Vignesh Manohar (University of California, Los Angeles, USA)
History of Electromagnetism 3	BC/3	T13 Bicentennial Session / Electromagnetics	19 Mar 2020	B11	08:50	09:10	A View of Some Key Developments of Spacecraft Antennas, Their Modelling and Technologies	Antoine Roederer (Technical University of Delft, The Netherlands)
History of Electromagnetism 3	BC/3	T13 Bicentennial Session / Electromagnetics	19 Mar 2020	B11	09:10	09:30	A Brief History of Frequency-Independent and Not-so-Frequency-Independent Antennas	Raj Mittra (Penn State University, USA)
History of Electromagnetism 3	BC/3	T13 Bicentennial Session / Electromagnetics	19 Mar 2020	B11	09:30	09:50	The Phased Array Antenna: A History of Progress in Analysis and Technology	Robert Mailloux (University of Trento, Italy)
History of Electromagnetism 3	BC/3	T13 Bicentennial Session / Electromagnetics	19 Mar 2020	B11	09:50	10:10	History of Microstrip and Dielectric Resonator Antennas	David R. Jackson (University of Houston, USA); Stuart A. Long (University of Houston, USA)
IET Session: New Antenna Systems Involving Application of Metamaterials and Metasurfaces	CS33	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B1	08:30	08:50	A Novel Metamaterial Dual-band GPS Antenna Extendable to Space Diversity Applications	Changhyeong Lee (Incheon National University, Korea (South)); Heejun Park (Incheon National University, Korea (South)); Gwang-Gyun Namgung (Incheon National University, Korea (South)); Yejune Seo (Incheon National University, Korea (South)); Sungtek Kahng (University of Incheon, Korea (South))
IET Session: New Antenna Systems Involving Application of Metamaterials and Metasurfaces	CS33	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B1	08:50	09:10	Circularly Polarized Concentric Metaring Antenna	Hisamatsu Nakano (Hosei University, Japan); Tomoki Abe (Hosei University, Japan); Amit Mehta (Swansea University, United Kingdom (Great Britain)); Junji Yamauchi (Hosei University, Japan)

IET Session: New Antenna Systems Involving Application of Metamaterials and Metasurfaces	CS33	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B1	09:10	09:30	Gaussian Horn Implemented by Metasurfaces	Valentina Sozio (Istituto Superiore Mario Boella, Italy); Enrica Martini (University of Siena, Italy); Francesco Caminita (Wave-Up SRL, Italy); Paolo De Vita (IDS Ingegneria Dei Sistemi S. p. A, Italy); Andrea Giacomini (Microwave Vision Italy, Italy); Marco Sabbadini (Esa Estec, The Netherlands); Stefano Maci (University of Siena, Italy); Giuseppe Vecchi (Politecnico di Torino, Italy)
IET Session: New Antenna Systems Involving Application of Metamaterials and Metasurfaces	CS33	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B1	09:30	09:50	Directive Radiation from Metasurfaces with Generalized PT-Symmetry	Pai-Yen Chen (University of Illinois at Chicago, USA)
IET Session: New Antenna Systems Involving Application of Metamaterials and Metasurfaces	CS33	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B1	09:50	10:10	Broadband Circularly Polarized Metasurface Antenna Fed by a Rotated L-Shaped Probe	Wei E. I. Liu (National University of Singapore, Singapore); Zhi Ning Chen (National University of Singapore, Singapore); Xianming Qing (Institute for Infocomm Research, Singapore)
IET Session: New Antenna Systems Involving Application of Metamaterials and Metasurfaces	CS33	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B1	10:40	11:00	Metamaterials for Electromagnetic and Thermal Waves	Erin Donnelly (Edinburgh Napier University, United Kingdom (Great Britain)); Antoine Durant (Edinburgh Napier University & Université Grenoble Alpes, United Kingdom (Great Britain)); Celia Lacoste (INP-ENSEIHT University of Toulouse, United Kingdom (Great Britain)); Luigi La Spada (Edinburgh Napier University, United Kingdom (Great Britain))
IET Session: New Antenna Systems Involving Application of Metamaterials and Metasurfaces	CS33	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B1	11:00	11:20	Evaluation of Aerosol Jet Printing of Frequency Selective Surface on Glass for Building and RF Applications	Anshuman Shastri (University of Kent, United Kingdom (Great Britain)); Kumar Putta (University of Kent, United Kingdom (Great Britain)); Benito Sanz-Izquierdo (University of Kent, United Kingdom (Great Britain)); Edward Parker (The University of Kent, United Kingdom (Great Britain)); Steven Gao (University of Kent, United Kingdom (Great Britain)); Lee Winchester (The Centre for Process Innovation, United Kingdom (Great Britain)); Alan McClelland (CPI, United Kingdom (Great Britain))
IET Session: New Antenna Systems Involving Application of Metamaterials and Metasurfaces	CS33	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B1	11:20	11:40	Direct Antenna Modulator for m-QAM Applications	Kenneth Lee Ford (University of Sheffield, United Kingdom (Great Britain)); Stephen Henthorn (University of Sheffield, United Kingdom (Great Britain)); Timothy O'Farrell (University of Sheffield, United Kingdom (Great Britain))
IET Session: New Antenna Systems Involving Application of Metamaterials and Metasurfaces	CS33	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B1	11:40	12:00	Electrically Small Huygens Dipole Rectennas for Wirelessly Powering Internet-of-Things Sensors	Wei Lin (University of Technology Sydney, Australia); Richard Ziolkowski (University of Technology Sydney & University of Arizona, Australia)
IET Session: New Antenna Systems Involving Application of Metamaterials and Metasurfaces	CS33	T11 Fundamental research and emerging technologies / Convened Session / Antennas	20 Mar 2020	B1	12:00	12:20	Realizing Antenna Arrays with Huygens' Metasurface Pairs Based on a Moment-Method-Like Design	Vasileios G. Ataloglou (University of Toronto, Canada); Ayman H. Dorrah (University of Toronto, Canada); George V. Eleftheriades (University of Toronto, Canada)
IET/AMTA Session: Test and Measurement Challenges for 5G and Beyond	CS34	T02 Millimetre wave 5G / Convened Session / Measurements	19 Mar 2020	A3	08:30	08:50	Antenna Simulation Accuracy vs. Measurement Results of Small Form Factor Device	Petri Mustonen (Radiantum Oy, Finland); Olli Talvitie (Radiantum Oy, Finland)
IET/AMTA Session: Test and Measurement Challenges for 5G and Beyond	CS34	T02 Millimetre wave 5G / Convened Session / Measurements	19 Mar 2020	A3	08:50	09:10	Incident Power Density Assessment Study for 5G Millimeter-Wave Handset Based on Equivalent Circuits Method	Wang He (Zhejiang University, China); Lucia Scialacqua (Microwave Vision Italy, Italy); Alessandro Scannavini (Microwave Vision Italy, Italy); Zhinong Ying (Sony Corporation, Sweden); Kun Zhao (Sony Research Center Lund & Aalborg University, Sweden); Bo Xu (Ericsson AB, Sweden); Carla Di Paola (Aalborg University, Denmark); Shuai Zhang (Aalborg University, Denmark); Sailing He (Zhejiang University, China)
IET/AMTA Session: Test and Measurement Challenges for 5G and Beyond	CS34	T02 Millimetre wave 5G / Convened Session / Measurements	19 Mar 2020	A3	09:10	09:30	What's in a Name? an Analysis of the True Meaning of MIMO and Beamforming	Michael D. Foegelle (ETS-Lindgren, USA)
IET/AMTA Session: Test and Measurement Challenges for 5G and Beyond	CS34	T02 Millimetre wave 5G / Convened Session / Measurements	19 Mar 2020	A3	09:30	09:50	An Assessment of the Radio Frequency Electromagnetic Field Exposure from A Massive MIMO 5G Testbed	Tian Hong Lok (UK, National Physical Laboratory, United Kingdom (Great Britain)); Fabien Hélot (University of Surrey, United Kingdom (Great Britain)); David Cheddle (National Physical Laboratory, United Kingdom (Great Britain)); Tom Fielder (National Physical Laboratory, United Kingdom (Great Britain))
IET/AMTA Session: Test and Measurement Challenges for 5G and Beyond	CS34	T02 Millimetre wave 5G / Convened Session / Measurements	19 Mar 2020	A3	09:50	10:10	EMF Exposure Assessment of Massive MIMO Radio Base Stations Based on Traffic Beam Pattern Envelopes	Bo Xu (Ericsson AB, Sweden); Davide Colombi (Ericsson AB, Sweden); Christer Törnévik (Ericsson AB, Sweden)
IET/AMTA Session: Test and Measurement Challenges for 5G and Beyond	CS34	T02 Millimetre wave 5G / Convened Session / Measurements	19 Mar 2020	A3	10:40	11:00	Over-the-air Investigation of Transmitter and Receiver Nonlinear Distortion Using a Mm-Wave MIMO Testbed	Hamza Nachouane (Chalmers University of Technology, Sweden); Thomas Eriksson (Chalmers University of Technology, Sweden); Koen Buisman (Chalmers University of Technology, Sweden)
IET/AMTA Session: Test and Measurement Challenges for 5G and Beyond	CS34	T02 Millimetre wave 5G / Convened Session / Measurements	19 Mar 2020	A3	11:00	11:20	Fading Channel Emulation for Massive MIMO Testing Using a Conductive Phase Matrix Setup	Pekka Kyösti (Keysight Technologies & University of Oulu, Finland); Petteri Heino (Keysight Technologies Finland oy, Finland)
IET/AMTA Session: Test and Measurement Challenges for 5G and Beyond	CS34	T02 Millimetre wave 5G / Convened Session / Measurements	19 Mar 2020	A3	11:20	11:40	5G Over-the-Air Conformance Testing	Jonas Fridén (Ericsson AB, Sweden); Sam Agneessens (Ericsson AB, Sweden); Aidin Razavi (Ericsson Research, Sweden); Aurelian Bria (Ericsson, Sweden); Torbjörn Elfström (Ericsson AB, Sweden)
IET/AMTA Session: Test and Measurement Challenges for 5G and Beyond	CS34	T02 Millimetre wave 5G / Convened Session / Measurements	19 Mar 2020	A3	11:40	12:00	Design and Simulation of a 28 GHz Plane Wave Generator for NR Measurements	Sara Catteau (Bluetest AB, Sweden); Marianna Ivashina (Chalmers University of Technology, Sweden); Robert Rehammar (Bluetest AB & Chalmers University of Technology, Sweden)
IET/IRACON Session: Propagation Measurements and Modelling for 5G and Beyond	CS35	T02 Millimetre wave 5G / Convened Session / Propagation	17 Mar 2020	A3	08:30	08:50	Investigation of Resonance Based Propagation Loss Modeling for THz Chip-to-Chip Wireless Communications	Jinbang Fu (Georgia Institute of Technology, USA); Prateek Juyal (Georgia Institute of Technology, USA); Baki B Yilmaz (Georgia Institute of Technology, USA); Alenka Zajic (Georgia Institute of Technology, USA)
IET/IRACON Session: Propagation Measurements and Modelling for 5G and Beyond	CS35	T02 Millimetre wave 5G / Convened Session / Propagation	17 Mar 2020	A3	08:50	09:10	A Hardware-in-the-Loop Evaluation of the Impact of the V2X Channel on the Traffic-Safety Versus Efficiency Trade-offs	Alessandro Bazzi (University of Bologna, Italy); Thomas Blazek (TU Wien, Austria); Michele Menarini (CNR-IEIT, Italy); Barbara M Masini (CNR - IEIT & University of Bologna, Italy); Alberto Zanella (Istituto di Elettronica e di Ingegneria dell'Inform. e delle Telecomunicazioni, Italy); Christoph F. Mecklenbräuker (TU Wien, Austria); Golsa Ghiaasi (Norwegian University of Science and Technology, Norway)
IET/IRACON Session: Propagation Measurements and Modelling for 5G and Beyond	CS35	T02 Millimetre wave 5G / Convened Session / Propagation	17 Mar 2020	A3	09:10	09:30	Multipath Characteristics of Outdoor-to-Indoor Propagation Based on 32-GHz Measurements	Juyul Lee (ETRI, Korea (South)); Kyung-Won Kim (ETRI, Korea (South)); Myung-Don Kim (ETRI, Korea (South)); Jae-Joon Park (ETRI, Korea (South))
IET/IRACON Session: Propagation Measurements and Modelling for 5G and Beyond	CS35	T02 Millimetre wave 5G / Convened Session / Propagation	17 Mar 2020	A3	09:30	09:50	Penetration Loss at 60 GHz for Indoor-to-Indoor and Outdoor-to-Indoor Mobile Scenarios	Sung Yun Jun (National Institute of Standards and Technology, USA); Derek Caudill (NIST, USA); Jack Chuang (NIST, USA); Peter Papazian (NIST Division 673, USA); Anuraag Bodi (National Institute of Standards and Technology, USA); Camillo Gentile (NIST, USA); Jelena Senic (NIST, USA); Nada Gollmie (NIST, USA)
IET/IRACON Session: Propagation Measurements and Modelling for 5G and Beyond	CS35	T02 Millimetre wave 5G / Convened Session / Propagation	17 Mar 2020	A3	09:50	10:10	Hybrid Channel Modeling for Intra-Wagon Communication in Millimeter-Wave Band	Xiping Wang (Beijing Jiaotong University, China); Danping He (Beijing Jiaotong University, China); Ke Guan (Beijing Jiaotong University, China); Bo Ai (Beijing Jiaotong University, China); Juan Moreno (Universidad Politécnica de Madrid, Spain); Cesar Briso (Universidad Politécnica de Madrid & ETSIS Telecomunicación, Spain)
IET/IRACON Session: Propagation Measurements and Modelling for 5G and Beyond	CS35	T02 Millimetre wave 5G / Convened Session / Propagation	17 Mar 2020	A3	10:40	11:00	Experimental Characterization of the Underframe Area of a Passenger Train with an UWB Channel Sounder: Preliminary Results	César Calvo Ramírez (Universidad Politécnica de Madrid, Spain); Juan Moreno (Metro de Madrid S.A. & Universidad Politécnica de Madrid, Spain); Cesar Briso (Universidad Politécnica de Madrid & ETSIS Telecomunicación, Spain)
IET/IRACON Session: Propagation Measurements and Modelling for 5G and Beyond	CS35	T02 Millimetre wave 5G / Convened Session / Propagation	17 Mar 2020	A3	11:00	11:20	Irregular MultiFocal Reflector for Efficient mmWave Propagation in Indoor Environments	J. Samuel Romero-Peña (Universitat Politècnica de València, Spain)
IET/IRACON Session: Propagation Measurements and Modelling for 5G and Beyond	CS35	T02 Millimetre wave 5G / Convened Session / Propagation	17 Mar 2020	A3	11:20	11:40	Measurement and Characterization of an Indoor Industrial Environment at 3.7 and 28 GHz	Mathis Schmieder (Fraunhofer Heinrich Hertz Institute, Germany); Taro Eichler (Rohde & Schwarz, Germany); Sven Wittig (Fraunhofer Heinrich Hertz Institute, Germany); Michael Peter (Fraunhofer Institute for Telecommunications, Heinrich Hertz Institute, Germany); Wilhelm Keusgen (Fraunhofer Heinrich Hertz Institute, Germany)
IET/IRACON Session: Propagation Measurements and Modelling for 5G and Beyond	CS35	T02 Millimetre wave 5G / Convened Session / Propagation	17 Mar 2020	A3	11:40	12:00	Channel Modelling Based on Game Engines Light Physics for mmW in Indoor Scenarios	Saúl Inca (ITEAM Research Institute, Universitat Politècnica de València, Spain); Danalsy Prado (ITEAM Research Institute, Universitat Politècnica de València, Spain); David Martín-Sacristán (ITEAM Research Institute, Universitat Politècnica de València, Spain); Jose F Monserrat (ITEAM Research Institute, Universitat Politècnica de València, Spain)

IET/IRACON Session: Propagation Measurements and Modelling for 5G and Beyond	CS35	T02 Millimetre wave 5G / Convened Session / Propagation	17 Mar 2020	A3	12:00	12:20	Path Loss Models and Delay Spread Parameters for the Millimetre Wave Channel in Indoor Environments	Sana Salous (Durham University, United Kingdom (Great Britain)); Saied El-Faijori (Durham University, United Kingdom (Great Britain))
Imaging and inverse scattering	T10-E05/2	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	16:40	17:00	Improving the Reconstruction Image Quality of Multiple Small Discrete Targets Using the Phase Coherence Method	Guanying Sun (Northeastern University, USA); Mohammad Hossein Nemati (Northeastern University, USA); Carey Rappaport (Northeastern University, USA)
Imaging and inverse scattering	T10-E05/2	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	17:00	17:20	A Coarse-fine Mesh Approach for Improved Solution of 3-D Inverse Problems in Unbounded Media	Ahmet Aydoğan (Izmir Bakircay University & Istanbul Technical University, Turkey); Emre Kilic (Technische Universität München, Germany); Mehmet Mert Taygur (Technical University of Munich, Germany); Thomas F. Elbert (Technical University of Munich (TUM) & Chair of High-Frequency Engineering (HFT), Germany)
Imaging and inverse scattering	T10-E05/2	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	17:20	17:40	Inverse Scattering by Means of a New Rewriting of the Integral Equations	Martina Teresa Bevacqua (Università Mediterranea di Reggio Calabria, Italy); Tommaso Isernia (University of Reggio Calabria, Italy)
Imaging and inverse scattering	T10-E05/2	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	17:40	18:00	Automatic Permittivity and Thickness Characterization of Body-Borne Weak Dielectric Threats Using Wideband Radar	Mahshid Asri (Northeastern University, USA); Mohammad M. Tajdini (Northeastern University, USA); Elizabeth Wig (Northeastern University, USA); Carey Rappaport (Northeastern University, USA)
Imaging and inverse scattering	T10-E05/2	T10 EM modelling and simulation tools / Regular Session / Electromagnetics	19 Mar 2020	B9	18:00	18:20	Tracking Targets from Indirect Through-The-Wall Radar Observations	Gabriele Incorvala (The University of Manchester, United Kingdom (Great Britain)); Oliver Dorn (University of Manchester, United Kingdom (Great Britain))
Innovative Lens Antennas for Future Communication Systems	Convened Poster 2-CS36	T02 Millimetre wave 5G / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Parallel-Plate Waveguide Lens for Mechanical Beam Scanning Using Gap Waveguide Feed System	Thomas Ströber (Univ Rennes 1, IETR, France); Ségolène Tubau (Thales Alenia Space, France); Hervé Legay (Thales Alenia Space, France); Etienne Girard (Thales Alenia Space, France); George Goussetis (Heriot-Watt University, United Kingdom (Great Britain)); Mauro Ettore (University of Rennes 1 & UMR CNRS 6164, France)
Innovative Lens Antennas for Future Communication Systems	Convened Poster 2-CS36	T02 Millimetre wave 5G / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Fully-Metallic Rinehart-Luneburg Lens at 60 GHz	Martin Petek (KTH Royal Institute of Technology, Sweden); Oskar Zetterstrom (KTH Royal Institute of Technology, Sweden); Elena Pucci (Ericsson AB, Sweden); Nelson Fonseca (European Space Agency, The Netherlands); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
Innovative Lens Antennas for Future Communication Systems	Convened Poster 2-CS36	T02 Millimetre wave 5G / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	3D-printed Wideband Hyperbolic Lens Antenna for Ka-band	Jose M Poyanco (Pontificia Universidad Católica de Valparaíso, Chile); Nelson Mario Castro (Pontificia Universidad Católica de Valparaíso, Chile); Francisco Pizarro (Pontificia Universidad Católica de Valparaíso, Chile); Eva Rajo-Iglesias (University Carlos III of Madrid, Spain)
Innovative Lens Antennas for Future Communication Systems	Convened Poster 2-CS36	T02 Millimetre wave 5G / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	On the Use of Dielectric Gratings for Enlarging the Field of View in Low Dielectric Permittivity Lenses	Marta Arias Campo (IMST GmbH & Delft University of Technology, Germany); Simona Bruni (IMST GmbH, Germany); Giorgio Carluccio (Delft University of Technology, The Netherlands); Nurlia Llombar (Delft University of Technology, The Netherlands)
Innovative Lens Antennas for Future Communication Systems	Convened Poster 2-CS36	T02 Millimetre wave 5G / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Transmit-array Antenna Design for Broadband Backhaul 5G Communications at WIGIG Band	Sergio Matos (Instituto Universitário de Lisboa, Portugal); Jorge R. Costa (Instituto de Telecomunicações / ISCTE-IUL, Portugal); Carlos A. Fernandes (Instituto de Telecomunicações, Instituto Superior Técnico, Portugal); Nour Nachabe (University of Nice Sophia Antipolis, France); Cyril Luxey (University Nice Sophia-Antipolis, France); Diane Titz (University Nice Sophia Antipolis, France); Frédéric Ganesello (STMicrelectronics, France); Carlos del-Rio (Universidad Pública de Navarra & Institute of Smart Cities, Spain); Ana Arbolea (Universidad Rey Juan Carlos, Spain); Jorge Teixeira (ISCTE-IUL, Instituto de Telecomunicações, Portugal); Jean-Philippe Garnerio (Polytech'Lab, Université Nice Sophia Antipolis, France); Jean-Francois Vizzari (Polytech'Lab, Université Nice Sophia Antipolis, France)
Invited Speaker Session	IS-Tue 1/1	Antennas	17 Mar 2020	A2	14:50	15:30	CubeSat Antennas: An Amazing Opportunity for Developing Out-of-the-Box Antennas	Yahya Rahmat-Samii (University of California Los Angeles (UCLA) & UCLA, USA)
Invited Speaker Session	IS-Tue 2/1	Propagation	17 Mar 2020	A3	14:50	15:30	Impact of Spatially Consistent Channels on Digital Beamforming for Millimeter-Wave Systems	Harsh Tataria (Lund University, Sweden); Fredrik Tufvesson (Lund University, Sweden)
Invited Speaker Session	IS-Tue 2/2	Antennas	17 Mar 2020	A2	15:30	16:10	Antenna-in-Package Technology	Yue Ping Zhang (Nanyang Technological University, Singapore)
Invited Speaker Session	IS-Tue 2/2	Electromagnetics	17 Mar 2020	A3	15:30	16:10	Microwave Imaging in Real Time	Natalia Nikolova (McMaster University, Canada)
Invited Speaker Session	IS-Wed 1/1	Electromagnetics	18 Mar 2020	A2	14:50	15:30	A Holy Grail Quest: The Concept of Stored Electromagnetic Energy	Guy Vandenbosch (Katholieke Universiteit Leuven (KU Leuven), Belgium)
Invited Speaker Session	IS-Wed 2/1	Electromagnetics	18 Mar 2020	A3	14:50	15:30	Computational Electromagnetics in Space	Erik Jørgensen (TICRA, Denmark); Oscar Borries (TICRA, Denmark); Min Zhou (TICRA, Denmark); Peter Meincke (TICRA, Denmark); Stig Sørensen (TICRA, Denmark); Niels Vesterdal (TICRA, Denmark); Michael F. Palvig (TICRA, Denmark)
Invited Speaker Session	IS-Wed 1/2	Propagation	18 Mar 2020	A2	16:00	16:40	Application of Machine Learning to Wireless Channel Modeling	Jianhua Zhang (Beijing University of Posts and Telecommunications, China); Li Yu (Beijing University of Posts and Telecommunications, China); Yuxiang Zhang (Beijing University Of Posts And Telecommunications, China); Zhen Zhang (Beijing University of Posts and Telecommunications, China); Zhiqiang Yuan (Beijing University of Posts and Telecommunications, China)
Invited Speaker Session	IS-Wed 2/2	Antennas	18 Mar 2020	A3	16:00	16:40	Submm-resolution Photoconductive Connected Array Radars	Andrea Neto (Delft University of Technology, The Netherlands)
Invited Speaker Session	IS-Thu 1/1	Measurements	19 Mar 2020	A2	14:50	15:30	Antenna Measurements and Signal Processing Techniques	Fernando Las-Heras (University of Oviedo, Spain); Yuri Alvarez-Lopez (University of Oviedo, Spain); Jaime Laviada (Universidad de Oviedo, Spain); Ana Arbolea (Universidad Rey Juan Carlos, Spain); Maria García Fernández (University of Oviedo, Spain); Guillermo Alvarez Narciandi (University of Oviedo, Spain)
Invited Speaker Session	IS-Thu 2/1	Propagation	19 Mar 2020	A3	14:50	15:30	Channel Modeling at Sub-millimeter Wave and Terahertz Frequencies for Wireless Chip-to-Chip Communications	Alenka Zajc (Georgia Institute of Technology, USA)
Invited Speaker Session	IS-Thu 1/2	Antennas	19 Mar 2020	A2	15:30	16:10	Mobile Satellite Communication Terminals - State of the Art and Antenna Challenges	Karu Esselle (University of Technology Sydney, Australia)
Invited Speaker Session	IS-Thu 2/2	Antennas	19 Mar 2020	A3	15:30	16:10	Antennas for Small Biomedical Brain Implants	Leena Ukkonen (Tampere University of Technology, Finland)
IoT antennas	T04-A08	T04 IoT and M2M / Regular Session / Antennas	16 Mar 2020	B2	16:00	16:20	Integrated Design of Dual-Band Antenna with Uni-/Omni-Directional Radiations	Chun-Xu Mao (University of Surrey, United Kingdom (Great Britain)); Mohsen Khalily (University of Surrey & 5G Innovation Centre, Institute for Communication Systems (ICS), United Kingdom (Great Britain)); Pei Xiao (University of Surrey, United Kingdom (Great Britain))
IoT antennas	T04-A08	T04 IoT and M2M / Regular Session / Antennas	16 Mar 2020	B2	16:20	16:40	On the Way to Green IoT Antennas: Compact Ultra-Thin CPW-Fed Monopole on Tencel	Maria Elena de Cos Gómez (Universidad de Oviedo, Spain); Alicia Flórez Berdasco (Universidad de Oviedo, Spain); Humberto Fernandez Alvarez (University of Oviedo, Spain); Fernando Las-Heras (University of Oviedo, Spain)
IoT antennas	T04-A08	T04 IoT and M2M / Regular Session / Antennas	16 Mar 2020	B2	16:40	17:00	Miniaturized Planar Inverted-F Antenna Using Minkowski Pre-Fractal Structure	Sandra Costanzo (University of Calabria, Italy); Adil Masoud Qureshi (University of Calabria, Italy)
IoT antennas	T04-A08	T04 IoT and M2M / Regular Session / Antennas	16 Mar 2020	B2	17:00	17:20	Inexpensive 3D-Printed Radiating Horns for Customary Things in IoT Scenarios	Diogo Helena (Universidade de Aveiro, Instituto de Telecomunicações, Portugal); Amélia Ramos (Universidade de Aveiro, Instituto de Telecomunicações, Portugal); Tiago Varum (Instituto de Telecomunicações, Universidade de Aveiro, Portugal); João Matos (Instituto de Telecomunicações, Universidade de Aveiro, Portugal)
IoT antennas	T04-A08	T04 IoT and M2M / Regular Session / Antennas	16 Mar 2020	B2	17:20	17:40	3D Antenna-on-Package for Near-Isotropic Radiation Shielded from Embedded Electronics	Maria M Bermudez (King Abdullah University of Science and Technology, Saudi Arabia); Kirill Kilonovski (King Abdullah University of Science and Technology, Saudi Arabia); Atif Shamim (King Abdullah University of Science and Technology, Saudi Arabia)
IoT antennas	T04-A08	T04 IoT and M2M / Regular Session / Antennas	16 Mar 2020	B2	17:40	18:00	Design of an Array Antenna Consisting of Three Dual Antenna Sets with a Narrow Array Distance for Interference Mitigation	Tae Heung Lim (Hongik University, Korea (South)); Byung Jun Jang (Kookmin Univ, Korea (South)); Hosung Choo (Hongik University, Korea (South))
IRACON Spectrum Sharing: Challenges and Opportunities for 5G and Beyond	CS37	T02 Millimetre wave 5G / Convened Session / Propagation	20 Mar 2020	A3	08:30	08:50	Channel Measurements and Path Loss Modeling for Indoor THz Communication	Naveed Ahmed Abbasi (University of Southern California, USA); Arjun Hariharan (University of Southern California, USA); Arun Moni Nair (University of Southern California, USA); Andreas Molisch (University of Southern California, USA)

IRACON Spectrum Sharing: Challenges and Opportunities for 5G and Beyond	CS37	T02 Millimetre wave 5G / Convened Session / Propagation	20 Mar 2020	A3	08:50	09:10	Characterization of the Propagation Channel in Conference Room Scenario at 190 GHz	Diego Dupleich (Ilmenau University of Technology, Germany); Robert Müller (TU Ilmenau, Germany); Sergii Skoblikov (TU Ilmenau, Germany); Markus Landmann (Fraunhofer Institute for Integrated Circuits IIS, Germany); Giovanni Del Gado (Fraunhofer Institute for Integrated Circuits IIS & Technische Universität Ilmenau, Germany); Reiner S. Thomä (Ilmenau University of Technology, Germany)
IRACON Spectrum Sharing: Challenges and Opportunities for 5G and Beyond	CS37	T02 Millimetre wave 5G / Convened Session / Propagation	20 Mar 2020	A3	09:10	09:30	Enabling RF Technologies for Spectrum Sharing	Mark Beach (University of Bristol, United Kingdom (Great Britain)); Leo Laughlin (University of Bristol, United Kingdom (Great Britain)); Eyad Arabi (University of Bristol, United Kingdom (Great Britain)); Simon Wilson (University of Bristol, United Kingdom (Great Britain)); Sarmad Ozan (University of Bristol, United Kingdom (Great Britain)); Chris Gamath (University of Bristol, United Kingdom (Great Britain))
IRACON Spectrum Sharing: Challenges and Opportunities for 5G and Beyond	CS37	T02 Millimetre wave 5G / Convened Session / Propagation	20 Mar 2020	A3	09:30	09:50	Assessing the Feasibility of the Spectrum Sharing Concepts for Private Industrial Networks Operating Above 5 GHz	Pekka Ojanen (Co-Worker Technology Finland, Finland); Seppo Yrjölä (Nokia & University of Oulu, Finland); Marja Matinmikko-Blue (University of Oulu, Centre for Wireless Communications, Finland)
IRACON Spectrum Sharing: Challenges and Opportunities for 5G and Beyond	CS37	T02 Millimetre wave 5G / Convened Session / Propagation	20 Mar 2020	A3	09:50	10:10	Regulatory Requirements and Characterisation of Transmitter and Receiver Parameters to Set a Novel Framework for Spectrum Sharing	Peter Faris (European Communications Office, Denmark); Doriana Guiducci (European Communications Office, Denmark)
IRACON Spectrum Sharing: Challenges and Opportunities for 5G and Beyond	CS37	T02 Millimetre wave 5G / Convened Session / Propagation	20 Mar 2020	A3	10:40	11:00	A Study of an Environment Recognition Scheme Using WLAN CSI for Dynamic Spectrum Sharing	Tomoki Murakami (NTT Corporation, Japan); Shinya Otsuki (NTT Service Integration Laboratories, Japan); Tomoaki Ogawa (NTT, Japan); Yasushi Takatori (NTT Network Innovation Laboratories, Japan)
IRACON Spectrum Sharing: Challenges and Opportunities for 5G and Beyond	CS37	T02 Millimetre wave 5G / Convened Session / Propagation	20 Mar 2020	A3	11:00	11:20	A Kirchhoff Approximation Based Spectrum Availability Prediction Method at Millimeter Wave	Kosuke Murakami (Tokyo Institute Technology, Japan); Jun-ichi Takada (Tokyo Institute of Technology, Japan); Kentaro Saito (Tokyo Institute of Technology, Japan); Panawit Hanpinitasak (Tokyo Institute of Technology, Japan)
IRACON Spectrum Sharing: Challenges and Opportunities for 5G and Beyond	CS37	T02 Millimetre wave 5G / Convened Session / Propagation	20 Mar 2020	A3	11:20	11:40	Highly-Reconfigurable Time-based Radiating Systems and Their Optimization	Diego Masotti (University of Bologna, Italy); Lorenzo Poli (ELEDIA Research Center, University of Trento, Italy); Mazen Al Shanawani (University of Bologna, Italy); Paolo Rocca (University of Trento, Italy); Alessandra Costanzo (DEI, University of Bologna, Italy)
IRACON Spectrum Sharing: Challenges and Opportunities for 5G and Beyond	CS37	T02 Millimetre wave 5G / Convened Session / Propagation	20 Mar 2020	A3	11:40	12:00	Joint Statistics of Urban Clutter Loss and Building Entry Loss at 3.5 GHz and 27 GHz - From Measurement to Modelling	Richard Rudd (Plum Consulting Ltd, United Kingdom (Great Britain)); Xiaomin Meng (University of Sussex, United Kingdom (Great Britain)); Victor Ocheri (University of Sussex, United Kingdom (Great Britain)); Dehao Wu (University of Sussex, United Kingdom (Great Britain)); Maziar Nekooee (University of Sussex, United Kingdom (Great Britain))
IRACON Spectrum Sharing: Challenges and Opportunities for 5G and Beyond	CS37	T02 Millimetre wave 5G / Convened Session / Propagation	20 Mar 2020	A3	12:00	12:20	Building Entry Loss and Clutter Loss at 26 GHz	Sana Salous (Durham University, United Kingdom (Great Britain)); Belen Montenegro Villaceros (Formerly JRC, Italy, Switzerland); James Bishop (Joint Research Centre of the European Commission, Italy)
ISAP Session: Recent Advances in Asian Antennas and Propagation Research	CS38	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B1	08:30	08:50	Reconfigurable Terahertz Reflectarray Based on Graphene Radiating Patches	Tiaoming Niu (Lanzhou University, China); Jingwei Zhang (Lanzhou University, China); Lin Cheng (Lanzhou University, China); Pengfei Cao (Lanzhou University, China); Ruoyu Cui (Lanzhou University, China); Zhonglei Mei (Lanzhou University, China)
ISAP Session: Recent Advances in Asian Antennas and Propagation Research	CS38	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B1	08:50	09:10	Achieving Wider Impedance Bandwidth Using Full-Wavelength Dipoles	Can Ding (University of Technology Sydney (UTS), Australia); Haihan Sun (University of Technology, Sydney, Australia); He Zhu (University of Technology Sydney, Australia); Y. Jay Guo (University of Technology Sydney, Australia)
ISAP Session: Recent Advances in Asian Antennas and Propagation Research	CS38	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B1	09:10	09:30	Single and Dual Beam Waveguide Slotted Antenna Using 3D Printing Technique for 5G Application	Muataz Watheq Almeshehe (Faculty of Electrical Engineeri, Universiti Teknologi Malaysia, Malaysia); Noor Asniza Murad (University Technology Malaysia, Malaysia); Mohamad Kamal A. Rahim (Universiti Teknologi Malaysia, Malaysia); Farid Zubir (Universiti Teknologi Malaysia & Faculty of Electrical Engineering, Malaysia); Osman Bin Ayop (Universiti Teknologi Malaysia, Malaysia); Mohd Fairus Mohd Yusoff (Universiti Teknologi Malaysia, Malaysia); Huda A. Majid (Universiti Tun Hussein Onn Malaysia, Malaysia); Mohamed Nasrun Osman (Universiti Malaysia Perlis, Malaysia); Mohamad Zoinol Abidin Bin Abd Aziz (Universiti Teknikal Malaysia Melaka & Hang Tuah Jaya, Malaysia)
ISAP Session: Recent Advances in Asian Antennas and Propagation Research	CS38	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B1	09:30	09:50	Deionized Water Based Insulator Loaded UWB Implanted Antenna for Gain Improvement	Geonyeong Shin (Chungnam National University, Korea (South))
ISAP Session: Recent Advances in Asian Antennas and Propagation Research	CS38	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B1	09:50	10:10	Microwave Metasurface-based Lens Antennas for 5G and Beyond	Zhi Ning Chen (National University of Singapore, Singapore); Teng Li (Southeast University, China); Wei E. I. Liu (National University of Singapore, Singapore)
ISAP Session: Recent Advances in Asian Antennas and Propagation Research	CS38	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B1	10:40	11:00	Modified Binomial Power Distribution Beamformer for Switched-Beam Circular Array	Sheng-Wei Wu (National Taiwan University, Taiwan); Kun-Yuo Lin (National Taiwan University, Taiwan); Shih-Yuan Chen (National Taiwan University, Taiwan)
ISAP Session: Recent Advances in Asian Antennas and Propagation Research	CS38	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B1	11:00	11:20	Metal Stamped Antenna-in-Package for Millimeter-wave Large-scale Phased-array Applications Using Multiphysics Analysis	Junho Park (Pohang University of Science & Technology, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))
ISAP Session: Recent Advances in Asian Antennas and Propagation Research	CS38	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B1	11:20	11:40	Antennas and Propagation Technologies of V2V Communications for Platooning	Kazuma Tomimoto (Softbank Corp., Japan); Koichi Serizawa (Softbank Corp., Japan); Masayuki Miyashita (Softbank Corp., Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan); Takeshi Fukusako (Kumamoto University, Japan)
ISAP Session: Recent Advances in Asian Antennas and Propagation Research	CS38	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B1	11:40	12:00	Novel Millimeter-Wave Phased Array Antenna for 5G Wireless Communications	Fan Yang (Tsinghua University, China); Shenheng Xu (Tsinghua University, China); Yezhen Li (Tsinghua University, China); Yongli Ren (Tsinghua University, China)
ISAP Session: Recent Advances in Asian Antennas and Propagation Research	CS38	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	B1	12:00	12:20	Highly-Integrated Dual-Band mmWave Antenna Array for 5G Mobile Phone Application	Wei-Yu Li (Industrial Technology Research Institute, Taiwan); Wei Chung (Industrial Technology Research Institute, Taiwan); Kin-Lu Wong (National Sun Yat-Sen University, Taiwan)
Keynote 1	IK 01		16 Mar 2020	A2	10:00	10:40	The Technology Journey Towards 6G	Magnus Fredhig (Ericsson AB, Sweden)
Keynote 2	IK 02		16 Mar 2020	A2	11:10	11:50	Present and Future Trends in Electromagnetics and Metamaterials	Andrea Alù (CUNY Advanced Science Research Center, USA)
Leaky-wave and Traveling-wave Antennas	T02-A10	T02 Millimetre wave 5G / Regular Session / Antennas	19 Mar 2020	B2	16:40	17:00	Review of Recent Advances in the Leaky-Wave Analysis of 2-D Leaky-Wave Antennas	David R. Jackson (University of Houston, USA); Filippo Capolino (University of California, Irvine, USA); Ahmad T. Almutawa (PAAET, Kuwait); Hamidreza Kazemi (University of California Irvine, USA); Sohini Sengupta (Energon Corporation, USA); Walter Fuscaldo (Sapienza University of Rome, Italy); Alessandro Galli (Sapienza University of Rome, Italy); Stuart A. Long (University of Houston, USA)
Leaky-wave and Traveling-wave Antennas	T02-A10	T02 Millimetre wave 5G / Regular Session / Antennas	19 Mar 2020	B2	17:00	17:20	Radial Line Slot Array Antenna for 5.8-GHz-Band Beam-Type Wireless Power Transmission	Takashi Tomura (Tokyo Institute of Technology, Japan); Jiro Hirokawa (Tokyo Institute of Technology, Japan); Minoru Furukawa (Sho Engineering Corp., Japan); Teruo Fujiwara (Sho Engineering Corp., Japan)
Leaky-wave and Traveling-wave Antennas	T02-A10	T02 Millimetre wave 5G / Regular Session / Antennas	19 Mar 2020	B2	17:20	17:40	Reducing Side-Lobe Level of Surface Mounted Printed Leaky-Wave Antenna	Nima Javanbakht (Carleton University, Canada); Barry Syrett (Carleton University, Canada); Rony E. Amaya (Carleton University, Canada); Jafar Shaker (Communications Research Centre Canada, Canada)
Leaky-wave and Traveling-wave Antennas	T02-A10	T02 Millimetre wave 5G / Regular Session / Antennas	19 Mar 2020	B2	17:40	18:00	Multi-Beam Radiation Properties of Higher-Order Space Harmonics-Enabled Leaky-Wave Antenna	Mohammad reza Rahimi (Polytechnique Montréal, Canada); Mohammad S. Sharawi (Polytechnique Montréal, Canada); Ke Wu (Ecole Polytechnique (University of Montreal) & Center for Radiofrequency Electronics Research of Quebec, Canada)
Leaky-wave and Traveling-wave Antennas	T02-A10	T02 Millimetre wave 5G / Regular Session / Antennas	19 Mar 2020	B2	18:00	18:20	Multi-Port Leaky-Wave Antennas as Real-Time Analog Spectral Decomposers	Mohamed K. Emara (Carleton University, Canada); Shulabh Gupta (Carleton University, Canada)
Machine Learning in Antennas	CS39	T11 Fundamental research and emerging technologies / Convened Session / Antennas	17 Mar 2020	B10	08:30	08:50	Machine Learning-assisted Antenna Design Optimization: A Review and the State-of-the-art	Mobayode Akinsolu (Glyndwr University, United Kingdom (Great Britain)); Keyur Mistry (University of Huddersfield, United Kingdom (Great Britain)); Bo Liu (University of Glasgow, United Kingdom (Great Britain)); Pavlos Lazaridis (University of Huddersfield, United Kingdom (Great Britain)); Peter S. Excell (Glyndwr University, United Kingdom (Great Britain))

Machine Learning in Antennas	CS39	T11 Fundamental research and emerging technologies / Convened Session / Antennas	17 Mar 2020	B10	08:50	09:10	Machine Learning-Based Hybrid Random-Fuzzy Modeling Framework for Antenna Design	Duygu Kan (Ghent University & IMEC, Belgium); Simon De Ridder (Ghent University, Belgium); Domenico Spina (Ghent University, Belgium); Ivo Couckuyt (Ghent University, Belgium); Flavia Grassi (Politecnico di Milano, Italy); Tom Dhaene (Ghent University & IMEC, Belgium); Hendrik Rogier (Ghent University, Belgium); Dries Vande Ginste (Ghent University, Belgium)
Machine Learning in Antennas	CS39	T11 Fundamental research and emerging technologies / Convened Session / Antennas	17 Mar 2020	B10	09:10	09:30	Compact Millimeter-Wave MIMO Antenna for 5G Applications	Issa Elfegani (Instituto de Telecomunicações, Portugal); Jonathan Rodriguez (Instituto de Telecomunicações, Portugal); Amjad Iqbal (Multimedia University, Malaysia); Maryam Sajedin (University of Aveiro, Portugal); Chemseddine Zebiri (Ferhat Abbas University of Setif, Algeria); Raed A Abd-Alhameed (University of Bradford, United Kingdom (Great Britain))
Machine Learning in Antennas	CS39	T11 Fundamental research and emerging technologies / Convened Session / Antennas	17 Mar 2020	B10	09:30	09:50	A Dual-Polarized 5G Base Station Antenna Using Machine-Learning Based Optimization Method	Qiang Hua (University of Liverpool, United Kingdom (Great Britain)); Yi Huang (University of Liverpool, United Kingdom (Great Britain)); Chaoyun Song (University of Liverpool, United Kingdom (Great Britain)); Tianyuan Jia (University of Liverpool, United Kingdom (Great Britain)); Xu Zhu (University of Liverpool & Harbin Institute of Technology, Shenzhen, United Kingdom (Great Britain))
Machine Learning in Antennas	CS39	T11 Fundamental research and emerging technologies / Convened Session / Antennas	17 Mar 2020	B10	09:50	10:10	A Doherty Power Amplifier Based on the Harmonic Generating Mechanism	Maryam Sajedin (University of Aveiro, Portugal); Issa Elfegani (Instituto de Telecomunicações, Portugal); Jonathan Rodriguez (Instituto de Telecomunicações, Portugal); Raed A Abd-Alhameed (University of Bradford, United Kingdom (Great Britain)); Ahmed Maan Abdulkhaleq (University of Bradford & SARAS Technology, United Kingdom (Great Britain)); Naser Ojaroudi Parchin (University of Bradford, United Kingdom, United Kingdom (Great Britain)); Yasir Ismael Abduraheem Al-Yasir (University of Bradford, United Kingdom (Great Britain))
Machine Learning in Antennas	CS39	T11 Fundamental research and emerging technologies / Convened Session / Antennas	17 Mar 2020	B10	10:40	11:00	Machine Learning-Driven Design Optimization for a Multi-Layer Metasurface Antenna	Despoina Kampaouridou (University of Birmingham, United Kingdom (Great Britain)); Alexandros Feresidis (University of Birmingham, United Kingdom (Great Britain))
Machine Learning in Antennas	CS39	T11 Fundamental research and emerging technologies / Convened Session / Antennas	17 Mar 2020	B10	11:00	11:20	Wearable 5-Gigahertz Wi-Fi Antenna Design Using Whale Optimization Algorithm	Achilles D. Boursianis (Aristotle University of Thessaloniki, Greece); Stavros Koulouridis (University of Patras, Greece); Dimitrios Georgoulas (Aristotle University of Thessaloniki, Greece); Sotirios Goudos (Aristotle University of Thessaloniki, Greece)
Machine Learning in Antennas	CS39	T11 Fundamental research and emerging technologies / Convened Session / Antennas	17 Mar 2020	B10	11:20	11:40	A Compact Frequency Reconfigurable DRA for GSM, LTE, and 5G Applications Services	Chemseddine Zebiri (Ferhat Abbas University of Setif, Algeria); Djamel Sayad (University of 20 Aout, United Kingdom (Great Britain)); Jamal Kosha (University of Bradford, United Kingdom (Great Britain)); Widad Mshwat (University of Bradford, United Kingdom (Great Britain)); Issa Elfegani (Instituto de Telecomunicações, Portugal); Jonathan Rodriguez (Instituto de Telecomunicações, Portugal); Raed A Abd-Alhameed (University of Bradford, United Kingdom (Great Britain))
Machine Learning in Antennas	CS39	T11 Fundamental research and emerging technologies / Convened Session / Antennas	17 Mar 2020	B10	11:40	12:00	A New Broadband MIMO Antenna System for Sub 6 GHz 5G Cellular Communications	Naser Ojaroudi Parchin (University of Bradford, United Kingdom, United Kingdom (Great Britain)); Yasir Ismael Abduraheem Al-Yasir (University of Bradford, United Kingdom (Great Britain)); Ahmed Maan Abdulkhaleq (University of Bradford & SARAS Technology, United Kingdom (Great Britain)); Haleh Jahankhsh Basherlou (Bradford College, United Kingdom (Great Britain)); Atta Ullah (University of Bradford, United Kingdom (Great Britain)); Raed A Abd-Alhameed (University of Bradford, United Kingdom (Great Britain))
Machine Learning in Antennas	CS39	T11 Fundamental research and emerging technologies / Convened Session / Antennas	17 Mar 2020	B10	12:00	12:20	Mutual Coupling Effect on Three-Way Doherty Amplifier for Green Compact Mobile Communications	Ahmed Maan Abdulkhaleq (University of Bradford & SARAS Technology, United Kingdom (Great Britain)); Maan Yahya (Northern Technical University, Iraq); Naser Ojaroudi Parchin (University of Bradford, United Kingdom, United Kingdom (Great Britain)); Yasir Ismael Abduraheem Al-Yasir (University of Bradford, United Kingdom (Great Britain)); Maryam Sajedin (University of Aveiro, Portugal); Issa Elfegani (Instituto de Telecomunicações, Portugal); Raed A Abd-Alhameed (University of Bradford, United Kingdom (Great Britain)); Ashwain Rayit (SARAS Technology Ltd. (SARAS), United Kingdom (Great Britain)); Jonathan Rodriguez (Instituto de Telecomunicações, Portugal)
Machine Learning in Radio Propagation	T11-P02/2	T11 Fundamental research and emerging technologies / Regular Session / Propagation	18 Mar 2020	B10	08:30	08:50	VoglerNet: Multiple Knife-Edge Diffraction Using Deep Neural Network	Viet-Dung Nguyen (ENSTA Bretagne, France); Huy Phan (University of Kent, United Kingdom (Great Britain)); Ali Mansour (ENSTA Bretagne, France); Arnaud Coatanhay (ENSTA Bretagne, France)
Machine Learning in Radio Propagation	T11-P02/2	T11 Fundamental research and emerging technologies / Regular Session / Propagation	18 Mar 2020	B10	08:50	09:10	Study on Radio Propagation Prediction by Machine Learning Using Urban Structure Maps	Tatsuya Nagao (KDDI Research, Inc., Japan); Takahiro Hayashi (KDDI Research, Inc., Japan)
Machine Learning in Radio Propagation	T11-P02/2	T11 Fundamental research and emerging technologies / Regular Session / Propagation	18 Mar 2020	B10	09:10	09:30	A Novel Machine Learning Approach of Hemorrhage Stroke Detection in Differential Microwave Head Imaging System	Mohammad Ojaroudi (University of Limoges/CNRS, France); Stéphane Bila (XLM UMR 7252 Université de Limoges/CNRS, France); Mahdi Salmiorkamani (Bio-Electromagnetic Group, Microwave Technology Company (MWT), Tehran, Turkey)
Machine Learning in Radio Propagation	T11-P02/2	T11 Fundamental research and emerging technologies / Regular Session / Propagation	18 Mar 2020	B10	09:30	09:50	A Study on the Variety and Size of Input Data for Radio Propagation Prediction Using a Deep Neural Network	Takahiro Hayashi (KDDI Research, Inc., Japan); Tatsuya Nagao (KDDI Research, Inc., Japan); Satoshi Ito (KDDI Research, Inc., Japan)
Machine Learning in Radio Propagation	T11-P02/2	T11 Fundamental research and emerging technologies / Regular Session / Propagation	18 Mar 2020	B10	09:50	10:10	Microwave Tomography for Estimating Moisture Content Distribution in Porous Foam Using Neural Networks	Rahul Yadav (University of Eastern Finland, Finland); Marko Vauhkonen (University of Eastern Finland, Finland); Guido Link (Karlsruhe Institute of Technology, Germany); Stefan Betz (Vötsch Industrietechnik GmbH, Reiskirchen, Germany); Timo Lähivaara (University of Eastern Finland, Finland)
Material characterisation and non-destructive testing	T11-M01	T11 Fundamental research and emerging technologies / Regular Session / Measurements	20 Mar 2020	B5	10:40	11:00	Bioinspired Sensor for the Electrical Permittivity Characterization of Dielectric Materials	João Guilherme Domingos de Oliveira (Universidade Federal do Rio Grande do Norte, Brazil); Samuel Paiva (Universidade Federal do Rio Grande do Norte, Brazil); Jose Garibaldi Duarte (Federal University of Rio Grande do Norte, Brazil); Luis Felipe V. T. Costa (Federal University of Rio Grande do Norte, Brazil); Valdemir S. Neto (Universidade Federal do Rio Grande do Norte, Brazil); Adaildo D'Assunção (Universidade Federal do Rio Grande do Norte, Brazil)
Material characterisation and non-destructive testing	T11-M01	T11 Fundamental research and emerging technologies / Regular Session / Measurements	20 Mar 2020	B5	11:00	11:20	UHF and L-Band Microwave Measurements of the Antarctic Firn-Layer Complex Permittivity Depth Profile	Roberto Olmi (National Research Council, Italy); Saverio Priori (IFAC CNR, Italy); Federico Puggelli (University of Siena, Italy); Alberto Toccafondi (University of Siena, Italy)
Material characterisation and non-destructive testing	T11-M01	T11 Fundamental research and emerging technologies / Regular Session / Measurements	20 Mar 2020	B5	11:20	11:40	Broadband Microwave Dielectric Property Comparison of Human Fetal Osteoblastic (hFOB) and Osteosarcoma (SaOS-2) Cell Lines	Zeynep Macit (Istanbul Technical University, Turkey); Cemanur Aydinalp (Istanbul Technical University, Turkey); Tuba Yilmaz (Istanbul Technical University, Turkey); Ayse Buse Ozdabak Sert (Istanbul Technical University, Turkey); Fatma Nese Kok (Istanbul Technical University, Turkey)
Material characterisation and non-destructive testing	T11-M01	T11 Fundamental research and emerging technologies / Regular Session / Measurements	20 Mar 2020	B5	11:40	12:00	Non-invasive Blood Glucose Measurement Based on Microwave Resonator	Ayodunni Oloyo (University of Manchester, United Kingdom (Great Britain)); Zhirun Hu (University of Manchester, United Kingdom (Great Britain))
Material characterisation and non-destructive testing	T11-M01	T11 Fundamental research and emerging technologies / Regular Session / Measurements	20 Mar 2020	B5	12:00	12:20	Dielectric Spectroscopy Characterization Within a Microfluidic Device Based on Open-Ended Coplanar Waveguide	Houssein Mariam (Université Paris-Est Marne-la-Vallée, France); Patrick Poulichet (ESIEE, France); Hakim Takhedmit (Paris-Est Marne-la-Vallée University, France); Elodie Richalot (Université Paris-Est (Marne-la-Vallée), France); Olivier François (ESIEE Paris, France)
Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	13:30	13:50	Dual-band Anomalous Reflection with Interleaved Metagratings	Gengyu Xu (University of Toronto, Canada); Sean V Hum (University of Toronto, Canada); George V. Eleftheriades (University of Toronto, Canada)
Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	13:50	14:10	Reconfigurable Sparse Metasurface: Beamforming Beyond Phase Gradient Heuristics	Vladislav Popov (SONDR, CentraleSupélec, Université Paris Saclay, France); Badreddine Ratni (Univ Paris Nanterre, France); Fabrice Boust (ONERA, France); Shah Nawaz Burokur (LEME, France)

Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	14:10	14:30	Degenerate Band Edge Resonances in Air-filled Substrate Integrated Waveguide	Tianyu Zheng (Sorbonne University, France); Massimiliano Cesaletti (Sorbonne Universités UPMC, France); Ahmed F. Abdelshafy (University of California, Irvine, USA); Filippo Capolino (University of California, Irvine, USA); Zhuoxiang Ren (Sorbonne Université, France); Guido Valerio (Sorbonne Université, France)
Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	14:30	14:50	An Efficient Anisotropic Metasurface for Linear and Circular-Polarization Conversion Applications	Afzal Ahmed (National University of Sciences and Technology, Pakistan); Hattian F. Abutarboush (Taibah University & Communications and Electronics Engineering, Saudi Arabia); Fahad Ahmed (National University Of Science and Technology & School of Electrical Engineering and Computer Sciences, Pakistan); Farooq A. Tahir (National University of Sciences and Technology, Pakistan)
Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	14:50	15:10	Cold Sintered CaTiO ₃ -K ₂ MoO ₄ Microwave Dielectric Ceramics for Integrated Microstrip Patch Antennas	Dawei Wang (University of Sheffield, United Kingdom (Great Britain)); Shiyu Zhang (Loughborough University, United Kingdom (Great Britain)); Ge Wang (University of Sheffield, United Kingdom (Great Britain)); J (Yiannis) Vardaxoglou (Loughborough University, United Kingdom (Great Britain)); William Whittow (Loughborough University, United Kingdom (Great Britain)); Darren Cadman (Loughborough University, United Kingdom (Great Britain)); Di Zhou (Xi'an Jiaotong University, United Kingdom (Great Britain)); Kaixin Song (Hangzhou Dianzi University, United Kingdom (Great Britain)); Ian Reaney (University of Sheffield, United Kingdom (Great Britain))
Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	15:10	15:30	Fabrication of Artificial Dielectrics via Stereolithography Based 3D-Printing	Jack McGhee (Loughborough University, United Kingdom (Great Britain)); Tom Whittaker (Loughborough University, United Kingdom (Great Britain)); Ge Wang (University of Sheffield, United Kingdom (Great Britain)); Jacob Moriarty (Loughborough University, United Kingdom (Great Britain)); Shiyu Zhang (Loughborough University, United Kingdom (Great Britain)); Darren Cadman (Loughborough University, United Kingdom (Great Britain)); William Whittow (Loughborough University, United Kingdom (Great Britain)); J (Yiannis) Vardaxoglou (Loughborough University, United Kingdom (Great Britain))
Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	16:00	16:20	Complementary Metasurfaces for Waveguide Applications	Xin Ma (Northwestern Polytechnical University, China); Mohammad Sajjad Mirmoosa (Aalto University, Finland); Sergei Tret'yakov (Aalto University, Finland)
Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	16:20	16:40	Design and Simulation of Polarization-Sensitive ENNZ-Lined Apertures for Visible-Light Metasurfaces	Mitchell Semple (University of Alberta, Canada); Ashwin K. Iyer (University of Alberta, Canada)
Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	16:40	17:00	Enforcing Local Power Conservation for Metasurface Design Using Electromagnetic Inversion	Trevor Brown (University of Manitoba, Canada); Youssef Vahabzadeh (Ecole Polytechnique de Montreal, Canada); Christophe Caloz (Ecole Polytechnique de Montreal, Canada); Puyan Mojabi (University of Manitoba, Canada)
Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	17:00	17:20	Impedance Matching Network Based on Bianisotropic Metasurfaces for Antennas Operating at High Microwave, Millimeter-Wave or Terahertz Frequencies	Mohammad Alibakhshikenari (Università degli Studi di Roma "Tor Vergata", Roma - ITALY, Italy); Bal Virdee (London Metropolitan University, United Kingdom (Great Britain)); Chan H. Hwang See (Edinburgh Napier University, United Kingdom (Great Britain)); Raed A. Abd-Alhameed (University of Bradford, United Kingdom (Great Britain)); Francisco Falcone (Universidad Publica de Navarra, Spain); Ernesto Limiti (University of Rome Tor Vergata, Italy)
Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	17:20	17:40	Propagation Through Metamaterial Temporal Slabs: Transmission, Reflection and Special Cases	Davide Ramaccia (RomaTre University, Italy); Alessandro Toscano (University Roma Tre (IT), Italy); Filiberto Bilotti (University Roma Tre, Italy)
Metamaterials, metasurfaces and advanced materials	T11-E08	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	16 Mar 2020	B11	17:40	18:00	Propagation Characteristics in Substrate Integrated Holey Metasurfaces	Fatemeh Ghasemifard (KTH Royal Institute of Technology, Sweden); Francisco Mesa (University of Seville, Spain); Guido Valerio (Sorbonne Université, France); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
Metasurfaces for Mobile (5G and Beyond) and Satellite Communication Systems	Convened Poster 2-CS41	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Glide-Symmetric Luneburg Lens Using Substrate-Integrated-Holes for 5G Communications at Ka-Band	Ramez Hamarneh (KTH, France); Oskar Zetterstrom (KTH Royal Institute of Technology, Sweden); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
Metasurfaces for Mobile (5G and Beyond) and Satellite Communication Systems	Convened Poster 2-CS41	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Peripherally Excited Phased Arrays with Practical Active Huygens' Sources and Slot Elements	Ayman H. Dorrah (University of Toronto, Canada); George V. Eleftheriades (University of Toronto, Canada)
Metasurfaces for Mobile (5G and Beyond) and Satellite Communication Systems	Convened Poster 2-CS41	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	An Ultra-thin Wide-Angle Scanned Planar Array Antenna for Satellite Communication	Yujie Liu (Queen Mary University of London & Antenna Group, United Kingdom (Great Britain)); Ahsan Noor Khan (Queen Mary University of London, United Kingdom (Great Britain)); Qiao Cheng (Queen Mary University of London, United Kingdom (Great Britain)); Max Munoz (Queen Mary, University of London, United Kingdom (Great Britain)); Yang Hao (Queen Mary University, United Kingdom (Great Britain))
Metasurfaces for Mobile (5G and Beyond) and Satellite Communication Systems	Convened Poster 2-CS41	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Quasi-Periodic Metasurfaces and Their Equivalent Dielectric Models	Qiao Cheng (Queen Mary University of London, United Kingdom (Great Britain)); Shiyu Zhang (Loughborough University, United Kingdom (Great Britain)); Raj Mittra (Penn State University, USA); J (Yiannis) Vardaxoglou (Loughborough University, United Kingdom (Great Britain)); Yang Hao (Queen Mary University, United Kingdom (Great Britain))
Metasurfaces for Mobile (5G and Beyond) and Satellite Communication Systems	Convened Poster 2-CS41	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Metasurface-Based Circularly-Polarized Multibeam Reflect-/Transmit-Arrays	Zhi Hao Jiang (Southeast University, China); Fan Wu (Southeast University, China); Xiaowei Zhu (Southeast University, China); Qiang Ren (Beihang University, China); Pingjuan Werner (Pennsylvania State University, USA); Douglas H Werner (Pennsylvania State University, USA)
Metasurfaces for Mobile (5G and Beyond) and Satellite Communication Systems	Convened Poster 2-CS41	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Recent Advances on Modulated Metasurface Antennas for SatCom	Marco Faenzi (Université de Rennes 1, France); Gabriele Minatti (Wave Up S. r. l., Italy); David González-Ovejero (Centre National de la Recherche Scientifique - CNRS, France); Francesco Caminita (Wave-Up SRL, Italy); Enrica Martini (University of Siena, Italy); Cristian Della Giovampola (Wave Up srl, Italy); Stefano Maci (University of Siena, Italy)
Metasurfaces for Mobile (5G and Beyond) and Satellite Communication Systems	Convened Poster 2-CS41	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Electro-Mechanically Tunable Meta-Surfaces for Beam-Steered Antennas from mm-Wave to THz	Muhammad S Rabbani (University of Birmingham, United Kingdom (Great Britain)); James Churm (University of Birmingham, United Kingdom (Great Britain)); Alexandros Feresidis (University of Birmingham, United Kingdom (Great Britain))
Microwave imaging	T05-E05	T05 Biomedical and health / Regular Session / Electromagnetics	16 Mar 2020	B8	16:00	16:20	Robust Multi-Resolution Microwave Imaging Through an Over-Constrained Approach	Marco Salucci (ELEDIA Research Center, Italy); Paolo Rocca (University of Trento, Italy); Andrea Massa (University of Trento, Italy)
Microwave imaging	T05-E05	T05 Biomedical and health / Regular Session / Electromagnetics	16 Mar 2020	B8	16:20	16:40	Multiple Moving Targets Tracking Based on Kernel Localization and Group Trackers for Envisioned Functional Microwave Brain Imaging Applications	Mohammad Ojaroudi (University of Limoges/CNRS, France); Stéphane Bida (XLIM UMR 7252 Université de Limoges/CNRS, France)
Microwave imaging	T05-E05	T05 Biomedical and health / Regular Session / Electromagnetics	16 Mar 2020	B8	16:40	17:00	Validation of Multilevel 24-Port Microwave Imaging System for Brain Stroke Monitoring on Synthetic Numerical Data	Jan Tesarik (Faculty of Biomedical Engineering, Czech Technical University in Prague, Czech Republic); Jan Vrba (Faculty of Biomedical Engineering, Czech Technical University in Prague, Czech Republic)
Microwave imaging	T05-E05	T05 Biomedical and health / Regular Session / Electromagnetics	16 Mar 2020	B8	17:00	17:20	Microwave Imaging of Cervical Myelopathy: A Preliminary Feasibility Assessment	Chiara Dachena (University of Genoa, Italy, Italy); Alessandro Fanti (University of Cagliari, Italy); Alessandro Fedeli (University of Genoa, Italy); Giuseppe Mazzarella (University of Cagliari, Italy); Matteo Pastorino (University of Genoa, Italy); Andrea Randazzo (University of Genoa, Italy)
Microwave imaging	T05-E05	T05 Biomedical and health / Regular Session / Electromagnetics	16 Mar 2020	B8	17:20	17:40	Effectiveness of Folded Quasi Self-Complementary Antenna to Microwave Imaging	Yoshihiko Kuwahara (Shizuoka University, Japan); Akira Nozaki (Shizuoka University, Japan)
Microwave imaging	T05-E05	T05 Biomedical and health / Regular Session / Electromagnetics	16 Mar 2020	B8	17:40	18:00	Real-Time Three-Dimensional Electrical Impedance Tomography of the Human Chest	Marco Salucci (ELEDIA Research Center, Italy); Davide Marcantonio (ELEDIA Research Center, Italy); Alessandro Polo (ELEDIA Research Center, University of Trento, Italy); Maokun Li (Tsinghua University, China)

Millimetre wave arrays for mobile communications	T02-A04/1	T02 Millimetre wave 5G / Regular Session / Antennas	16 Mar 2020	A2	16:00	16:20	Dual-Polarized Dielectric Resonator Antenna Array for 5G Mobile Radio Base Stations	Jerzy Kowalewski (Karlsruhe Institute of Technology, Germany); Alisa Jauch (Karlsruhe Institute of Technology (KIT), Germany); Joerg Eisenbeis (Karlsruhe Institute of Technology, Germany); Sören Marahrens (Karlsruhe Institute of Technology (KIT), Germany); Karina Schneider (Karlsruhe Institute of Technology, Germany); Thomas Zwick (Karlsruhe Institute of Technology (KIT), Germany)
Millimetre wave arrays for mobile communications	T02-A04/1	T02 Millimetre wave 5G / Regular Session / Antennas	16 Mar 2020	A2	16:20	16:40	Dual-band Dual-polarized Antenna for mm-Wave 5G Base Station Antenna Array	Zeeshan Siddiqui (University of Oulu & Centre for Wireless Communications, Finland); Marko Sonkki (University of Oulu, Finland); Jiangcheng Chen (University of Oulu, Finland); Markus Berg (University of Oulu & Excellant Ltd., Finland); Marko E Leinonen (University of Oulu, Finland); Aarno Pärssinen (University of Oulu, Finland)
Millimetre wave arrays for mobile communications	T02-A04/1	T02 Millimetre wave 5G / Regular Session / Antennas	16 Mar 2020	A2	16:40	17:00	Subarray Antenna Fed by Analog Beamforming Network for 5G Picocell Applications	Danelys Rodriguez-Avila (Microwave and Antenna Group (MAG), Ecole Polytechnique Fédérale de Lausanne, Switzerland); Anja K. Skrivervik (EPFL, Switzerland)
Millimetre wave arrays for mobile communications	T02-A04/1	T02 Millimetre wave 5G / Regular Session / Antennas	16 Mar 2020	A2	17:00	17:20	A Photonic Beam-Steerable Mm-wave Antenna Array for Radio over Fiber Applications	Alvaro J Pascual (University of Rennes 1 & IETR, France); Muhsin Ali (Universidad Carlos III de Madrid, Spain); Luis Enrique García Muñoz (Universidad Carlos III de Madrid, Spain); Guillermo Carpintero (Universidad Carlos III de Madrid, Spain); David González-Ovejero (Centre National de la Recherche Scientifique - CNRS, France); Ronan Sauleau (University of Rennes 1, France)
Millimetre wave arrays for mobile communications	T02-A04/1	T02 Millimetre wave 5G / Regular Session / Antennas	16 Mar 2020	A2	17:20	17:40	Low-profile Millimeter-Wave Wideband Circularly Polarized Spiral Antenna Array	Huakang Chen (Chongqing University of Posts and Telecommunications, China); Yu Shao (Chongqing University of Posts and Telecommunications, China); Keyao Li (Chongqing University of Posts and Telecommunications, China); Changhong Zhang (Chongqing University of Posts and Telecommunications, China); Zhi-Zhong Zhang (Chongqing University of Posts and Telecommunications, China)
Millimetre wave arrays for mobile communications	T02-A04/1	T02 Millimetre wave 5G / Regular Session / Antennas	16 Mar 2020	A2	17:40	18:00	28 GHz Millimeter Wave Multibeam Antenna Array with Compact Reconfigurable Feeding Network	Yihua Zhou (Queen Mary University of London, United Kingdom (Great Britain)); Vedprabhu Basavarajappa (University of Surrey, United Kingdom (Great Britain)); Shaker Alkarak (Queen Mary University Of London, United Kingdom (Great Britain)); Yue Gao (University of Surrey, United Kingdom (Great Britain))
Millimetre wave arrays for mobile terminals	T02-A04/2	T02 Millimetre wave 5G / Regular Session / Antennas	17 Mar 2020	A2	08:30	08:50	Dual-Polarized mm-Wave Antenna Solution for Mobile Phone	Resti Montoya (Aalto University, Finland); Juha Ala-Laurinaho (Aalto University, Finland); Ville Viikari (Aalto University & School of Electrical Engineering, Finland)
Millimetre wave arrays for mobile terminals	T02-A04/2	T02 Millimetre wave 5G / Regular Session / Antennas	17 Mar 2020	A2	08:50	09:10	Dual-Band Dual-Polarized mm-Wave Slot Antenna Array for Mobile Handsets	Joni Kurvinen (Aalto University School of Electrical Engineering, Finland); Anu Lehtovuori (Aalto University, Finland); Ville Viikari (Aalto University & School of Electrical Engineering, Finland)
Millimetre wave arrays for mobile terminals	T02-A04/2	T02 Millimetre wave 5G / Regular Session / Antennas	17 Mar 2020	A2	09:10	09:30	A Novel Lens Antenna Design Based on a Bed of Nails Metasurface for New Generation Mobile Devices	Carla Di Paola (Aalborg University, Denmark); Kun Zhao (Sony Research Center Lund & Aalborg University, Sweden); Shuai Zhang (Aalborg University, Denmark); Gert Pedersen (Aalborg University, Denmark)
Millimetre wave arrays for mobile terminals	T02-A04/2	T02 Millimetre wave 5G / Regular Session / Antennas	17 Mar 2020	A2	09:30	09:50	Embedded 60-GHz mm-Wave Antennas in Non-mm-Wave Antennas Integrating a Package (AIAIP) for Motion Recognition in a Full-Screen Metal-Framed Cell Phone	Huan-Chu Huang (vivo Mobile Communication Co., Ltd, Taiwan); Heng Zha (vivo Mobile Communication Co., Ltd, China); Yijin Wang (vivo Mobile Communication Co., Ltd, China)
Millimetre wave arrays for mobile terminals	T02-A04/2	T02 Millimetre wave 5G / Regular Session / Antennas	17 Mar 2020	A2	09:50	10:10	Embedded 5G Wideband Dual-Polarized mm-Wave Antennas in Non-mm-Wave Antennas Integrating a Package (AIAIP) for a Metal-Framed Cell Phone	Zhimin Zhu (vivo Mobile Communication Co., Ltd, China); Huan-Chu Huang (vivo Mobile Communication Co., Ltd, Taiwan); Yijin Wang (vivo Mobile Communication Co., Ltd, China); Xianjing Jian (vivo Mobile Communication Co., Ltd, China); Rongjie Ma (vivo Mobile Communication Co., Ltd, China)
Millimetre wave arrays for mobile terminals	T02-A04/2	T02 Millimetre wave 5G / Regular Session / Antennas	17 Mar 2020	A2	10:40	11:00	Frequency Reconfigurable Endfire Vertical Polarized Array for 5G Handset Applications	Jin Zhang (Aalborg University, Denmark); Shuai Zhang (Aalborg University, Denmark); Gert Pedersen (Aalborg University, Denmark)
Millimetre wave arrays for mobile terminals	T02-A04/2	T02 Millimetre wave 5G / Regular Session / Antennas	17 Mar 2020	A2	11:00	11:20	A Beam-Steerable Antenna Array with Radiation Beam Reconfigurability for 5G Smartphones	Naser Ojaraudi Parchin (University of Bradford, United Kingdom (Great Britain)); Raed A Abd-Alhameed (University of Bradford, United Kingdom (Great Britain)); Ming Shen (Aalborg University, Denmark)
Millimetre wave arrays for mobile terminals	T02-A04/2	T02 Millimetre wave 5G / Regular Session / Antennas	17 Mar 2020	A2	11:20	11:40	A Millimeter-Wave Dual Band Antenna with Circular Polarization	Samaneh Sadeghi-Marasht (University College Dublin, Ireland); Mohammad S. Sharawi (Polytechnique Montreal, Canada); Anding Zhu (University College Dublin, Ireland)
Millimetre wave arrays for mobile terminals	T02-A04/2	T02 Millimetre wave 5G / Regular Session / Antennas	17 Mar 2020	A2	11:40	12:00	Substrate Integrated Dual Linearly Polarized End-Fire Antenna Array Operating at 28GHz	Halim Boutayeb (Huawei Technologies, Canada); Wen Tong (Huawei Technologies Canada Co., Ltd., Canada); Fayezy Hyjazie (Huawei Technologies Co. Ltd., Canada); Wenyao Zhai (Huawei Technologies Canada Research Center, Canada); Xin Feng (Huawei Technologies Co., Ltd., Canada)
Millimetre wave arrays for mobile terminals	T02-A04/2	T02 Millimetre wave 5G / Regular Session / Antennas	17 Mar 2020	A2	12:00	12:20	Wideband Dual-Polarized Patch Antenna with Capacitive Coupling for mm-Wave Bands	Marko Sonkki (University of Oulu, Finland); Danping He (Beijing Jiaotong University, China); Zeeshan Siddiqui (University of Oulu & Centre for Wireless Communications, Finland); Marko E Leinonen (University of Oulu, Finland); Ke Guan (Beijing Jiaotong University, China)
Millimetre wave lens antennas for space applications	T09-A09	T09 Space (incl. cubesat) / Regular Session / Antennas	16 Mar 2020	B8	13:30	13:50	Compressed Lenses via Transformation Optics for Mobile Satellite Communications	Oskar Zetterstrom (KTH Royal Institute of Technology, Sweden); Nelson Fonseca (European Space Agency, The Netherlands); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
Millimetre wave lens antennas for space applications	T09-A09	T09 Space (incl. cubesat) / Regular Session / Antennas	16 Mar 2020	B8	13:50	14:10	Experimental Validation of the Beam Pattern of a Wide Band Quasi-Optical System for DESHIMA Spectrometer	Shahab Oddin Dabironezare (Delft University of Technology, The Netherlands); Kenichi Karatsu (SRON, The Netherlands); Stephen Yates (SRON, The Netherlands); Vignesh Murugesan (SRON, The Netherlands); David Thoen (Kavli Institute of NanoScience, Delft University of Technology, The Netherlands); Jochem Baselmans (SRON, The Netherlands); Nuria Llobart (Delft University of Technology, The Netherlands)
Millimetre wave lens antennas for space applications	T09-A09	T09 Space (incl. cubesat) / Regular Session / Antennas	16 Mar 2020	B8	14:10	14:30	Analysis of Wide Band Wide-Scanning Quasi-Optical Systems Based on Fourier Optics	Shahab Oddin Dabironezare (Delft University of Technology, The Netherlands); Giorgio Carluccio (Delft University of Technology, The Netherlands); Andrea Neto (Delft University of Technology, The Netherlands); Nuria Llobart (Delft University of Technology, The Netherlands)
Millimetre wave lens antennas for space applications	T09-A09	T09 Space (incl. cubesat) / Regular Session / Antennas	16 Mar 2020	B8	14:30	14:50	Rotman Lenses with Ridged Waveguides in Q-Band	Sophie-Abigael Gomanne (European Space Agency, The Netherlands); Nelson Fonseca (European Space Agency, The Netherlands); Petar Jankovic (European Space Agency, The Netherlands); Jaione Galdeano (European Space Agency, The Netherlands); Giovanni Toso (European Space Agency, ESA ESTEC, The Netherlands); Piero Angeletti (European Space Agency, The Netherlands)
Millimetre wave lens antennas for space applications	T09-A09	T09 Space (incl. cubesat) / Regular Session / Antennas	16 Mar 2020	B8	14:50	15:10	Design of an Impedance-Matched Horn Antenna with Enhanced Directivity Using Conformal Transformation Optics	Hossein Eskandari (Ferdowsi University of Mashhad, Iran); Tomáš Tyc (Masaryk University, Czech Republic); Juan Luis Albadaleso-Lijarco (KTH Royal Institute of Technology, Sweden); Oskar Zetterstrom (KTH Royal Institute of Technology, Sweden); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
Millimetre wave lens antennas for space applications	T09-A09	T09 Space (incl. cubesat) / Regular Session / Antennas	16 Mar 2020	B8	15:10	15:30	All-Metal Graded Index Gutman Lens Antenna - A More Compact Luneburg Lens	Petros Bantavis (Universite de Rennes 1, France); Cebrian Gonzalez (Idonai, Spain); Ronan Sauleau (University of Rennes 1, France); George Goussetis (University, France); Sébastien Tubau (Thales Alenia Space, France); Hervé Legay (Thales Alenia Space, France)
Millimetre wave propagation modelling	T02-P02	T02 Millimetre wave 5G / Regular Session / Propagation	19 Mar 2020	B1	08:30	08:50	Performance Comparison of Single- And Multi-Lobe Antenna Arrays in 5G Urban Outdoor Environments at mm-Waves via Intelligent Ray Tracing	Yanki Aslan (Delft University of Technology, The Netherlands); Jan Puskey (Delft University of Technology, The Netherlands); Antoine Roederer (Technical University of Delft, The Netherlands); Jochem Yarovsky (TU Delft, The Netherlands)
Millimetre wave propagation modelling	T02-P02	T02 Millimetre wave 5G / Regular Session / Propagation	19 Mar 2020	B1	08:50	09:10	A Dynamic Visibility Algorithm for Ray Tracing in Outdoor Environments with Moving Transmitters and Scatterers	Sajjad Hussain (National University of Sciences and Technology, Pakistan); Conor Brennan (Dublin City University, Ireland)
Millimetre wave propagation modelling	T02-P02	T02 Millimetre wave 5G / Regular Session / Propagation	19 Mar 2020	B1	09:10	09:30	Analysis of 60-GHz In-street Backhaul Channel Measurements and LiDAR Ray-based Simulations	Mohammed Zahid Aslam (SIRADEL, France); Yoann Corre (SIRADEL, France); Jakob Belschner (Deutsche Telekom AG, Germany); Gnana Soundari Arockiaraj (Deutsche Telekom AG, Germany); Monika Jäger (Deutsche Telekom AG, Germany)

Millimetre wave propagation modelling	T02-P02	T02 Millimetre wave 5G / Regular Session / Propagation	19 Mar 2020	B1	09:30	09:50	On a Fresnel-Integrals-Based Back-Scattering Model at Millimeter-Waves	Adrián Lahuerta-Lavieja (KU Leuven, Belgium); Martin Johansson (Ericsson Research, Sweden); Ulf Gustavsson (Ericsson AB, Sweden); Guy Vandenbosch (Katholieke Universiteit Leuven (KU Leuven), Belgium)
Millimetre wave propagation modelling	T02-P02	T02 Millimetre wave 5G / Regular Session / Propagation	19 Mar 2020	B1	09:50	10:10	Cell-Free at Millimeter Wave Frequency Simulation Using the Ray Tracing Method	Higo Thaian Pereira da Silva (Federal University of Campina Grande, Brazil); Rafael M. Duarte (Universidade Federal de Campina Grande, Brazil); Marcelo S. Alencar (Federal University of Campina Grande & Institute for Advanced Studies in Communications, Brazil); Wamberto Queiroz (Universidade Federal de Campina Grande, Brazil)
MIMO, diversity, smart antennas & signal processing	T01-A22	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	20 Mar 2020	A2	08:30	08:50	Integrated Doherty Power Amplifier - Antenna Element with Active Impedance Modulation: Efficiency vs. Bandwidth Trade-Offs	Oleg Iupikov (Chalmers University of Technology, Sweden); Jose-Ramon Perez-Cisneros (Chalmers University of Technology, Sweden); Rob Maaskant (CHALMERS, Sweden); Christian Fager (Chalmers University of Technology, Sweden); Koen Buisman (Chalmers University of Technology, Sweden); Daniel Åkesson (Ericsson AB, Sweden); Marianna Ivashina (Chalmers University of Technology, Sweden)
MIMO, diversity, smart antennas & signal processing	T01-A22	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	20 Mar 2020	A2	08:50	09:10	Theory of Cross-Polar Beamforming for Dual Polarized Arrays in Mobile Communications	Björn Lindmark (Commscope, Sweden)
MIMO, diversity, smart antennas & signal processing	T01-A22	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	20 Mar 2020	A2	09:10	09:30	Power-Efficient Beam Pattern Synthesis via Dual Polarization Beamforming	Sven O. Persson (Ericsson AB, Sweden)
MIMO, diversity, smart antennas & signal processing	T01-A22	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	20 Mar 2020	A2	09:30	09:50	Full Duplex Spatial Modulation System Performance Depending on Self-interference Cancellation Accuracy	Yanni Zhou (Univ Lyon, INSA Lyon, Inria, CITI, France, France); Florin Hutu (Univ Lyon, INSA Lyon, Inria, CITI, France); Guillaume Villemaud (Université de Lyon, INRIA, INSA-Lyon, CITI, France)
MIMO, diversity, smart antennas & signal processing	T01-A22	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	20 Mar 2020	A2	09:50	10:10	Signal-to-Noise Ratio Considerations for Secure Antenna Polarization Modulation	Cara Yang Kataria (University of Illinois at Urbana-Champaign, USA); Steven Franke (University of Illinois at Urbana-Champaign, USA); Jennifer T. Bernhard (University of Illinois at Urbana-Champaign & Electromagnetics Laboratory, USA)
MIMO, diversity, smart antennas & signal processing	T01-A22	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	20 Mar 2020	A2	10:40	11:00	Array Configuration Effect on the Spatial Correlation of MU-MIMO Channels in NLoS Environments	Navid Amani (Chalmers University of Technology, Sweden); Amirashkan Farsaei (Eindhoven University of Technology, The Netherlands); Ulf Gustavsson (Ericsson AB, Sweden); Thomas Eriksson (Chalmers University of Technology, Sweden); Frans MJ Willems (Technical University Eindhoven, The Netherlands); Marianna Ivashina (Chalmers University of Technology, Sweden); Rob Maaskant (CHALMERS, Sweden)
MIMO, diversity, smart antennas & signal processing	T01-A22	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	20 Mar 2020	A2	11:00	11:20	Efficiency Analysis in Multibeam Wideband Phased Arrays	Riccardo Ozzola (Delft University of Technology, The Netherlands); Daniele Cavallo (Delft University of Technology, The Netherlands)
MIMO, diversity, smart antennas & signal processing	T01-A22	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	20 Mar 2020	A2	11:20	11:40	New High-Gain Differential-Fed Dual-Polarized Filtering Microstrip Antenna for 5G Applications	Yasir Ismael Abdulaheem Al-Yasir (University of Bradford, United Kingdom (Great Britain)); Naser Ojroudi Parchin (University of Bradford, United Kingdom (Great Britain)); Mohammad Fares (University of Basra, Iraq); Ahmed Maan Abdulkhaleq (University of Bradford & SARAS Technology, United Kingdom (Great Britain)); Maryam Sajedin (University of Aveiro, Portugal); Issa Elfergani (Instituto de Telecomunicações, Portugal); Jonathan Rodriguez (Instituto de Telecomunicações, Portugal); Raed A Abd-Alhameed (University of Bradford, United Kingdom (Great Britain))
MIMO, diversity, smart antennas & signal processing	T01-A22	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	20 Mar 2020	A2	11:40	12:00	On the Use of the Observable Field to Synthesize Independent Beams from a Finite Volume	Andrea Neto (Delft University of Technology, The Netherlands); Arturo Fiorellini Bernardis (Delft University of Technology, The Netherlands); Angelo Freni (University of Florence, Italy); Nuria Llobart (Delft University of Technology, The Netherlands)
MIMO, diversity, smart antennas & signal processing	T01-A22	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	20 Mar 2020	A2	12:00	12:20	High-Gain Flat-Top Antenna Sub-Arrays for Planar Arrays with Limited Field of View	Ronis T. Maximidis (Eindhoven University of Technology, The Netherlands); Diego Caratelli (The Antenna Company, The Netherlands); Giovanni Toso (European Space Agency, ESA ESTEC, The Netherlands); A. B. (Bart) Smolders (Eindhoven University of Technology, The Netherlands)
Mm-wave, THz, and quasi-optical antenna measurements	T02-M08	T02 Millimetre wave 5G / Regular Session / Measurements	20 Mar 2020	B2	10:40	11:00	Experimental Characterization of a Wideband G-Band Circularly Polarized Lens Antenna	Marta Arias Campo (IMST GmbH & Delft University of Technology, Germany); Giorgio Carluccio (Delft University of Technology, The Netherlands); Darwin Blanco (Ericsson, Sweden); Oliver Litschke (IMST GmbH, Germany); Simona Bruni (IMST GmbH, Germany); Nuria Llobart (Delft University of Technology, The Netherlands)
Mm-wave, THz, and quasi-optical antenna measurements	T02-M08	T02 Millimetre wave 5G / Regular Session / Measurements	20 Mar 2020	B2	11:00	11:20	Experimental Validation of System NEP of a Single-Pixel THz Imaging Camera in CMOS	Sven van Berkel (Delft University of Technology, The Netherlands); Satoshi Malotau (Delft University of Technology, The Netherlands); Carmine De Martino (Delft University of Technology, The Netherlands); Marco Spirito (Delft University of Technology, The Netherlands); Daniele Cavallo (Delft University of Technology, The Netherlands); Andrea Neto (Delft University of Technology, The Netherlands); Nuria Llobart (Delft University of Technology, The Netherlands)
Mm-wave, THz, and quasi-optical antenna measurements	T02-M08	T02 Millimetre wave 5G / Regular Session / Measurements	20 Mar 2020	B2	11:20	11:40	Measurement and Calculation of Exposure Level to 5G Base Station Antenna	Marin Galic (Centar za Mjerjenja u Okolišu, Croatia); Dragan Poljak (University of Split, Croatia); Tajmin Tadic (Environmental Measurement Center, Croatia)
Mm-wave, THz, and quasi-optical antenna measurements	T02-M08	T02 Millimetre wave 5G / Regular Session / Measurements	20 Mar 2020	B2	11:40	12:00	Analysis of Substrate Parameters' Variations in a PCB-based 60 GHz GCPW Marchand Balun Design	Muhammad Umar (Technische Universität Dresden, Germany); Martin Laabs (Dresden University of Technology, Germany); Jacqueline Damas (Technical University of Dresden, Germany); Niels Neumann (Technische Universität Dresden, Germany); Dirk Plettemeier (Dresden University of Technology, Germany)
Mm-wave, THz, and quasi-optical antenna measurements	T02-M08	T02 Millimetre wave 5G / Regular Session / Measurements	20 Mar 2020	B2	12:00	12:20	Echo Reduction Properties of Fast Non-Redundant Planar NF Sampling Methodologies	Francesco D'Agostino (University of Salerno, Italy); Flaminio Ferrara (University of Salerno, Italy); Claudio Gennarelli (University of Salerno, Italy); Rocco Guerriero (University of Salerno, Italy); Maria Alberica Saporetti (Microwave Vision Italy, Italy); Francesco Saccardi (Microwave Vision Italy, Italy); Lars Foged (Microwave Vision Italy, Italy); Damiano Trenta (European Space Agency, ESTEC, Italy)
Multiband and wideband antennas	T01-A11	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	19 Mar 2020	A2	08:30	08:50	Dual-Band Array of Cross-Polarized Vivaldi Antennas for 5G Applications	Paula Fernandez-Martinez (University Carlos III de Madrid, Spain); Sergio Martin-Anton (University Carlos III de Madrid, Spain); Daniel Segovia-Vargas (Universidad Carlos III de Madrid, Spain)
Multiband and wideband antennas	T01-A11	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	19 Mar 2020	A2	08:50	09:10	Compact Eight-Band Monopole for LTE Mobile Phone	Ying-Ning Li (South China University of Technology, China); Qing-Xin Chu (South China University of Technology, China)
Multiband and wideband antennas	T01-A11	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	19 Mar 2020	A2	09:10	09:30	Miniaturized Base-station Antenna Element with Sinuously Bent Arms	Hailiang Zhu (Northwestern Polytechnical University, China); Yuwei Qiu (Northwestern Polytechnical University, China); Jinliang Bai (National Key Laboratory of Test Physics and Numerical Mathematics, China); Pei Zheng (National Key Laboratory of Science and Technology on Test Physics and Numerical Mathematics, China); Gao Wei (Northwestern Polytechnical University, China)
Multiband and wideband antennas	T01-A11	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	19 Mar 2020	A2	09:30	09:50	A Wideband Dual-Polarized Antenna with Enhanced Cross-Polarization Discrimination for Base Station Application	Jin Jiang (South China University of Technology, China); Qing-Xin Chu (South China University of Technology, China)
Multiband and wideband antennas	T01-A11	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	19 Mar 2020	A2	09:50	10:10	A Broadband Dual-Polarized Dipole Antenna for LTE and 5G Base Station	Bingguang Zhong (Shenzhen Sunway Communication Co., Ltd., China)
Multiband, wideband and array antennas	T07-A17	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	16:00	16:20	A Copper Strip Array Loaded Multiband Square Slot Antenna	Princy Paul (NIT, Suratkal, India); Krishnamoorthy Kandasamy (National Institute of Technology Karnataka, SURATKAL, India); Mohammad S. Sharawi (Polytechnique Montreal, Canada)
Multiband, wideband and array antennas	T07-A17	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	16:20	16:40	Preliminary Co-Design of L and X-band Stacked Arrays with Scanning Capabilities	Brandon Sun (Insa de Rennes, France); Renaud Loison (IETR & INSA, France); Raphael Gillard (IETR & INSA, France); Eric Estebe (Thales DMS France, France); Christian Renard (Thales Systèmes Aéroportés, France)
Multiband, wideband and array antennas	T07-A17	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	16:40	17:00	Multichannel Dynamic Directional Modulation with Software Defined Radio	Edith Annette Cabrera-Hernández (Universitat Autònoma de Barcelona, Spain); Josep Parrón Granados (Universitat Autònoma de Barcelona, Spain); Alan Tennant (University of Sheffield, United Kingdom (Great Britain))

Multiband, wideband and array antennas	T07-A17	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	17:00	17:20	High-Performance Wideband Horn Antenna for Direction Finding Arrays	Saeed Manshari (Engineering Optimization & Modeling Center, Reykjavik University, Iceland); Slawomir Koziel (Gdansk University of Technology, Poland); Leifur Leifsson (Iowa State University, USA); Andrés Alayón Glazunov (University of Twente & Chalmers University of Technology, The Netherlands)
Multiband, wideband and array antennas	T07-A17	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	17:20	17:40	A Distinct Approach Exploiting Collapse Distribution Colligated with Genetic Algorithm for the Synthesis of Thinned Planar Antenna Arrays	Veer S Gangwar (LRDE(DRDO), India); Juhi Modi (IIT(ISM) DHANBAD, India); Jatin Narde (NIT Rourkela, India); Kundan Suman (IIT ISM, India); Ashwin. P ((DRDO), Bangalore, India)
Multiband, wideband and array antennas	T07-A17	T07 Defence and security / Regular Session / Antennas	16 Mar 2020	B4	17:40	18:00	Research on a Kind of Asymmetric Scanning Phased Array Antenna	Hong-yin Zhang (The 14th Institute of China Electronics Technology Group Corporation, China)
Nano and Quantum Antennas	CS42	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	19 Mar 2020	A2	16:40	17:00	Nonperturbative Dynamics of Quantum Antennas	Iñigo Liberal (Public University of Navarre, Spain); Richard Ziolkowski (University of Technology Sydney & University of Arizona, Australia)
Nano and Quantum Antennas	CS42	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	19 Mar 2020	A2	17:00	17:20	Electromagnetic Modeling for Nanoscale Quantum Optics: Beyond the Lego-Brick Picture	Martijn Wubs (Technical University of Denmark, Denmark)
Nano and Quantum Antennas	CS42	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	19 Mar 2020	A2	17:20	17:40	Quantum Antenna Theory for Secure Wireless Communications	Said Mikki (University of New Haven, USA)
Nano and Quantum Antennas	CS42	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	19 Mar 2020	A2	17:40	18:00	Modal Analysis of Deep Nanoscale Plasmonic Structures: Nonlocal Hydrodynamic Approach	Mario Kupresak (KU Leuven, Belgium); Xuezhi Zheng (Katholieke Universiteit Leuven, Belgium); Guy Vandenbosch (Katholieke Universiteit Leuven (KU Leuven), Belgium); Victor V. Moshchalkov (Katholieke Universiteit Leuven, Belgium)
Nano and Quantum Antennas	CS42	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	19 Mar 2020	A2	18:00	18:20	On the Design of Bulk Absorbers at THz Frequencies	Andrea Neto (Delft University of Technology, The Netherlands); Ralph van Schelven (Delft University of Technology, The Netherlands); Paolo Sberna (Delft University of Technology, The Netherlands)
Near- and Far-Field Wireless Power Transfer	CS43	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B9	16:00	16:20	Wireless Power Transfer in Japan: Regulations and Activities	Naoki Shinohara (Kyoto University, Japan)
Near- and Far-Field Wireless Power Transfer	CS43	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B9	16:20	16:40	Appliqué: A Computationally Efficient Modeling Tool for Multi-Layer Printed Inductors, for near Field Wireless Power Transfer Applications	Brody Mahoney (University of Washington, USA); Joshua R. Smith (University of Washington, USA)
Near- and Far-Field Wireless Power Transfer	CS43	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B9	16:40	17:00	3D Antenna Array for SWIPT Sensing with WPT Capabilities	Diogo Rafael Pinto Pires (Universidade de Aveiro & Instituto de Telecomunicações, Portugal); Daniel Belo (Universidade de Aveiro & Instituto de Telecomunicações, Portugal); Marina Jordão (Instituto Telecomunicações - Universidade Aveiro, Portugal); Pedro Pinho (IT - Instituto de Telecomunicações & ISEL - Instituto Superior de Engenharia de Lisboa, Portugal); Nuno Borges Carvalho (University of Aveiro/IT Aveiro, Portugal)
Near- and Far-Field Wireless Power Transfer	CS43	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B9	17:00	17:20	A Novel Duplexing Antenna for Feedback Wireless Power Transfer	Sumin David Joseph (University of Liverpool, United Kingdom (Great Britain)); Yi Huang (University of Liverpool, United Kingdom (Great Britain)); Shuehng Hsu (National Tsinghua University, Taiwan); Manoj Stanley (National Physical Laboratory, Teddington, United Kingdom (Great Britain)); Ahmed Alkeldin (University of Liverpool, United Kingdom (Great Britain)); Chaoyun Song (University of Liverpool, United Kingdom (Great Britain))
Near- and Far-Field Wireless Power Transfer	CS43	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B9	17:20	17:40	Electromagnetic Field Modeling for Wireless Power Transfer in Biological Tissue	Tom van Nunen (Eindhoven University of Technology, The Netherlands); Rob Mestrom (Eindhoven University of Technology, The Netherlands); Mark Bentum (Eindhoven University of Technology & ASTRON, The Netherlands); Hubregt J. Visser (Imec The Netherlands, The Netherlands)
Near- and Far-Field Wireless Power Transfer	CS43	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	16 Mar 2020	B9	17:40	18:00	100 W 6.78 MHz Inductive Power Transfer System for Drones	Lingxin Lan (Imperial College London, United Kingdom (Great Britain)); Christopher H Kwan (Imperial College London, United Kingdom (Great Britain)); Juan Artega (Imperial College London, United Kingdom (Great Britain)); David Christopher Yates (Imperial College London, United Kingdom (Great Britain)); Paul Mitcheson (Imperial College London, United Kingdom (Great Britain))
Near-Field Focusing and Pulse Generation Through Localized Waves	CS44	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	08:30	08:50	Engineering the Realizations of Localized Waves with Independently Addressable Pulse Driven Arrays	Richard Ziolkowski (University of Technology Sydney & University of Arizona, Australia)
Near-Field Focusing and Pulse Generation Through Localized Waves	CS44	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	08:50	09:10	Terahertz X-wave Launchers by Metallic Spline-Profiled Horns	Srdan Paković (Université de Rennes 1, France); Nicola Bartolomei (University of Rennes 1, France); Mauro Ettorre (University of Rennes 1 & UMR CNRS 6164, France); Ronan Sauleau (University of Rennes 1, France); David González-Ovejero (Centre National de la Recherche Scientifique - CNRS, France)
Near-Field Focusing and Pulse Generation Through Localized Waves	CS44	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	09:10	09:30	An Overview of the Techniques to Generate Limited-diffractive Bessel Beams and Localized Pulses by Using RLSA and Leaky-Wave Antennas	Santi Concetto Pavone (Università degli Studi di Catania, Italy); Walter Fuscaldo (Sapienza University of Rome, Italy); Alessandro Galli (Sapienza University of Rome 1, Italy); Matteo Albani (University of Siena, Italy)
Near-Field Focusing and Pulse Generation Through Localized Waves	CS44	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	09:30	09:50	Multi-spot Adaptive Near-Field Focusing Through Transmitting Time-Modulated Arrays	Rafael González Aytastán (Universidad de Oviedo, Spain); Marcos R. Pino (Universidad de Oviedo, Spain); Paolo Nepa (University of Pisa, Italy)
Near-Field Focusing and Pulse Generation Through Localized Waves	CS44	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	09:50	10:10	Space-Fractional Bessel Beams with Self-Healing and Diffraction-Free Propagation Characteristics	Aqsa Ehsan (Information Technology University of the Punjab, Pakistan); Muhammad Qasim Mehmood (Information Technology University of the Punjab, Pakistan); Yee Sin Ang (Singapore University of Technology and Design, unknown); Lay Kee Ang (SUTD, Malaysia); Muhammad Zubair (Information Technology University of the Punjab & Singapore University of Technology and Design, Pakistan)
Near-Field Focusing and Pulse Generation Through Localized Waves	CS44	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	10:40	11:00	Towards 3-D Vector Intensity Focusing of near and Far Fields	Giada Battaglia (Università Mediterranea di Reggio Calabria, Italy); Andrea Francesco Morabito (Università Mediterranea di Reggio Calabria, Italy); Roberta Palmeri (Università Mediterranea di Reggio Calabria, Italy); Tommaso Isernia (University of Reggio Calabria, Italy)
Near-Field Focusing and Pulse Generation Through Localized Waves	CS44	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	11:00	11:20	Field Focusing for Nanophotonic Engineering and Applications	Loreto Di Donato (University of Catania, Italy); Davide Rocco (Università degli Studi di Brescia, Italy); Gino Sorbello (University of Catania, Italy); Costantino De Angelis (Università degli Studi di Brescia, Italy)
Near-Field Focusing and Pulse Generation Through Localized Waves	CS44	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	11:20	11:40	Frequency-Scanned Focused Leaky-Wave Antennas for Direction-of-Arrival Detection in Proximity BLE Sensing Applications	Miguel Poveda-García (Technical University of Cartagena, Spain); Alejandro Gil Martínez (Technical University of Cartagena Cartagena, Spain); Jose-Luis Gómez-Tornero (Polytechnic University of Cartagena, Spain)
Near-Field Focusing and Pulse Generation Through Localized Waves	CS44	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	11:40	12:00	Cascaded-Metasurface Non-Integer Cylindrical Bessel Beam (NIC-BB) Generator	Oscar Céspedes Vicente (Polytechnique Montréal, Canada); Christophe Caloz (Ecole Polytechnique de Montreal, Canada)
Near-Field Focusing and Pulse Generation Through Localized Waves	CS44	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	12:00	12:20	3-D Printed Terahertz Lens for Generation of Non-diffractive Bessel Beam Carrying OAM	Gengbo Wu (City University of Hong Kong, Hong Kong); Ka Fai Chan (City University of Hong Kong, Hong Kong); Chi Hou Chan (City University of Hong Kong, Hong Kong)
Near-field, far-field, compact and RCS range measurement techniques	T06-M03	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Measurements	16 Mar 2020	B7	16:00	16:20	Experimental Validation of the Translated-SWE Technique Applied to Automotive Measurements over PEC-Floor at Arbitrary Height	Francesco Saccardi (Microwave Vision Italy, Italy); Francesca Mioc (Consultant, Switzerland); Per Iversen (Orbit/FR, USA); John Estrada (MVG, USA); Lars Foged (Microwave Vision Italy, Italy)

Near-field, far-field, compact and RCS range measurement techniques	T06-M03	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Measurements	16 Mar 2020	B7	16:20	16:40	Near-field Measurement and Far-field Characterization of a J-band Antenna Based on an Electro-optic Sensing	Shintaro Hisatake (Gifu University, Japan); Yusuke Tanaka (Gifu University, Japan); Cybelle Belem (Université de Lille, France); Cyril Luxey (University Nice Sophia-Antipolis, France); Frédéric Giancesello (STMicroelectronics, France); Guillaume Ducournau (IEMN, University of Lille, France); Akihiko Hirata (Chiba Institute of Technology, Japan)
Near-field, far-field, compact and RCS range measurement techniques	T06-M03	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Measurements	16 Mar 2020	B7	16:40	17:00	A New Method to Measure the Absolute Gain Patterns of a Log-Periodic Antenna at a Reduced Distance Without Considering the Phase Center in a Single-Cut Near-Field Far-Field Transformation	Masanobu Hirose (National Institute of Advanced Industrial Science and Technology, Japan); Satoru Kurokawa (National Institute of Advanced Industrial Science and Technology, Japan)
Near-field, far-field, compact and RCS range measurement techniques	T06-M03	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Measurements	16 Mar 2020	B7	17:00	17:20	Relative Phase Reconstruction Based on Multiprobe Solutions and Post-Processing Techniques	Ruben Tena Sanchez (Technical University of Madrid, Spain); Manuel Sierra-Castañer (Universidad Politécnica de Madrid, Spain); Lars Foged (Microwave Vision Italy, Italy)
Near-field, far-field, compact and RCS range measurement techniques	T06-M03	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Measurements	16 Mar 2020	B7	17:20	17:40	MetOp-5G Scatterometer Antenna Testing - Golden Standard Measurement 2019	Javier Fernández Álvarez (Technical University of Denmark, Denmark); Kyriakos Kaslis (Technical University of Denmark, Denmark); Jeppe Nielsen (Technical University of Denmark, Denmark); Olav Breinbjerg (Technical University of Denmark, Denmark)
Near-field, far-field, compact and RCS range measurement techniques	T06-M03	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Measurements	16 Mar 2020	B7	17:40	18:00	On the Accuracy of Standard Gain Horn Measurement	Maryam Razmhosseini (Simon Fraser University, Canada); Christopher G Hynes (Simon Fraser University, Canada); Rodney Vaughan (Simon Fraser University, Canada)
New Perspectives and Applications of Characteristic Mode Analysis in Antenna Design	CS45	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	B1	08:30	08:50	Characteristic Mode Analysis for the Design of Nanosatellite Reconfigurable Antennas	Simone Genovesi (University of Pisa, Italy); Francesco Alessio Dicandia (GreenWaves, Italy)
New Perspectives and Applications of Characteristic Mode Analysis in Antenna Design	CS45	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	B1	08:50	09:10	Antenna Positioning for Bandwidth Optimization Using Characteristic Mode Analysis	Peter William Futter (Altair Development S.A. (Pty) Ltd, South Africa); Ulrich Jakobus (Altair Engineering GmbH, Germany)
New Perspectives and Applications of Characteristic Mode Analysis in Antenna Design	CS45	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	B1	09:10	09:30	On the Use of Characteristic Mode Analysis for the Design of Antenna Arrays	Philipp Gentner (Ericsson Antenna Technology Germany GmbH, Germany)
New Perspectives and Applications of Characteristic Mode Analysis in Antenna Design	CS45	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	B1	09:30	09:50	Use of Characteristic Modes in the CBFM for the Analysis of Large Arrays	Yigit Haykir (Middle East Technical University, Turkey); Ozlem Aydin Civi (Middle East Technical University, Turkey)
New Perspectives and Applications of Characteristic Mode Analysis in Antenna Design	CS45	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	B1	09:50	10:10	Reducing User Effects on Mobile Handset Antennas Using Mode Mapping	Miao Wu (Dalian University of Technology, China); BaoYi Wang (Dalian University of Technology, China); Hui Li (Dalian University of Technology, China)
New Perspectives and Applications of Characteristic Mode Analysis in Antenna Design	CS45	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	B1	10:40	11:00	Influence of p-Refinement on Accuracy of Mode Tracking Based on Correlation of Characteristic Currents	Ana Djurdjevic (WIPL-D, Serbia); Branko Mrdakovic (WIPL-D, Serbia); Branko Koldundzija (University of Belgrade, Serbia)
New Perspectives and Applications of Characteristic Mode Analysis in Antenna Design	CS45	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	B1	11:00	11:20	Systematic Design Method for Asymmetric Multiport Antennas Based on Characteristic Modes	Nikolai Peitzmeier (Leibniz University Hannover, Germany); Dirk Manteuffel (University of Hannover, Germany)
New Perspectives and Applications of Characteristic Mode Analysis in Antenna Design	CS45	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	B1	11:20	11:40	Systematic Approach to Design a Circularly Polarized Antenna Using the Characteristic Modes Theory	Hussein Jaafar (The French Alternative Energies and Atomic Energy Commission, France); Ala Sharaiha (Université de Rennes 1 & IETR, France); Sylvain Collardey (University of Rennes 1, France)
New Perspectives and Applications of Characteristic Mode Analysis in Antenna Design	CS45	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	B1	11:40	12:00	Flexible Antenna Design with Characteristic Modes	Eva Antonino-Daviu (Universitat Politècnica de València, Spain); Aline Eid (Georgia Institute of Technology, USA); Ryan Bahr (Georgia Institute of Technology, USA); Manos M. Tentzeris (Georgia Institute of Technology, USA)
New Perspectives and Applications of Characteristic Mode Analysis in Antenna Design	CS45	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	B1	12:00	12:20	Broadband Metasurface-Based Antenna Using Hexagonal Loop Elements	Wenzhang Zhang (University of Liverpool, United Kingdom (Great Britain)); Yi Huang (University of Liverpool, United Kingdom (Great Britain)); Jiafeng Zhou (University of Liverpool, United Kingdom (Great Britain))
New Trends in Leaky Wave Antennas	CS46	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B2	08:30	08:50	Broadside Radiation Equalization Through Mode Coupling Balancing in Periodic Leaky-Wave Antennas	Amar Al-Bassam (RWTH Aachen University, Germany); Dirk Heberling (RWTH Aachen University, Germany); Christophe Caloz (Ecole Polytechnique de Montreal, Canada)
New Trends in Leaky Wave Antennas	CS46	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B2	08:50	09:10	Open-Stopband Suppression in a Canonical 1-D Periodic 2-D Structure with Asymmetric Unit Cell	Paolo Baccarelli (Roma Tre University, Italy); Paolo Burghignoli (Sapienza University of Rome, Italy); Davide Comite (Sapienza University of Rome, Italy); Walter Fuscaldo (Sapienza University of Rome, Italy); Alessandro Galli (Sapienza University of Rome, Italy)
New Trends in Leaky Wave Antennas	CS46	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B2	09:10	09:30	Reconfigurable Leaky-wave Antennas with Independent Control of the Leakage Constant and Radiation Angle	Minseok Kim (University of Toronto, Canada); George V. Eleftheriades (University of Toronto, Canada)
New Trends in Leaky Wave Antennas	CS46	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B2	09:30	09:50	Latest Developments and New Design Approaches in Designing Leaky-wave Antennas Based on Substrate Integrated Waveguide Technology	Anirban Sarkar (School of Electrical and Electronics Eng., Chung-Ang University, Korea (South)); Sungjoon Lim (Chung-Ang University, Korea (South))
New Trends in Leaky Wave Antennas	CS46	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B2	09:50	10:10	Recent Advances in Magnet-less Non-reciprocal Leaky Wave Antennas	Ohad Silbiger (Tel-Aviv University, Israel); Yakir Hadad (Tel-Aviv University, Israel, USA)
New Trends in Leaky Wave Antennas	CS46	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B2	10:40	11:00	2-D Planar Leaky-wave Antenna with Fixed Frequency Beam Steering Through Broadside	Victoria Gómez-Guillamón Buendía (Heriot-Watt University, United Kingdom (Great Britain)); Davide Comite (Sapienza University of Rome, Italy); Symon K. Podilchak (Heriot-Watt University, United Kingdom (Great Britain)); Maksim Kuznetsov (Heriot Watt University, United Kingdom (Great Britain)); Alois Freundorfer (Queens University, Canada); Yahia Antar (Royal Military College of Canada, Canada)
New Trends in Leaky Wave Antennas	CS46	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B2	11:00	11:20	Controlling Dual Polarization with Metasurface Leakage	Alice Benini (University of Siena, Italy); Enrica Martini (University of Siena, Italy); Charlotte Tripón-Cansellet (Université Pierre et Marie Curie, France); Jean-Maurice Chazelas (Thales Aerospace Division, France); Stefano Maci (University of Siena, Italy)
New Trends in Leaky Wave Antennas	CS46	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B2	11:20	11:40	Leaky-Wave Analysis of an Ultrathin Planar High Impedance Surface Antenna	Ahmad T. Almutawa (PAAET, Kuwait); Filippo Capolino (University of California, Irvine, USA)
New Trends in Leaky Wave Antennas	CS46	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B2	11:40	12:00	Cylindrical Aperture Synthesis with Metasurfaces	Faris Alsolamy (University of Michigan Ann Arbor, USA); Anthony Gribic (University of Michigan, Ann Arbor, USA)
New Trends in Leaky Wave Antennas	CS46	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B2	12:00	12:20	Holographic-Based mmW-Wideband Bidirectional Frequency Scanning Leaky Wave Antenna	Ali Araghi (University of Surrey, United Kingdom (Great Britain)); Mohsen Khallily (University of Surrey & 5G Innovation Centre, Institute for Communication Systems (ICS), United Kingdom (Great Britain)); Pei Xiao (University of Surrey, United Kingdom (Great Britain)); Rahim Tafazolli (University of Surrey, United Kingdom (Great Britain))
Non-Magnetic Nonreciprocity	CS47	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B5	08:30	08:50	Nonreciprocal Metasurfaces Through Circular Polarization Biasing	Dimitrios Sounas (Wayne State University, USA)
Non-Magnetic Nonreciprocity	CS47	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B5	08:50	09:10	Quad Magnet-free Micro-acoustic RF Circulator with Intermodulation Suppression	Yao Yu (Northeastern University, Boston, US, USA); Matteo Rinaldi (Northeastern University, USA)

Non-Magnetic Nonreciprocity	CS47	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B5	09:10	09:30	Low Loss, CMOS Integrated, Magnetic-Free Non-Reciprocal Components Operating from Radio Frequencies to Millimeter-Waves	Aravind Nagulu (Columbia University, USA); Harish Krishnaswamy (Columbia University, USA)
Non-Magnetic Nonreciprocity	CS47	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B5	09:30	09:50	Space-Time Modulated Loaded-Wire Metagratings for Magnetless Nonreciprocity	Yakir Hadad (Tel-Aviv University, Israel, USA)
Non-Magnetic Nonreciprocity	CS47	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B5	09:50	10:10	Nonreciprocal Antennas Based on Time-Modulation: Challenges and Opportunities	Alejandro Alvarez-Melcon (Technical University of Cartagena, Spain); Juan Sebastián Gomez-Diaz (University of California, Davis, USA)
Non-Magnetic Nonreciprocity	CS47	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B5	10:40	11:00	A Spatio-Temporally Modulated Metasurface as a Free-Space N-Path System	Zhanni Wu (the University of Michigan, USA); Cody Scarborough (University of Michigan, USA); Anthony Grbic (University of Michigan, Ann Arbor, USA)
Non-Magnetic Nonreciprocity	CS47	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B5	11:00	11:20	Temporal Modulation of Bianisotropic Metasurfaces for Unidirectional Wave Amplification	Xuchen Wang (Aalto University, Finland); Ana Diaz-Rubio (Aalto University, Finland); Viktor Asadchy (Aalto University, Finland); Grigori Petukhov (Aalto University, Finland); Mohammad Sajjad Mirmoosa (Aalto University, Finland); Sergei Tret'yakov (Aalto University, Finland)
Non-Magnetic Nonreciprocity	CS47	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B5	11:20	11:40	"Perfect" Faraday-Rotation Metasurface	Guillaume Lavigne (Polytechnique Montreal, Canada); Toshiro Kodera (Meisei University, Japan); Christophe Caloz (Ecole Polytechnique de Montreal, Canada)
Non-Magnetic Nonreciprocity	CS47	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B5	11:40	12:00	First Principles Calculation of Topological Invariants by Means of the Photonic Green's Function	Filipa Prudencio (Instituto Superior Técnico-Instituto de Telecomunicações, Portugal); Mario Silveirinha (Universidade de Lisboa - Instituto de Telecomunicações, Portugal)
Non-Magnetic Nonreciprocity	CS47	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B5	12:00	12:20	Doppler Cloak: Concept and Realistic Implementation Through Space-Time Modulated Metamaterials and Time-Modulated Metasurfaces	Davide Ramaccia (RomaTre University, Italy); Andrea Alù (The University of Texas at Austin, USA); Alessandro Toscano (University Roma Tre (IT), Italy); Filiberto Bilotti (University Roma Tre, Italy)
Novel Antenna Measurement Data Analysis and Techniques	CS48	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	16:40	17:00	Equivalent Source Technique Processing of Broadband Antenna Measurements	Lucia Scialacqua (Microwave Vision Italy, Italy); Francesca Mioc (Consultant, Switzerland); Lars Foged (Microwave Vision Italy, Italy); Giorgio Giordanengo (LINKS Foundation & Politecnico di Torino, Italy); Marco Righero (LINKS Foundation, Italy); Giuseppe Vecchi (Politecnico di Torino, Italy)
Novel Antenna Measurement Data Analysis and Techniques	CS48	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	17:00	17:20	Improved-Reliability Phase-Retrieval with Broadband Antenna Measurements	Alexander Paulus (Technical University of Munich, Germany); Josef Knapp (Technical University of Munich, Germany, Germany); Jonas Kornprobst (Technical University of Munich, Germany); Thomas F. Elbert (Technical University of Munich, Germany, Germany)
Novel Antenna Measurement Data Analysis and Techniques	CS48	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	17:20	17:40	Direct Wave Removal in Anechoic Chamber Range Imaging from Planar Scanned Data	Zhong Chen (ETS-Lindgren, USA); Zubiao Xiong (ETS-Lindgren, Inc., USA); Dennis Lewis (Boeing, USA)
Novel Antenna Measurement Data Analysis and Techniques	CS48	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	17:40	18:00	Site Validation Based on the Use of Broadband Calculable Antennas and Numerical Simulations	Carlo Carobbi (University of Florence, Italy); Alessio Bonci (ITT G. Ferraris San Giovanni Valdarno, Italy)
Novel Antenna Measurement Data Analysis and Techniques	CS48	T11 Fundamental research and emerging technologies / Convened Session / Measurements	19 Mar 2020	B10	18:00	18:20	An In-Depth Understanding of Salient Features of Antenna Near-Field Measurements Through Full Wave Simulations	Vignesh Manohar (University of California, Los Angeles, USA); Yahya Rahmat-Samii (University of California Los Angeles (UCLA) & UCLA, USA)
Novel Techniques for Beam Manipulation at Millimeter	CS49	T02 Millimetre wave 5G / Convened Session / Antennas	19 Mar 2020	A3	16:40	17:00	Directive Beam Radiation by A Fresnel Zone Plate Integrated Partially Reflective Surface for Millimeter-wave Applications	Qing-Yi Guo (City University of Hong Kong, Hong Kong); Quan Wei Lin (City University of Hong Kong, Hong Kong); Hang Wong (City University of Hong Kong, Hong Kong)
Novel Techniques for Beam Manipulation at Millimeter	CS49	T02 Millimetre wave 5G / Convened Session / Antennas	19 Mar 2020	A3	17:00	17:20	Polarization Reconfiguration of a Millimeter-Waves Antenna Using the Optical Control of Phase Change Materials	Jehison Leon-Valdes (Xlim Laboratory, France); Laure Hultema (Xlim Laboratory, France); Eric Arnaud (University of LIMOGES, France); Damien Passerieux (University of Limoges, France); Aurelien Crunteanu (XLIM, CNRS/ University of Limoges, France)
Novel Techniques for Beam Manipulation at Millimeter	CS49	T02 Millimetre wave 5G / Convened Session / Antennas	19 Mar 2020	A3	17:20	17:40	Implementation Methods for Planar Wide-Angle Scanning Phased Array	Xiao Ding (University of Electronic Science and Technology of China, China); Ren Wang (University of Electronic Science and Technology of China, China); You-Feng Cheng (Southwest Jiaotong University, China); Yan-He Lv (University of Electronic Science and Technology of China, China); Wei Shao (University of Electronic Science and Technology of China, China); Bing-Zhong Wang (University of Electronic Science and Technology of China, China)
Novel Techniques for Beam Manipulation at Millimeter	CS49	T02 Millimetre wave 5G / Convened Session / Antennas	19 Mar 2020	A3	17:40	18:00	Wideband Fixed- And Scanned-Beam Millimeter Wave Antenna Arrays for 5G Applications	Donia Oueslati (ICTEAM Institute, Université Catholique de Louvain, Belgium); Raj Mittra (Penn State University, USA)
Novel Techniques for Beam Manipulation at Millimeter	CS49	T02 Millimetre wave 5G / Convened Session / Antennas	19 Mar 2020	A3	18:00	18:20	Fully Dielectric Phased Array for Beamsteering Using Liquid Crystal Technology at W-Band	Ersin Polat (Technische Universität Darmstadt, Germany); Roland Reese (Technische Universität Darmstadt, Germany); Henning Tesmer (TU Darmstadt, Germany); Matthias Nickel (Technische Universität Darmstadt, Germany); Rolf Jakoby (Institute for Microwave Engineering and Photonics, Technische Universität Darmstadt, Germany); Holger Maune (Technische Universität Darmstadt, Germany)
Novel Wave Phenomena in Metamaterials and Metasurfaces Applied to Antennas and Propagation	Convened Poster 2-CS50	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Analytical Study of Dielectric-wall Conical Horn Antennas	Anastasios Paraskevopoulos (University of Siena, Italy, United Kingdom (Great Britain)); Francesco Caminita (Wave-Up SRL, Italy); Roberto Giusto (Huawei Technologies, Italy); Matteo Albani (University of Siena, Italy)
Novel Wave Phenomena in Metamaterials and Metasurfaces Applied to Antennas and Propagation	Convened Poster 2-CS50	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Ray-tracing in Dielectric Inhomogeneous Metalenses	Francesca Maggiorini (University of Siena, Italy); Matteo Albani (University of Siena, Italy); Roberto Giusto (Huawei Technologies, Italy); Stefano Maci (University of Siena, Italy)
Novel Wave Phenomena in Metamaterials and Metasurfaces Applied to Antennas and Propagation	Convened Poster 2-CS50	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Dielectric Rectangular Lens for Antenna Array Scanloss Mitigation	Giorgio Gottardi (ELEDIA Research Center, University of Trento, Italy); Alessandro Polo (ELEDIA Research Center, University of Trento, Italy); Giacomo Oliveri (University of Trento & ELEDIA Research Center, Italy); Andrea Massa (University of Trento, Italy)
Novel Wave Phenomena in Metamaterials and Metasurfaces Applied to Antennas and Propagation	Convened Poster 2-CS50	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Study of Printed Scattering Reflectors Based on Discretised Metasurface	Michal Cerveny (University of Sheffield, United Kingdom (Great Britain)); Kenneth Lee Ford (University of Sheffield, United Kingdom (Great Britain)); Alan Tennant (University of Sheffield, United Kingdom (Great Britain))
Novel Wave Phenomena in Metamaterials and Metasurfaces Applied to Antennas and Propagation	Convened Poster 2-CS50	T11 Fundamental research and emerging technologies / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Latest Developments on Non-linear and Time-varying Metasurfaces and Topological Antennas	Davide Ramaccia (RomaTre University, Italy); Mirko Barbuti (Niccolò Cusano University, Italy); Alessio Monti (Niccolò Cusano University, Italy); Stefano Vellucci (Roma Tre University, Italy); Angelica Viola Marini (Università degli Studi Roma Tre, Italy); Alessandro Toscano (University Roma Tre (IT), Italy); Filiberto Bilotti (University Roma Tre, Italy)
Point of Care Microwave Sensors	T05-A12/2	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	08:30	08:50	Handheld, Broadband Transmission-Based Probe - The Next Star Trek Tri-Corder	Paul M Meaney (Dartmouth College, USA); Robin Augustine (Uppsala University, Sweden); Timothy Raynolds (Dartmouth College, USA)
Point of Care Microwave Sensors	T05-A12/2	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	08:50	09:10	An NRW Extension for Dielectric Characterization of Arbitrary Length Low-Loss Materials	Hassan Shwaykani (American University of Beirut, Lebanon); Joseph Costantine (American University of Beirut, Lebanon); Ali El-Hajj (American University of Beirut, Lebanon); Mohammed Al-Husseini (Beirut Research and Innovation Center, Lebanon)
Point of Care Microwave Sensors	T05-A12/2	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	09:10	09:30	Clustering of Dielectric and Colour Profiles of an Ex-vivo Burnt Human Skin Sample	Pramod K B Rangaraj (Researcher & Uppsala University, Sweden); Javad Ebrahimi-zadeh (University of Uppsala, Sweden); Abhishek Honganally Nagaraju (Uppsala University & Uppsala, Sweden); Irina El-Ali (Datametric AG, Switzerland); Mokhtar Kouki (Datametric AG, Switzerland); Bappaditya Mandal (Uppsala University, Uppsala, Sweden); Fredrik RM Huss (Uppsala University Hospital & Uppsala University, Sweden); Mauricio D Perez (Uppsala University & National Technological University, Sweden); Robin Augustine (Uppsala University, Sweden)

Point of Care Microwave Sensors	T05-A12/2	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	09:30	09:50	Non-Invasive Transmission Based Tumor Detection Using Anthropomorphic Breast Phantom at 2.45 GHz	Laya Joseph (FTE, Angstrom Laboratory, Lägerhyddsvägen 1 & Uppsala University, Sweden); Noor Badariah Asan (Uppsala University & FKEKK, Universiti Teknikal Malaysia Melaka, Sweden); Javad Ebrahimiadeh (University of Uppsala, Sweden); Arvind Selvan Chezian (Uppsala University, Sweden); Mauricio D Perez (Uppsala University & National Technological University, Sweden); Thimo Voigt (Swedish Institute of Computer Science & Uppsala University, Sweden); Robin Augustine (Uppsala University, Sweden)
Point of Care Microwave Sensors	T05-A12/2	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	09:50	10:10	On the Optimal Matching Medium and Working Frequency in EM-based Medical Devices	Gennaro G. Bellizzi (Erasmus University Medical Center, Italy); Martina Teresa Bevacqua (Università Mediterranea di Reggio Calabria, Italy)
Point of Care Microwave Sensors	T05-A12/2	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	10:40	11:00	Low Profile Implantable Antenna for Fat Intra-Body Communication	Bappaditya Mandal (Uppsala University, Uppsala, Sweden); Laya Joseph (FTE, Angstrom Laboratory, Lägerhyddsvägen 1 & Uppsala University, Sweden); Javad Ebrahimiadeh (University of Uppsala, Sweden); Mauricio D Perez (Uppsala University & National Technological University, Sweden); Debasis Mitra (Indian Institute of Engineering Science & Technology, Shibpur, India); Robin Augustine (Uppsala University, Sweden)
Point of Care Microwave Sensors	T05-A12/2	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	11:00	11:20	Optimal Probe Geometry for Microwave Monitoring During in-Lab Ex-Vivo Measurements	Giselle González-López (Universitat Politècnica de Catalunya, Spain); Susana Amorós García de Valdecasas (Predoctoral Researcher, Spain); Luis Jofre (Universitat Politècnica de Catalunya, Spain)
Point of Care Microwave Sensors	T05-A12/2	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	11:20	11:40	Metasurface Sensors for Healthcare Applications	Antoine Durant (Edinburgh Napier University & Université Grenoble Alpes, United Kingdom (Great Britain)); Celia Lacoste (INP-ENSEIHT University of Toulouse, United Kingdom (Great Britain)); Erin Donnelly (Edinburgh Napier University, United Kingdom (Great Britain)); Luigi La Spada (Edinburgh Napier University, United Kingdom (Great Britain))
Point of Care Microwave Sensors	T05-A12/2	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	11:40	12:00	An Accelerometer - Based Evaluation of Tinetti Scale	Andrea Tiloca (Politecnico di Torino, Italy); Guido Pagana (LINKS Foundation, Politecnico di Torino, Italy)
Point of Care Microwave Sensors	T05-A12/2	T05 Biomedical and health / Regular Session / Antennas	19 Mar 2020	B6	12:00	12:20	Multiple-Pole CSRR-based Microwave Sensor for Glucose Levels Detection	Ala Eldin Omer (University of Waterloo, Canada); George Shaker (University of Waterloo & Spark Tech Labs, Canada); Safieddin Safavi-Naeini (University of Waterloo, Canada); Hamid Kokabi (Laboratory of Electronics and Electromagnetism (LZE), Sorbonne University, Canada); Georges Alquié (UPMC, France); Frederique Frederique Deshours (Laboratory of Electronics and Electromagnetism (LZE), Sorbonne University, France)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Effect of Element Number Reduction on Inter-User Interference and Chip Temperatures in Passively-Cooled Integrated Antenna Arrays for 5G	Yanki Aslan (Delft University of Technology, The Netherlands); Jan Puskely (Delft University of Technology, The Netherlands); Antoine Roederer (Technical University of Delft, The Netherlands); Alexander Yarowoy (TU Delft, The Netherlands)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	An 8x8 Cavity Backed Waveguide Antenna Array for D-Band Backhauling Communications	Sherif R. Zahran (University of Calabria, Italy); Luigi Bocca (University of Calabria, Italy); Giandomenico Amendola (IEEE, USA); Stefano Moscato (SIAE Microelettronica, Italy); Matteo Oldoni (SIAE Microelettronica S.p.A., Italy); Dario Tresoldi (SIAE Microelettronica, Italy)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	From "Hostile" to "Nice" Environment in Communication and Sensing	Marco Salucci (ELEDIA Research Center, Italy); Giorgio Gottardi (ELEDIA Research Center, University of Trento, Italy); Paolo Rocca (University of Trento, Italy); Andrea Massa (University of Trento, Italy)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Tiled Arrays: Low Cost Solutions for Next Generation Communication and Sensing Systems	Nicola Anselmi (ELEDIA Research Center, Italy); Paolo Rocca (University of Trento, Italy); Andrea Massa (University of Trento, Italy)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	A Novel Probabilistic Interval Arithmetic Method for Tolerance Analysis of Phased Arrays Beamforming Networks	Nicola Anselmi (ELEDIA Research Center, Italy); Alessandro Polo (ELEDIA Research Center, University of Trento, Italy); Paolo Rocca (University of Trento, Italy); Andrea Massa (University of Trento, Italy)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Optimization of Modular Multi-Function Radar Architectures for Two-Way Pattern Sidelobe Minimization	Nicola Anselmi (ELEDIA Research Center, Italy); Alessandro Polo (ELEDIA Research Center, University of Trento, Italy); Paolo Rocca (University of Trento, Italy)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Modeling of a Realistic Hybrid Metal-Plasma Transmit-array with Beam-scanning Capabilities	Giulia Mansutti (Università degli Studi di Padova, Italy); Mohammad Hannan (ELEDIA Research Center, University of Trento, Italy); Federico Boulos (ELEDIA@UnitN - DISI, University of Trento, Italy); Paolo Rocca (University of Trento, Italy); Paola De Carlo (University of Padova, Italy); Antonio-D. Capobianco (University of Padova, Italy); Alberto Tuozi (ASI - Italian Space Agency, Italy)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	An Irregular Tightly Coupled Dipole Array with Wide Scanning Angles	Yankai Ma (University of Electronic Science and Technology of China, China); Shi Wen Yang (University of Electronic Science and Technology of China, China); Yikai Chen (University of Electronic Science and Technology of China, China); Shi-Wei Qu (University of Electronic Science and Technology of China, China); Jun Hu (University of Electronic Science and Technology of China, China)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Improving Physical Layer Security Technique Based on 4-D Antenna Arrays with Pre-Modulation	Kejin Chen (University of Electronic Science and Technology of China, China); Shi Wen Yang (University of Electronic Science and Technology of China, China); Yikai Chen (University of Electronic Science and Technology of China, China); Shi-Wei Qu (University of Electronic Science and Technology of China, China); Jun Hu (University of Electronic Science and Technology of China, China)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	On the Use of Symmetry for Shaped-Beam Antennas Installed onto 8-U CubeSats	Eduardo Yoshimoto (Universidade Federal do Pampa, Brazil); Marcos V. T. Heckler (Universidade Federal do Pampa, Brazil)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Design of TCDA Avoiding Half-wavelength Limitation Using PC	Seoungjung Kim (Seoul National University, Korea (South))
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Global Optimization of Pencil Beams with Constrained Dynamic Range Ratio	Maja Jurisic Bellotti (University of Zagreb, Faculty of Electrical Engineering and Computing, Croatia); Mladen Vucic (University of Zagreb, Faculty of Electrical Engineering and Computing, Croatia)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	New Hexagonal CORPS-BFN for Multibeam Antenna Applications	Carlos Biurun-Quel (Universidad Publica de Navarra & Institute of Smart Cities, Spain); Antonio Montesano (AIRBUS DS, Spain); Iñigo Edera (Universidad Pública de Navarra & Institute of Smart Cities, Universidad Pública de Navarra, Spain); JuanCarlos Iriarte (Public University of Navarra & Antenna Group, Spain); Carlos del-Rio (Universidad Publica de Navarra & Institute of Smart Cities, Spain)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Window-to-Polynomial Transform and Its Application in Antenna Array Design	Goran Molnar (Ericsson Nikola Tesla d. d. & Research and Development Centre, Croatia); Marko Matijašić (Ericsson Nikola Tesla d. d. & Research and Development Centre, Croatia)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	An Iterative Minimization Algorithm for Array Diagnosis in the Presence of Array Errors Using Amplitude-only Far Field Data	Wenjing Wang (University of Electronic Science and Technology of China, China); Ying Zhang (University of Electronic Science and Technology of China, China); Daoying Zhou (University of Electronic Science and Technology, China); Ling Kuang (University of Electronic Science and Technology of China, China)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Design of a Dual-Circularly-Polarized Stacked Patch Antenna for SOTM Application at Ka-band	Salvatore Liberto (Heriot-Watt University, United Kingdom (Great Britain)); George Goussetis (Heriot-Watt University, United Kingdom (Great Britain)); Andrew Christie (Sofant Technologies Ltd, United Kingdom (Great Britain))
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Reflectarray Antenna Changing Beam Direction by Polarization	Mei Fukaya (Kanazawa Institute of Technology, Japan); Shigeru Makino (Kanazawa Institute of Technology, Japan); Michio Takikawa (Mitsubishi Electric Corporation, Japan); Hiromasa Nakajima (Mitsubishi Electric Corporation, Japan)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Compact and Low Cost Linear Antenna Array for Millimeter Wave Automotive Radar Applications	Imran Aziz (Uppsala University & Mirpur University of Science and Technology, Mirpur Azad Jammu and Kashmir, Sweden); Wan-Chun Liao (Chalmers University of Technology, Sweden); Hanieh Aliakbari (Lund University, Sweden); Winfried Simon (IMST GmbH, Germany)

Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Compact and Modular Ka-Band Front-end Concept for SATCOM and 5G	Winfried Simon (IMST GmbH, Germany); David Schaefer (IMST & Antennas & EM Modelling, Germany); Simona Bruni (IMST GmbH, Germany); Marta Arias Campo (IMST GmbH & Delft University of Technology, Germany); Simon Otto (IMST GmbH, Germany); Sybille Holzwarth (IMST GmbH, Germany)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Exploiting Real Far Field Patterns into the Multiplicity of Solutions for Linear Array Pattern Synthesis: Bandwidth Studies	Aaron A Salas-Sanchez (University of Trento & University of Santiago de Compostela, Italy); Paolo Rocca (University of Trento, Italy); Juan Rodríguez-González (University of Santiago de Compostela, Spain); Francisco Ares-Pena (University of Santiago de Compostela, Spain)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Minimization Techniques of Q in Circular Taylor-like Distributions	Aaron A Salas-Sanchez (University of Trento & University of Santiago de Compostela, Italy); Paolo Rocca (University of Trento, Italy); Juan Rodríguez-González (University of Santiago de Compostela, Spain); Francisco Ares-Pena (University of Santiago de Compostela, Spain)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Optimized Polarization for Rotationally Tiled, Wideband, Dual-Polarized Vivaldi Arrays	Elizabeth Bekker (University of Pretoria, South Africa); Johan W Odendaal (University of Pretoria, South Africa); Johan Joubert (University of Pretoria, South Africa)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	On the Development of a Scanning Lens Phased Array at 550GHz	Nuria Llobart (Delft University of Technology, The Netherlands); Sjoerd Bosma (Delft University of Technology, The Netherlands); Maria Alonso-delPino (Jet Propulsion Laboratory, USA); Cecile Jung-Kubiak (NASA-JPL, Caltech, USA)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Design and Simulation of a Dual Horn Antenna with Low Sidelobes and High Gain	Ely Levine (AFCEA, Academic College of Engineering, Israel); Haim Matzner (HIT-Holon Institute of Technology, Israel)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Optimization of Excitation and Geometry of Linear Dipole Array Above PEC Ground Plane for Directivity Maximization	Tomas Lonsky (Czech Technical University, Czech Republic); Jan Kracek (Czech Technical University in Prague, Czech Republic); Pavel Hazdra (Czech Technical University in Prague, Czech Republic)
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	A Recursive Calibration Approach for Smart Antenna Beamforming Frontend	Moh Chuan Tan (University of Glasgow & RFNet Technologies Pte Ltd, Singapore); Minghui Li (University of Glasgow, United Kingdom (Great Britain)); Qammer H Abbasi (University of Glasgow, United Kingdom (Great Britain)); Muhammad Ali Imran (University of Glasgow, United Kingdom (Great Britain))
Poster Session 1: Array antennas, antenna systems and architectures (incl. radomes)	Poster1-A17	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Direction of Arrival Estimation Using Hybrid Spatial Cross-Cumulants and Root-MUSIC	Murdi Muhammad (University of Glasgow, Singapore); Minghui Li (University of Glasgow, United Kingdom (Great Britain)); Qammer H Abbasi (University of Glasgow, United Kingdom (Great Britain)); Cindy Goh (University of Glasgow, Singapore); Muhammad Ali Imran (University of Glasgow, United Kingdom (Great Britain))
Poster Session 1: Channel sounding and parameter estimation techniques	Poster1-P03	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Mobile Measurements at 3.7 GHz Using a Massive MIMO Antenna Array in Outdoor Environments	Nada Bel-Haj-Maati (IMT Atlantique & Orange Labs, France); Nadine Malhouroux (France Telecom Research & Development, France); Patrice Pajusko (IMT Atlantique, France); Michel Ney (IMT Atlantique, France)
Poster Session 1: Channel sounding and parameter estimation techniques	Poster1-P03	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	A Novel 3D Beam Training Strategy for mmWave UAV Communications	Weizhi Zhong (Nanjing University of Aeronautics and Astronautics, China); Yong Gu (Nanjing University of Aeronautics and Astronautics, China); Qiuming Zhu (Nanjing University of Aeronautics and Astronautics, China); Lei Wang (Nanjing University of Aeronautics and Astronautics, China); Xiaomin Chen (Nanjing University of Aeronautics and Astronautics, China); Kai Mao (Nanjing University of Aeronautics and Astronautics, China)
Poster Session 1: Channel sounding and parameter estimation techniques	Poster1-P03	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Measured Millimeter-Wave Channels in Corridor Scenarios with Large-Scale Antenna Arrays	Allan Mbugua (Huawei Technologies Duesseldorf GmbH, Munich Research Center, Germany); Wei Fan (Aalborg University, Denmark); Fengchun Zhang (Aalborg University, Denmark); Yun Chen (Huawei Technologies Duesseldorf GmbH, Munich Research Center, Germany); Gert Pedersen (Aalborg University, Denmark)
Poster Session 1: Channel sounding and parameter estimation techniques	Poster1-P03	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Propagation Channel Characterization for Ka Mobile Communication Systems	Jonathan Israel (ONERA - The French Aerospace Lab, France); Sébastien Rougerie (CNES, France)
Poster Session 1: Channel sounding and parameter estimation techniques	Poster1-P03	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Complex Sounding of the Ionosphere During the Intense Magnetic Substorm	Donat Blagoveshchensky (Saint-Petersburg State University of Aerospace Instrumentation, Russia); Alexey S Kalishin (Arctic and Antarctic Research Institute, Russia); Maria A Sergeeva (CONACT, SCIESMEX, LANCE, UNAM, Mexico)
Poster Session 1: Data acquisition, imaging algorithms and processing methods	Poster1-M04	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	An Improved Receiver for Harmonic Motion Microwave Doppler Imaging	Damia Alptekin Soydan (Middle East Technical University, Turkey); Ümit Irgin (Middle East Technical University, Turkey); Can Baris Top (Aselsan Inc., Turkey); Nevzat Gençer (Middle East Technical University, Turkey)
Poster Session 1: Data acquisition, imaging algorithms and processing methods	Poster1-M04	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	Interpretation of the Physical Layer Measurements of Smartphones as Measures of Exposure to Electromagnetic Fields	Sascha Schießl (RWTH Aachen University, Germany); Thomas Kopacz (RWTH Aachen University, Germany); Dirk Heberling (RWTH Aachen University, Germany)
Poster Session 1: Data acquisition, imaging algorithms and processing methods	Poster1-M04	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	Processing Azimuth-Time Domain Aliasing in Spaceborne Sliding-Spotlight SAR Imaging	Yunxia Wang (University of Electronic Science and Technology of China, China); ShunSheng Zhang (University of Electronic Science and Technology of China, China); Yuming Jia (University of Electronic Science and Technology of China, China)
Poster Session 1: Dielectric resonator antennas	Poster1-A07	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	On-Chip Micromachined Dielectric Resonator Antennas Loaded with Parasitic Circular/Crescent Patch for mm-Wave Applications	Mai Sallam (The American University in Cairo & Katholieke Universiteit Leuven, Egypt); Mohamed Serry (The American University in Cairo, Egypt); Sherif Sedky (AUC, Egypt); Atif Shamim (King Abdulah University of Science and Technology, Saudi Arabia); Guy Vandenbosch (Katholieke Universiteit Leuven (KU Leuven), Belgium); Ezzeldin Soliman (The American University in Cairo, Egypt)
Poster Session 1: Dielectric resonator antennas	Poster1-A07	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Filtering Dielectric Resonator Antenna Using Terminal-Loaded Resonators	Yan-Ting Liu (City University of Hong Kong, Hong Kong); Kwok Wa Leung (City University of Hong Kong, Hong Kong)
Poster Session 1: Dielectric resonator antennas	Poster1-A07	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	An Asymmetric Star Design for the Dynamic Control of Quantum-Emitter-Coupled Plasmonic Nanoantenna Emission	Hisham Ashraf Amer (Zewail University of Science and Technology, Egypt); Tamer Ali (Zewail University of Science and Technology, Egypt); Ashraf Badawi (Zewail City of Science and Technology, Egypt)
Poster Session 1: Dielectric resonator antennas	Poster1-A07	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Reconfigurable All-dielectric Transmission Lens for Vortex Beam Generation	Jianjia Yi (Key Laboratory of Integrated Services Networks, Xidian University, China); Menglan Lin (Key Laboratory of Integrated Services Networks, Xidian University, China); Lina Zhu (Xidian University, China); Caijie Dong (Key Laboratory of Integrated Services Networks, Xidian University, China); Hailin Zhang (Xidian University, China)
Poster Session 1: Dielectric resonator antennas	Poster1-A07	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Impedance Bandwidth Performance of TM106 Mode in Equilateral Triangular DRA	Anoop P (Indian Institute of Technology Guwahati, India); Ratnajit Bhattacharjee (Indian Institute of Technology, Guwahati, India)
Poster Session 1: Lens antennas	Poster1-A09	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	2-D Wide-Scanning Flat Luneburg Lens Antenna for 5G Communication	Kunning Liu (University of Electronic Science and Technology of China, China); Shi Wen Yang (University of Electronic Science and Technology of China, China); Shi-Wei Qu (University of Electronic Science and Technology of China, China); Yikai Chen (University of Electronic Science and Technology of China, China); Jun Hu (University of Electronic Science and Technology of China, China)
Poster Session 1: Lens antennas	Poster1-A09	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Ka-band Multi-beam Planar Lens Antenna for 5G Applications	Eduardo Garcia-Marin (Universidad Autonoma de Madrid, Spain); Dejan Filipovic (University of Colorado at Boulder, USA); Jose Luis Masa-Campos (Universidad Autonoma de Madrid, Spain); Pablo Sanchez-Olivares (Universidad Politécnica de Madrid, Spain)
Poster Session 1: Lens antennas	Poster1-A09	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	H-band Quartz-Cavity Leaky-Wave Lens Feeder with Novel Chip Interconnect	Marta Arias Campo (IMST GmbH & Delft University of Technology, Germany); Katarzyna Holc (Fraunhofer Institute for Applied Solid Physics IAF, Freiburg, Germany); Arnulf Leuther (Fraunhofer Institute for Applied Solid State Physics, Germany); Rainer Weber (Fraunhofer IAF, Germany); Simona Bruni (IMST GmbH, Germany); Nuria Llobart (Delft University of Technology, The Netherlands)
Poster Session 1: Lens antennas	Poster1-A09	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Highly Integrable High Gain Substrate-Integrated Planar Lens for Wide D-band Applications	Loïc Marnat (CEA, LETI, Minattec, France); Kossaila Medrar (CEA Leti, France); Laurent Dussopt (CEA, LETI, Minattec, France)

Poster Session 1: Lens antennas	Poster1-A09	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Waveguide Switch Based on Ferrite Circulator for Antenna Beam Steering Applications	Stephanie Smith (CSIRO & Astronomy and Space Science, Australia); Andrew Weily (Antenna Engineer, Australia); Ken Smart (CSIRO Astronomy and Space Science, Australia); Nick Carter (CSIRO Astronomy and Space Science, Australia); Santiago Castillo (CSIRO Astronomy and Space Science, Australia)
Poster Session 1: Lens antennas	Poster1-A09	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Zero Index Metamaterial for High Gain Array	Jiang Tingyong (EPFL, Switzerland); Ning Hui (Northwest Institute of Nuclear Technology, Switzerland); Zhou Heng (Northwest Institute of Nuclear Technology, Switzerland)
Poster Session 1: Lens antennas	Poster1-A09	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Ray-Tracing Analysis of the near and Far Fields of Focusing Geodesic Lens Antennas	German León (Universidad de Oviedo, Spain); Omar Orgeira (Universidad de Oviedo, Spain); Nelson Fonseca (European Space Agency, The Netherlands); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
Poster Session 1: Material characterisation and non-destructive testing	Poster1-M01	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	Impact of Mounting Materials on Phased Arrays for the 5G New Radio	Michael D. Foegelie (ETS-Lindgren, USA)
Poster Session 1: Material characterisation and non-destructive testing	Poster1-M01	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	A Numerical Study on Tomographic Imaging Using Guided Electromagnetic Waves	Jochen Moll (Goethe University Frankfurt am Main, Germany); Duy Hai Nguyen (Goethe University Frankfurt, Germany); Viktor Krozer (Goethe University of Frankfurt am Main, Germany)
Poster Session 1: Material characterisation and non-destructive testing	Poster1-M01	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	Advanced Calibration Method for Accurate Microwave Absorber Reflectivity Measurements at Oblique Illumination Angles	Willi Hofmann (Technische Universität Ilmenau, Germany); Andreas Schwind (Technische Universität Ilmenau, Germany); Christian Bornkessel (Technische Universität Ilmenau, Germany); Matthias Hein (Ilmenau University of Technology, Germany)
Poster Session 1: MIMO, diversity, smart antennas & signal processing	Poster1-A22	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Enhanced Low Band MIMO Terminal Antenna Based on Selective Feeding of Chassis Modes	Hanieh Alakbari (Lund University, Sweden); Qiuyan Liang (Lund University & Xidian University, Sweden); Buon Kiong Lau (Lund University, Sweden)
Poster Session 1: MIMO, diversity, smart antennas & signal processing	Poster1-A22	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Yagi-Uda-Inspired Pattern Reconfigurable MIMO Antenna with Suppressed Harmonics and Minimum Parasitic Presence for WLAN Applications	Phalguni Mathur (Bharathiar University, India)
Poster Session 1: MIMO, diversity, smart antennas & signal processing	Poster1-A22	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Convergence of OAM Beams Using Time-Modulated Concentric Circular Arrays	Yang Wang (Chongqing University of Posts and Telecommunications, China); Jie Liu (Chongqing University of Posts and Telecommunications, China); Tao Hu (Chongqing University of Posts and Telecommunications, China); Wenjun Jie (Chongqing University of Posts and Telecommunications, China); Donghua Yang (Chongqing University of Posts and Telecommunications, China); Alan Tennant (University of Sheffield, United Kingdom (Great Britain))
Poster Session 1: MIMO, diversity, smart antennas & signal processing	Poster1-A22	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Printed Dipole MIMO Antenna for Wireless Handheld Terminals	Ahmad Abdelgawad (University of South Carolina, USA); Mohammad Ali (University of South Carolina, USA)
Poster Session 1: MIMO, diversity, smart antennas & signal processing	Poster1-A22	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Non-Gaussian Colored Noise Generation for Wireless Channel Simulation with Particle Swarm Optimizer	Shaowei Dai (University of Glasgow, Singapore); Minghui Li (University of Glasgow, United Kingdom (Great Britain)); Qammer H Abbasi (University of Glasgow, United Kingdom (Great Britain)); Muhammad Ali Imran (University of Glasgow, United Kingdom (Great Britain))
Poster Session 1: MIMO, diversity, smart antennas & signal processing	Poster1-A22	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Dynamic Short-Range Sensing Approach Using MIMO Radar for Brain Activities Monitoring	Mohammad Ojaroudi (University of Limoges/CNRS, France); Stéphane Billa (XLIM UMR 7252 Université de Limoges/CNRS, France)
Poster Session 1: MIMO, diversity, smart antennas & signal processing	Poster1-A22	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	A Three-Antenna Compact Micro-Diversity Module for Automotive Satellite Radio Reception	Simon Senega (Universität der Bundeswehr München, Germany); Sebastian Mattheis (Universität der Bundeswehr München, Germany); Stefan Lindenmeier (Universität der Bundeswehr, Germany)
Poster Session 1: MIMO, diversity, smart antennas & signal processing	Poster1-A22	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Maximum Ratio Transmission for OAM Mode Multiplexing Using Multiple UCAs	Ayano Yamamoto (Hokkaido University, Japan); Toshihiko Nishimura (Hokkaido University, Japan); Takeo Ohgane (Hokkaido University, Japan); Tomoya Tandai (Toshiba Corporation, Japan); Daisuke Uchida (Toshiba Corporation, Japan)
Poster Session 1: Near-field, far-field, compact and RCS range measurement techniques	Poster1-M03	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	Off-the-shelf Optical Antenna Feed System	Christopher G Hynes (Simon Fraser University, Canada); Rodney Vaughan (Simon Fraser University, Canada)
Poster Session 1: Near-field, far-field, compact and RCS range measurement techniques	Poster1-M03	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	Height Profiles of Typical Automotive Landmarks Using Tomographic Compact-Range Measurements	Roland Moch (RWTH Aachen University, Germany); Dirk Heberling (RWTH Aachen University, Germany)
Poster Session 1: Near-field, far-field, compact and RCS range measurement techniques	Poster1-M03	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	A Novel Indoor and Outdoor Drone-Based Antenna and RCS Measurement Facility	Pierre Massaloux (CESTA, France)
Poster Session 1: Near-field, far-field, compact and RCS range measurement techniques	Poster1-M03	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	RCS Evaluation by Image-based Near-field to Far-field Transformation	Hirokazu Kobayashi (Osaka Institute of Technology, Japan)
Poster Session 1: Near-field, far-field, compact and RCS range measurement techniques	Poster1-M03	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	On the Influence of the Transformation Matrix in Compressed Spherical Near-Field Measurements	Cosme Culotta-Lopez (RWTH Aachen University, Germany); Dirk Heberling (RWTH Aachen University, Germany)
Poster Session 1: Near-field, far-field, compact and RCS range measurement techniques	Poster1-M03	Measurements	17 Mar 2020	Exhibition Hall	13:20	13:20	Precise 6D RTK Positioning System for UAV-based Near-Field Antenna Measurements	Patrick Henkel (ANAVS GmbH, Germany); Andreas Speri (ANAVS GmbH, Germany); Ulrich Mittmann (ANAVS GmbH, Germany); Torsten Fritzel (Aerossess UG, Germany); Rüdiger Strauß (Aerossess UG, Germany); Hans-Juergen Steiner (Aerossess UG, Germany)
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Multiple Screen Diffraction Analysis Using the Parabolic Equation Technique	Glaucio L. Ramos (Federal University of São João Del-Rei, Brazil); Paulo Tibúrcio Pereira (Federal University of São João Del-Rei, Brazil); Pablo Andrade (Federal University of São João Del-Rei, Brazil); Diego Tami (Federal University of Minas Gerais, Brazil); Sandro Trindade Mordente Gonçalves (CEFETMG, Brazil); Elson Silva (UFMG, Brazil)
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Effect of a Clutter Behind Building on a Building Entry Loss (BEL) over a nLoS Path	Young Chul Lee (Mokpo National Maritime University, Korea (South)); Chul Woo Byeon (Wonkwang University, Korea (South)); Alamgir Hossain (Wonkwang University, Korea (South)); Khairunnisa Aziding (Mokpo National Maritime University, Korea (South)); Jong-Il Lee (National Radio Research Agency (RRA), Korea (South)); Moon Soo Kang (National Radio Research Agency, Korea (South))
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Measurements of a Dynamic 60 GHz Radio Channel in an Open-Space Office	Marwan El Hajj (IETR-INSa de Rennes, France); Gheorghe Zaharia (IETR-INSa de Rennes, France); Ghais El Zein (IETR-INSa Rennes, France); Hanna Farhat (Lebanese University & University Institute of Technology, Lebanon); Sawzan Sadek (Lebanese University, Lebanon)
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Experiences: Near Line-Of-Sight TVWS	Albert A. Lysko (Council for Industrial and Scientific Research & North-West University, South Africa)
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	60 GHz Path Loss Modelling Inside Ships	Brecht De Beelde (Ghent University & IMEC, Belgium); Emmeric Tanghe (Ghent University, Belgium); Marwan Yusuf (Ghent University, Belgium); David Plets (Ghent University - imec, Belgium); Eli De Poorter (Ghent University & Imec, Belgium); Wout Joseph (Ghent University/IMEC, Belgium)
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Problems While Setting the Reference Level in a Satellite Beacon Receiver Propagation Experiment at Ka-band	Vicente Pastoriza-Santos (University of Vigo, Spain); Fernando Machado (University of Vigo, Spain); Dalia (Das) Nandi (Indian Institute of Information Technology, India); Fernando Pérez-Fontán (University of Vigo, Spain)
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	ITALSAT Ka, Q and V Band Cross Polar Discrimination Statistics Measured in Spino d'Adda, Italy	Eric Regonesi (Politecnico di Milano, Italy); Carlo Riva (Politecnico di Milano, Italy); Lorenzo Luini (Politecnico di Milano, Italy); Antonio Martellucci (European Space Agency, The Netherlands)
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Cloud Detection Models and Their Effect on the Calculation of Cloud Attenuation: Assessment at Ka- And Q-band at 4065 Meters of Altitude	Gustavo Siles (Universidad Privada Boliviana, Bolivia); Miguel Heredia (Agencia Boliviana Espacial, Bolivia); Rodrigo Harriague (Universidad Privada Boliviana, Bolivia)
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Satellite Link-Budget Statistical Prediction from Weather Forecast Models: Verification with Hayabusa-2 Ka-band Data	Marianna Biscarini (Sapienza University of Rome, Italy); Andrea Vittimberga (Sapienza University of Rome, Italy); Klaide De Sanctis (HIMET, Italy); Saverio Di Fabio (CETEMPS, Italy); Luca Milani (Sapienza University of Rome, Italy); Maria Montagna (SciSys @ ESA, Germany); Frank S. Marzano (Sapienza University of Rome, Italy)

Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Experimental Study of Dispersion/Attenuation by Trees from 1 to 40 GHz	Maria-Teresa Martinez-Ingles (University Centre of Defence at the Spanish Air Force Academy, MDE-UPCT, Spain); Jose-Maria Molina-Garcia-Pardo (Universidad Polit�cnica de Cartagena, Spain); Leandro Juan-Lacer (Universidad Polit�cnica de Cartagena, Spain); Juan Pascual-Garc�a (Universidad Polit�cnica de Cartagena, Spain); Jos�-Victor Rodr�guez (Universidad Polit�cnica de Cartagena, Spain)
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Nine Years of Excess Attenuation Statistics of Earth-Space Propagation Experiments at Ka-Band in Toulouse, France	Charles-Antoine L'Hour (ONERA, France); Jean-Pascal Monvoisin (ONERA, France); Laurent Castanet (ONERA, France); Xavier Boulanger (CNES, France); Valentin Le Mire (ONERA, France)
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Transmission Loss Evaluation for Fabry-Perot Materials' Characterization	Leonardo Possenti (University of Bologna, Italy); Juan Pascual-Garc�a (Universidad Polit�cnica de Cartagena, Spain); Vittorio Degli-Esposti (University of Bologna, Italy); Antonio Jose Lozano-Guerrero (Universidad Polit�cnica de Cartagena, Spain); Marina Barbirolli (University of Bologna, Italy); Maria-Teresa Martinez-Ingles (University Centre of Defence at the Spanish Air Force Academy, MDE-UPCT, Spain); Franco Fuschini (Viale del Risorgimento 2, Italy); Jos�-Victor Rodr�guez (Universidad Polit�cnica de Cartagena, Spain); Enrico M. Vitucci (University of Bologna, Italy); Jose-Maria Molina-Garcia-Pardo (Universidad Polit�cnica de Cartagena, Spain)
Poster Session 1: Propagation experimental methods and campaigns	Poster1-P04	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Antenna Design for RF Ion Heating of Anisotropic Magnetized Plasma	Giuseppe Torrisi (INFN-LNS, Italy); Giorgio Sebastiano Mauro (INFN-LNS, Italy); David Mascali (INFN-LNS, Italy); Alessio Galat� (Istituto Nazionale di Fisica Nucleare, Italy); Luigi Celona (INFN-LNS, Italy); Gino Sorbello (University of Catania, Italy); Santo Gammino (INFN-LNS, Italy)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Wall Parameters Sensitivity for Indoor Radio Waves Attenuation	Eran Greenberg (RAFAEL, Israel); Gil Segal (Rafael, Israel)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Assessment of sub-THz Mesh Backhaul Capabilities from Realistic Modelling at the PHY Layer	Gr�gory Gougeon (SIRADEL, France); Yoann Corre (SIRADEL, France); Mohammed Zahid Aslam (SIRADEL, France); Simon Bicals (CEA, France); Jean-Baptiste Dor� (CEA, France)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Joint Statistical Modeling of Received Power, Mean Delay, and Delay Spread for Indoor Wideband Radio Channels	Ayush Bharti (Aalborg University, Denmark); Laurent Clavier (Institut Mines-Telecom, Telecom Lille & IEMN / IRCICA, France); Troels Pedersen (Aalborg University, Denmark)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	A Bandwidth Scalable Millimetre Wave Over-The-Air Test System with Low Complexity	Erich Z�chmann (PIDSO - Propagation Ideas & Solutions GmbH, Austria); Terje Mathiesen (Norwegian University of Science and Technology, Norway); Thomas Blazek (TU Wien, Austria); Herbert Groll (TU Wien, Austria); Golsa Ghiaasi (Norwegian University of Science and Technology, Norway)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Achievable Synchronisation Gain in Uncalibrated Large Scale Antenna Systems	Jens Abraham (Norwegian University of Science and Technology, Norway); Torbj�rn Ekman (Norwegian University of Science and Technology, Norway)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Electromagnetic Pipeline Coating Communication for IoT Condition Monitoring of Subsea O&G Pipelines	Knut Grythe (SINTEF, Norway); Irene Jensen (SINTEF ICT, Norway); Ole Knudsen (SINTEF Industry, Norway)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Combined Antenna-Channel Characterization for Wireless Communication from Horse Hoof to Base Station	Jasper Goethals (Ghent University & IMEC, Belgium); Gunter Vermeeren (Ghent University, Belgium); Denys Nikolayev (�cole Polytechnique F�d�rale de Lausanne, Switzerland); Margot Deruyck (Ghent University - IMEC, Belgium); Luc Martens (Ghent University-IMEC, Belgium); Wout Joseph (Ghent University/IMEC, Belgium)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Remote Monitoring and Propagation Modeling of EM Side-Channel Signals for IoT Device Security	Seun Sangodoyin (Georgia Institute of Technology, USA); Frank Werner (Georgia Institute of Technology, USA); Baki B Yilmaz (Georgia Institute of Technology, USA); Chia-Lin Cheng (Georgia Tech, USA); Evran Ugurlu (Georgia Institute of Technology, USA); Nader Sehatbakhsh (Georgia Institute of Technology, USA); Milos Prvulovic (Georgia Institute of Technology, USA); Alenka Zajic (Georgia Institute of Technology, USA)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Analysis of Delay Characteristics at 4.9 GHz and 28 GHz in an Indoor Industrial Scenario	Zuolong Ying (Beijing University of Posts and Telecommunications, China); Tao Jiang (Beijing University of Posts and Telecommunications, China); Pan Tang (Beijing University of Posts and Telecommunications, China); Jianhua Zhang (Beijing University of Posts and Telecommunications, China); Lei Tian (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, China)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Analysis of Phase Evolution Impact in SIMO Operation in Distributed Transceiver Systems	Luis Lenin Trigueros (Universidad Publica de Navarra and Institute of Smart Cities, Spain); Peio Lopez Iturri (Universidad Publica de Navarra and Institute for Smart Cities, Spain, Spain); Leyre Azpilicueta (Tecnologico de Monterrey, Mexico); Carlos del-Rio (Universidad Publica de Navarra & Institute of Smart Cities, Spain); Francisco Falcone (Universidad Publica de Navarra and Institute for Smart Cities, Spain, Spain)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Propagation Analysis of Terahertz OAM Waves in Atmospheric Turbulent Environment	Jian Cui (Chongqing University of Posts and Telecommunications, China); Yang Wang (Chongqing University of Posts and Telecommunications, China); Yanli Tu (China Mobile Group Design Institute Co., Ltd, China); Guangyang Liu (Chongqing University of Posts and Telecommunications, China); Jie Zhang (University of Sheffield, Dept. of Electronic and Electrical Engineering, United Kingdom (Great Britain))
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Analysis of Safe Ultrawideband Human-Robot Communication in Automated Collaborative Warehouse	Branimir Iv�k (Ericsson Nikola Tesla d. d. & University of Zagreb, Faculty of Electrical Engineering and Computing, Croatia); Zvonimir Sipus (University of Zagreb, Croatia); Juraj Bartoli� (University of Zagreb, Croatia); Josip Babi� (Kon�ar-Electrical Engineering Institute Inc., Croatia)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Propagation Model for UCA-based OAM Communications in Six-Ray Canyon Channels	Wenjun Jie (Chongqing University of Posts and Telecommunications, China); Yang Wang (Chongqing University of Posts and Telecommunications, China); Tao Hu (Chongqing University of Posts and Telecommunications, China); Jie Liu (Chongqing University of Posts and Telecommunications, China); Donghua Yang (Chongqing University of Posts and Telecommunications, China); Jie Zhang (University of Sheffield, Dept. of Electronic and Electrical Engineering, United Kingdom (Great Britain))
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Modified Two-Ray Model with UTD and Atmospheric Effects	Andres Navarro (Universidad Icesi, Colombia); Diego Parada (Federal University of Minas Gerais, Brazil); Dinael Guevara (Francisco de Paula Santander University, Colombia); C�ssio Rego (Federal University of Minas Gerais, Brazil); Roger Alexander Badillo (Francisco de Paula Santander University, Colombia)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Analysis of Radiowave Propagation in Forest Media Using the Parabolic Equation	Glaucio L. Ramos (Federal University of S�o Jo�o Del-Rei, Brazil); Paulo Tib�rcio Pereira (Federal University of S�o Jo�o Del-Rei, Brazil); Nuno R. Leonor (Instituto de Telecomunika��es, Portugal); Rafael F. S. Caldeirinha (Polytechnic Institute of Leiria & Instituto de Telecomunika��es, Portugal)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Construction of Gaussian and Isotropic Channels Based on Electrically Small Dipole Arrays	Assane Ngom (ESIGEEC, IRSEEM, France); Constant M. A. Niamien (Normandie Univ, UNIROUEN, ESIGEEC/IRSEEM, Rouen, France)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Reduction Technique of Differential Propagation Delay with Negative Group Delay Function	Fayu Wan (Nanjing University of Information Science and Technology, China); Ningdong Li (Nanjing University of Information Science and Technology, China); Wencelas Rajandrabire (IM2NP, France); Blaise Ravelo (NUIST, China)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	On Separation of Wet Antenna Effects from Rain Attenuation Measurements	Pavel Valtr (Faculty of Electrical Engineering, Czech Technical University in Prague, Czech Republic); Martin Fend (Czech Technical University in Prague, Czech Republic); Vojtech Bares (Czech Technical University in Prague, Czech Republic); Pavel Pechac (Czech Technical University in Prague, Czech Republic)
Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Mode Modulation Based Multi-Mode Transmitter for Line-of-Sight Propagation	Tao Hu (Chongqing University of Posts and Telecommunications, China); Yang Wang (Chongqing University of Posts and Telecommunications, China); Jie Zhang (University of Sheffield, Dept. of Electronic and Electrical Engineering, United Kingdom (Great Britain))

Poster Session 1: Propagation modelling and simulation	Poster1-P02	Propagation	17 Mar 2020	Exhibition Hall	13:20	13:20	Detection Probability Calculations for Fluctuating Targets Under Clutter	Ido Finkelman (Elta Systems Ltd., Israel); Nimrod Teneh (Elta Systems Ltd, Israel); Gregory Lukovsky (Elta Systems Ltd., Israel)
Poster Session 1: Reflect arrays and transmit arrays	Poster1-A19	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	A Millimeter-Wave Low-Profile and Metal-Only Transmitarray Antennas at 28 GHz	Seyedeh Zahra Mousavirazi (Institut National de la Recherche Scientifique (INRS), Canada); Seyed Ramazannia Tuloti (Electrical and Computer Engineering Faculty, Semnan University, Iran); Tayeb A. Denidni (INRS-EMT, Canada)
Poster Session 1: Reflect arrays and transmit arrays	Poster1-A19	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Dual-Polarized Dual-Frequency Ka-band Transmitarray Lens	Enrique G. Plaza (Universidad de Oviedo, Spain); Germán León (Universidad de Oviedo, Spain); Susana Loredó (University of Oviedo, Spain); Luis Fernando Herran (University of Oviedo, Spain)
Poster Session 1: Reflect arrays and transmit arrays	Poster1-A19	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Transmitarray Antenna for Converged Vortex Beam Generation and Steering	Irina Munina (St. Petersburg Electrotechnical University LETI, Russia); Pavel A. Turalchuk (St. Petersburg Electrotechnical University LETI, Russia); Dmitry E Zelenchuk (Queen's University of Belfast, United Kingdom (Great Britain))
Poster Session 1: Reflect arrays and transmit arrays	Poster1-A19	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Design and Operation of a Smart Graphene-Metal Hybrid Reflectarray at THz Frequencies	Arjun Singh (Northeastern University, USA); Michael Andrello (AFRL, USA); Erik Einarsson (University at Buffalo, USA); Ngwe Thawdar (Air Force Research Laboratory, USA); Josep M Jornet (Northeastern University, USA)
Poster Session 1: Reflect arrays and transmit arrays	Poster1-A19	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Low-profile TM Incident Retrodirective Metasurface Using AMC Surface	Sun-Gyu Lee (Hongik University, Korea (South)); Jeong Hae Lee (Hongik University, Korea (South))
Poster Session 1: Reflect arrays and transmit arrays	Poster1-A19	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Ultrawideband Transmitarray Employing Connected Slot-Bowtie Dipole Elements	Lizhao Song (University of Technology Sydney, Australia); Peliyan Qin (University of Technology, Sydney, Australia); Stefano Maci (University of Siena, Italy); Y Jay Guo (University of Technology Sydney, Australia)
Poster Session 1: Reflect arrays and transmit arrays	Poster1-A19	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Frequency Diverse Array Beamforming Using Particle Swarm Optimization	Yi Liao (UESTC, China); Hu Tang (UESTC, China); Di Jiang (UESTC, China); Zhi Zheng (University of Electronic Science and Technology of China, China)
Poster Session 1: Reflect arrays and transmit arrays	Poster1-A19	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	A Triple-layer Wideband Transmitarray Antenna Using Finger-Type Slot Elements	Guang Liu (National Space Science Center, China); Hongjian Wang (National Space Science Center, China); Yang Liu (National Space Science Center & University of Chinese Academy of Sciences, China)
Poster Session 1: Reflect arrays and transmit arrays	Poster1-A19	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	An Ultra-wideband Reflectarray Antenna Using Connected Dipoles for Multifunctional Systems	Junxun Zhang (Shenzhen University, China); Long Zhang (Shenzhen University, China); Wenting Li (Kent, China); Yejun He (Shenzhen University, China); Sai-Wai Wong (Shenzhen University, China); Steven Gao (University of Kent, United Kingdom (Great Britain))
Poster Session 1: Reflect arrays and transmit arrays	Poster1-A19	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Equivalent Dielectric Description of Transmit-arrays as an Efficient and Accurate Method of Analysis	Sergio Matos (Instituto Universitário de Lisboa, Portugal); Jorge R. Costa (Instituto de Telecomunicações / ISCTE-IUL, Portugal); Parinaz Naseri (University of Toronto, Canada); Eduardo B. Lima (Instituto de Telecomunicações & Instituto Superior Técnico, Portugal); Carlos A. Fernandes (Instituto de Telecomunicações, Instituto Superior Técnico, Portugal); Nelson Fonseca (European Space Agency, The Netherlands)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	64 Element Active Phased Array as Focal Plane Array Feed for Reflector Antennas for mm-Wave Wireless Communications	Antonius Johannes van den Biggelaar (Eindhoven University of Technology, The Netherlands); Ali Al-Rawi (Eindhoven University of Technology, The Netherlands); Ulf Johannsen (Eindhoven University of Technology, The Netherlands); A. B. (Bart) Smolders (Eindhoven University of Technology, The Netherlands)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	On the Magnification Factor of Ring Focus Imaging Systems	Giuseppe Orlando (ThalesAleniaSpace Italia, Italy)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	K-band Feed and Transceiver with Compact Monopulse Tracking Coupler for Deep Space Applications	Ignacio Montesinos-Ortego (TTI, Spain); Zoran Golubic (TTI, Spain); Beatriz Bedia (TTI, Spain); Fabio Pelorossi (ESOC, ESA, Germany); Filippo Concaro (European Space Agency, Germany)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Improving Modal Purity in Quadraxially Fed Quadruple-Ridged Flared Horn Antennas	Jacobus M Kotzé (Stellenbosch University, South Africa); Petrie Meyer (Stellenbosch University, South Africa)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	C Band Self Diplexed Tx/Rx Feed System for Telecom	Rodolfo Ravanelli (Thales Alenia Space Italy SpA, Italy); Giuseppe Addamo (Istituto di Elett. e di Ingegneria dell'Inform. e delle Telecom. (IEIIT-CNR), Italy); Roberto Mizoni (Thales Alenia Space Italia, Italy); Oscar A. Peverini (Istituto di Elett. e di Ingegneria dell'Inform. e delle Telecom. (IEIIT-CNR), Italy); Marcello Zolesi (Thales Alenia Space, Italy); Giuseppe Virone (Consiglio Nazionale delle Ricerche, Italy); Franco Perrini (Thales Alenia Space-Italia S.p.a., Italy); Fabio Paonessa (National Research Council of Italy (CNR - IEIIT), Italy)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Multi-frequency Dual-polarization Spaceborne Microwave Radiometer Antennas	Hongjian Wang (National Space Science Center, China)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Upgrade to the K-band Uplink Channel for the ESA Deep Space Antennas: Analysis of the Optics and Preliminary Dichroic Mirror Design	Matteo Marchetti (University of Pavia, Italy); Filippo Concaro (European Space Agency, Germany); Fabio Pelorossi (ESOC, ESA, Germany); Luca Perreggini (University of Pavia, Italy); Marco Pasian (University of Pavia, Italy)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Full-wave Scattering from Reflector Antennas on Electrically Large Platforms Using low-Memory Computers	Oscar Borries (TICRA, Denmark); Peter Demeyer (TICRA, Denmark); Erik Jørgensen (TICRA, Denmark)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Circularly Polarized Axially Corrugated Feed Horn for CubeSat Reflectarray Applications	Miroslav J. Veljovic (EPFL, Switzerland); Anja K. Skrivervik (EPFL, Switzerland)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Tunable Dichroic Cell for Multi-band Reflector Antenna System	Miguel Salas-Natera (Universidad Politécnica de Madrid, Spain); Roberto Garrote Moreno (Universidad Politécnica de Madrid, Spain); Eduardo Carrasco (Universidad Politécnica de Madrid, Spain); Jose A. Encinar (Universidad Politécnica de Madrid, Spain); Ramón Martínez Rodríguez-Osorio (Universidad Politécnica de Madrid, Spain)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Contingency Mitigation Aspects for Reflector Based Satellite SAR Systems	Patrick T.P. Klenk (German Aerospace Center (DLR), Germany); Jens Reimann (German Aerospace Center (DLR), Germany); Sigurd Huber (German Aerospace Center (DLR), Germany); Marco Schwardt (German Aerospace Center (DLR), Germany)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Design and Measurement of Possible Wide-band 67-116 GHz ALMA Vacuum Window Anti-reflection Layers	Peter J Speirs (University of Bern, Switzerland); Rocío Molina (Universidad de Chile, Chile); Elena Saenz (European Space Agency, The Netherlands); Paul Moseley (European Space Agency, Switzerland); Pavel Yagoubov (European Southern Observatory, Germany); Axel Murk (IAP, Switzerland)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Electromagnetic Analysis of the ngVLA Reference Design Antenna	Sivasankaran Srikanth (National Radio Astronomy Observatory & Associated Universities Incorporated, USA)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Compact Quasi-Optical Power Combiner with Single Shaped Reflector	Dong Xia (Beihang University, China); Liao Ma (Beihang University, China); Ming Jin (Beihang University of Chemical Technology, China); Ming Bai (Beihang University, China)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	4-40 GHz In-Phase/180° Out-of-Phase Power Dividers with Enhanced Isolation	Hadi Hijazi (Lab-STICC/ENSTA Bretagne, France); Marc Le Roy (Lab-STICC, France); Raafat Lababidi (ENSTA Bretagne, France); Denis Le Jeune (ENSTA Bretagne, France); Andre Perennec (Lab-STICC, France)
Poster Session 1: Reflector, feed systems, and components	Poster1-A18	Antennas	17 Mar 2020	Exhibition Hall	13:20	13:20	Broadband Beam-Steering with Focused Connected Arrays in Quasi-Optical Systems	Alejandro Pascual Laguna (Delft University of Technology & SRON, The Netherlands); Daniele Cavallo (Delft University of Technology, The Netherlands); Jochem Baselmans (SRON, The Netherlands); Nuria Lombart (Delft University of Technology, The Netherlands)
Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A Novel Wearable RF Head Coil for High Resolution 7T Magnetic Resonance Imaging	Pouya Goodarzi (Shahid Rajaei Teacher Training University, Iran); Fatemeh Geran Charakhili (Shahid Rajaei Teacher Training University, Iran); Hamidreza Saligheh Rad (Tehran University of Medical Sciences, Iran); Mohammad Reza Nazem Zadeh (Tehran University of Medical Sciences, Iran)
Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Antenna Mutual Coupling Effects in Highly Integrated Transmitter Arrays	Wan-Chun Liao (Chalmers University of Technology, Sweden); Rob Maaskant (CHALMERS, Sweden); Thomas Emanuelsson (Gapwaves AB, Sweden); Artem Vilenskiy (Samsung Research Institute Russia, Russia); Marianna Ivashina (Chalmers University of Technology, Sweden)

Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A Method of Reducing Mutual Coupling for a Finite Array	Lei Chen (Xidian University, China); Tianling Zhang (Xidian University, China); Ashraf Uz Zaman (Chalmers University of Technology, Sweden); Jian Yang (Chalmers University of Technology, Sweden)
Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Antenna Adaptation Circuits for High Data Rate Magneto Inductive Underwater Communications	Thierry Deschamps de Paillette (University of La Rochelle, France); Alain Gague (La Rochelle University, France)
Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Mechanically Influenced Antennas for Strain Sensing Applications Using Multiphysics Modelling	Shaghayegh Soltani (University of Kent, United Kingdom (Great Britain)); Paul Taylor (University of Kent, United Kingdom (Great Britain)); John Batchelor (University of Kent, United Kingdom (Great Britain))
Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Statistical Comparison of Coupling Effects Between Thin and Thick Dipoles in Random Sets	Imad Adjali (Université Paris-Est, ESYCOM, UPEMLV, France); Benoit Poussot (Université Paris-Est, France); Shermila Mostarshedi (Université Paris-Est Marne-la-Vallée, France); Jean-Marc Laheurte (Université Paris-Est-Marne-la-Vallée, France)
Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Wireless Link for Micro-scale Biomedical Implants Using Magnetolectric Antennas	Fazel Rangriz (NTNU, Norway); Ali Khaleghi (Norwegian University of Science and Technology (NTNU) & Oslo University Hospital, Norway); Ilanko Balasingham (NTNU, Norway)
Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Highly Decoupled Compact SDARS WLAN Antennas for Automotive	Abd Alhay Salah (Al-Azhar University Gaza, Palestine); Friedrich Hoffmann (IMST GMBH, Germany)
Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Multi-ring Circular Parasitic Antenna with Circularly Polarized Conical Beam and High Gain	Niyonzima Laetitia (Université Catholique de Louvain, Belgium); Donia Oueslati (ICTEAM Institute, Université Catholique de Louvain, Belgium); Christophe Craeye (Université Catholique de Louvain, Belgium)
Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Antennas on CubeSat Platforms: Accurate RF Predictions	Cecilia Cappellin (TICRA, Denmark); Mustafa Murat Bilgic (TICRA, Denmark); Jakob Rosenkrantz de Lasso (TICRA, Denmark); Oscar Borries (TICRA, Denmark)
Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Power Transfer Efficiency Analyzed Using Characteristic Mode Coupling Between Two Parallel Loops	Ferdaous Abderrazak (ITEAM-UPV, Spain); Eva Antonino-Daviu (Universitat Politècnica de València, Spain); Miguel Ferrando-Bataller (Universitat Politècnica de València, Spain)
Poster Session 2: Antenna interactions and coupling	Poster2-A02	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Preliminary Analysis of the Effects of the Ground Plane on the Element Patterns of SKA1-Low	Pietro Bolli (INAF - Osservatorio Astrofisico di Arcetri, Italy); Mirko Bercigli (IDS Ingegneria Dei Sistemi S. p. A, Italy); Paola Di Ninni (OAA - INAF, Italy); Maria Grazia Labate (SKA Organisation, United Kingdom (Great Britain)); Giuseppe Virone (Consiglio Nazionale delle Ricerche, Italy)
Poster Session 2: Antenna theory	Poster2-A01	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Three-Element End-Fire Linear Arrays (Super) Directivity and Gain Optimization	Alexandre Debarb (University of Grenoble Alpes & CEA-LETI, France); Antonio Clemente (CEA-LETI Minatec, France); Christophe Delaveaud (CEA-LETI, France)
Poster Session 2: Antenna theory	Poster2-A01	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A Miniaturized Circularly Polarized Antenna Using a Meandered Folded-Shorted Patch Array for CubeSats	Yuepei Li (Heriot Watt University, United Kingdom (Great Britain)); Symon K. Podlichak (Heriot-Watt University, United Kingdom (Great Britain)); Dimitris E. Anagnostou (Heriot Watt University, United Kingdom (Great Britain))
Poster Session 2: Antenna theory	Poster2-A01	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A Broadband Transition from Microstrip to Groove Gap Waveguide for Ka-Band Applications	Davood Zarifi (University of Kashan, Iran); Atefe Ashrafi (University of Kashan, Iran)
Poster Session 2: Antenna theory	Poster2-A01	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Closed Form Characterization of Mutual Coupling in Uniform Linear Arrays	Grzegorz Wolosinski (Huawei Munich Research Center, Germany); Harsh Tataria (Lund University, Sweden); Vincent Fusco (Queen's University Belfast, United Kingdom (Great Britain))
Poster Session 2: Antenna theory	Poster2-A01	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Approximating the Directivities of Antenna Elements and Arrays	Maor Mordohy (MIT-Holon Institute of Technology, Israel); Maor Kadosh (MIT, Israel); Ely Levine (AFeka, Academic College of Engineering, Israel); Haim Matzner (MIT-Holon Institute of Technology, Israel)
Poster Session 2: Antenna theory	Poster2-A01	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Double-Layer Machine Learning Assisted Optimization for Antenna Sensitivity Analysis	Qi Wu (Southeast University, China); Haiming Wang (Southeast University, China); Wei Hong (Southeast University, China)
Poster Session 2: Antenna theory	Poster2-A01	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Exact Derivation of the Radiation Law of Antennas Embedded into Generic Nonlocal Metamaterials: A Momentum-Space Approach	Said Mikki (University of New Haven, USA)
Poster Session 2: Antenna theory	Poster2-A01	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A New Feed Network for the Communication Signal and Excitation of Surface-Wave-Driven Plasma Antennas	Fatemeh Sadeghikia (Aerospace Research Institute, Iran); Ali K. Horestanti (Aerospace Research Institute, Iran); Mohammad reza Dorbin (Aerospace Research Institute, Iran); Mahmoud Talafi Noghami (Aerospace Research Institute, Iran); Hajar Ja'afar (Universiti Teknologi MARA, Malaysia)
Poster Session 2: Antenna theory	Poster2-A01	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Beamwidth Control of a Helical Antenna Using Truncated Conical Plasma Reflectors	Mahsa Valipour (Aerospace Research Institute, Iran); Fatemeh Sadeghikia (Aerospace Research Institute, Iran); Ali K. Horestanti (Aerospace Research Institute, Iran); Mohamed Hindi (Université de Rennes 1, France)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	General Formulation of the Boundary Element Method (BEM) for Curvilinear Metasurfaces in the Presence of Multiple Scattering Objects	Tom Smy (Carleton University, Canada); Jacob Connor (Carleton University, Canada); Scott Stewart (Carleton University, Canada); Shulabh Gupta (Carleton University, Canada)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Gradient-induced Heating of a Metallic Hip Implant in Magnetic Resonance Imaging	Alessandro Arduino (INRIM, Italy); Oriano Bottauscio (INRIM, Italy); Mario Chiampi (INRIM, Italy); Luca Zilberti (INRIM, Italy)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Model Simplification and Validation of Virtual Prototypes for Vehicular Antenna Design	Irfan Yousaf (Lunds University & Volvo Cars Corporation, Sweden); Kranti Kumar Katara (IIT Kanpur, India); Buon Kiong Lau (Lund University, Sweden)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Integral Equation Formulation for Planar Plasmonic Nano Structures in Layered Media	Eraa Mahdy (Cairo University, Faculty of Engineering, Egypt); Alaa Abdelmageed (Cairo University, Egypt); Ezzeldin Soliman (The American University in Cairo, Egypt)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Impact of Parameters Variability on the Performances of an Implanted Antenna for Biomedical Applications	Shuoliang Ding (GeePs & CentraleSupélec, France); Yao Pei (University Paris-sud, France); Lionel Pichon (Group of Electrical Engineering Paris, Université Paris-Saclay & GeePs Laboratory, France); Stavros Koulouridis (University of Patras, Greece)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Application of non-PEC Walled Mode-Matching Techniques to a Prototype SAFARI M-band Multi-Mode Receiver	Joseph Brennan (Maynooth University, Ireland); Marcin Gradziel (National University of Ireland, Maynooth, Ireland); Neil Trappe (NUI Maynooth, Ireland); Peter Ade (Cardiff University, United Kingdom (Great Britain))
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Neural Network Approach for Dielectric Characterization of Tissues in Microwave Frequencies Using Coplanar Waveguide Transmission	Viktor Mattsson (Uppsala University, Sweden); Mauricio D Perez (Uppsala University & National Technological University, Sweden); Dario Dematties (Universidad de Buenos Aires, Sweden); Robin Augustine (Uppsala University, Sweden)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Feeding Positions Providing the Lowest TARC of Uncorrelated Channels	Michal Masek (Czech Technical University in Prague & MECAS ESI s.r.o., Pilsen, Czech Republic, Czech Republic); Miloslav Capek (Czech Technical University in Prague, Czech Republic); Lukas Jelinek (Czech Technical University in Prague, Czech Republic)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	PML Effectiveness in the Transmission Line Modelling Method for Radiation and Scattering Applications	Jomiloju Odeyemi (University of Nottingham, United Kingdom (Great Britain)); Chris Smartt (University of Nottingham, United Kingdom (Great Britain)); Ana Vukovic (University of Nottingham, United Kingdom (Great Britain)); Trevor Benson (University of Nottingham, United Kingdom (Great Britain)); Phillip Sewell (University of Nottingham, United Kingdom (Great Britain))
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Effects of Common Approximations in the Modeling of a Liquid-Crystal-Based Patch Antenna: A Numerical Investigation	Nectarios Papanicolaou (University of Nicosia, Cyprus); Anastasis C Polycarpou (University of Nicosia, Cyprus); Marios Christou (University of Nicosia, Cyprus)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Hybrid MoM/T-Matrix Method for Analysis of Interaction Between Objects	Vít Losenský (Czech Technical University in Prague, Czech Republic); Miloslav Capek (Czech Technical University in Prague, Czech Republic); Lukas Jelinek (Czech Technical University in Prague, Czech Republic); Mats Gustafsson (Lund University, Sweden)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	A Parallelized Fast Array Analysis Approach	Danie Ludick (Stellenbosch University, South Africa); Tameez Ebrahim (Stellenbosch University, South Africa)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Accuracy and Modeling Improvements for an Integral Equation Framework Applied to Thin Layer Microstrip and Substrate Integrated Waveguide (SIW) Structures	Thomas Vaupel (Fraunhofer FHR, Germany)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Electromagnetic Design of Beam Position Monitor Based on Diffraction Radiation from Twin Dielectric Nanowires	Daria O. Herasymova (Institute of Radio-Physics and Electronics NASU, Ukraine)

Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Simulations and Measurements of Brick-Like Axial-Mode Helix Antenna Using CAD Tools	Dragan I. Olcan (University of Belgrade, Serbia); Umut Bulus (Antenom Antenna Technologies, Turkey)
Poster Session 2: Computational and numerical techniques	Poster2-E03	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Modelling of the Mechanical Antenna Using the Biot-Savart Law	Ben I Jones (Queen Mary University of London, United Kingdom (Great Britain)); Theo Saunders (Queen Mary University of London, United Kingdom (Great Britain)); Yang Hao (Queen Mary University, United Kingdom (Great Britain))
Poster Session 2: Electrically small antennas	Poster2-A08	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Miniaturized On-Chip Meandered Loop Antenna with Improved Gain Using Partially Shield Layer	Harshavardhan Singh (National Institute of Technology, Durgapur, India); Sujit Kumar Mandal (National Institute of Technology, Durgapur, India)
Poster Session 2: Electrically small antennas	Poster2-A08	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Remote Characterization of Small Antennas Using Waveguide	Hamed Hasani (Sivantos GmbH, Germany)
Poster Session 2: Electrically small antennas	Poster2-A08	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Compact Circularly Polarized E-Shaped Crossed-Dipole Antenna	Kam Kedze (Ajou University, Korea (South)); Youngwook Kim (California State University, Fresno, USA); Ikmo Park (Ajou University, Korea (South))
Poster Session 2: Electrically small antennas	Poster2-A08	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Effect of the Ground Plane in UHF Chip Antenna Efficiency	Jaime Molins-Benillure (Universitat Politècnica de València & ITEAM, Spain); Marta Cabedo-Fabrés (Universitat Politècnica de València, Spain); Eva Antonino-Daviu (Universitat Politècnica de València, Spain); Miguel Ferrando-Bataller (Universitat Politècnica de València, Spain)
Poster Session 2: Electrically small antennas	Poster2-A08	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A Very Compact Implantable Antenna for Wireless Biotelemetry Applications in the MedRadio Band	Tomer Paley (School of Electrical and Electronic Engineering, Israel); Guy Lasri (Faculty of Engineering, Holon Institute of Technology, Israel); Benjamin Milgrom (University of Connecticut, USA); Motti Haridim (Holon Institute of Technology, Israel)
Poster Session 2: Electrically small antennas	Poster2-A08	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Compact Circular Polarized Antenna for Multi-band Operation	Sarra Jemmeli (University of Limoges, France); Laure Huitema (Xlim Laboratory, France); Thierry Monediere (XJLM-University of Limoges, France)
Poster Session 2: Electrically small antennas	Poster2-A08	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Compact UHF Printed Antennas for Nano-Satellites	Juner M. Vieira (Aeronautics Institute of Technology, Brazil); Rodrigo Facco (Federal University of Pampa, Brazil); Marcos V. T. Heckler (Universidade Federal do Pampa, Brazil)
Poster Session 2: Electrically small antennas	Poster2-A08	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Circularly Polarized Electrically Small Antenna Using Chiral Metamaterials and Based on Characteristic Modes Theory	Nadia Kari (Université Paris Est, ESYCOM & FSTTAR, COSYS, LEOST, France); Divitha Seetharamdoo (IFSTTAR, LEOST & Univ Lille Nord de France, France); Jean-Marc Laheurte (Université Paris-Est-Marne-la-Vallée, France); Francois Sarrazin (University of Paris-Est-Marne-la-Vallée & ESYCOM, France)
Poster Session 2: Electrically small antennas	Poster2-A08	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A Novel Design Methodology for Non-Foster Elements with Application in Broadband Self-oscillating Antennas	Bair Bultantsev (St. Petersburg Electrotechnical University LETI, Russia); Leo Vincelj (University of Zagreb, Croatia); Dmitry Khodolnyak (Saint Petersburg Electrotechnical University LETI, Russia); Silvio Hrabar (University of Zagreb, Croatia)
Poster Session 2: EM theory and analytical techniques	Poster2-E02	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Proposal on Hybrid Propagation Analysis of Aperture Field Integration Method and Ray Tracing Method Suitable for Airport Surface in VHF Band	Satoshi Kuroda (Aoyama Gakuin University, Japan); Ryosuke Suga (Aoyama Gakuin University, Japan); Atsushi Kezuka (Electronic Navigation Research Institute, MPAT, National R&D Agency, Japan); Osamu Hashimoto (Aoyama Gakuin University, Japan)
Poster Session 2: EM theory and analytical techniques	Poster2-E02	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Volume Integral Equation Formulation for Electromagnetic Scattering by Highly Inhomogeneous Anisotropic Cylinders	Konstantinos Katsinos (National Technical University of Athens, Greece); Grigorios Zouros (National Technical University of Athens, Greece); John Roumeliotis (National Technical University of Athens, Greece)
Poster Session 2: EM theory and analytical techniques	Poster2-E02	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Evaluating the RCS Contribution of Geometrical Singularities: An Analytical Model	Alexandre Corazza (CEA - CESTA, France); Pascal Pagan (CEA - CESTA, France); Sylvain Morvan (CEA-DAM & Centre des Etudes Scientifiques et Techniques Aquitaine, France)
Poster Session 2: Frequency and polarization selective surfaces	Poster2-E07	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Frequency Selective Surface with Polarization Staggered Bands	Yan Zhang (North China Electric Power University, China); Yifang Guo (North China Electric Power University, China); Xiyuan Yao (North China Electric Power University, China)
Poster Session 2: Frequency and polarization selective surfaces	Poster2-E07	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Ultra-wideband Polarization-insensitive Thin Microwave Absorber Composed of Triple-layer Resistive Surfaces	Yixian Fang (University of Manchester, United Kingdom (Great Britain)); Zhirun Hu (University of Manchester, United Kingdom (Great Britain))
Poster Session 2: Frequency and polarization selective surfaces	Poster2-E07	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Millimeter-wave Bandpass Frequency Selective Structure Using Stacked Dielectric Slabs	Joseph Botros (Carleton University, Canada); Mohamed K. Emara (Carleton University, Canada); Rony E. Amaya (Carleton University, Canada); Shulabh Gupta (Carleton University, Canada)
Poster Session 2: Frequency and polarization selective surfaces	Poster2-E07	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Three-Dimensional Frequency Selective Surface for Single-Polarized Filtering Applications with Angular Stability	Paul Le Bihan (Institut d'Electronique et de Télécommunications de Rennes & THALES Defence Mission Systems, France); María García-Vigueras (IETR-NSA Rennes, France); Erwan Fourn (INSA of Rennes & IETR, France); Raphael Gillard (IETR & INSA, France); Isabelle LeRoy-Naneix (THALES AIRBORNE SYSTEMS, France); Stefan Varault (THALES Defence Mission Systems, France); Christian Renard (Thales Systèmes Aéroportés, France)
Poster Session 2: Frequency and polarization selective surfaces	Poster2-E07	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Dual-Polarized Frequency-Selective Transmission Structure with Two-Sided Absorption Bands	Zhefei Wang (Harbin Institute of Technology, China)
Poster Session 2: Frequency and polarization selective surfaces	Poster2-E07	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	A Wide-Angle Scanning Polarization Converter Based on Jerusalem-Cross Frequency Selective Surface	Emilio Arneri (University of Calabria, Italy); Francesco Greco (Universita' delle Calabria, Italy); Luigi Boccia (University of Calabria, Italy); G. Amendola (Universita della Calabria, Italy)
Poster Session 2: Frequency and polarization selective surfaces	Poster2-E07	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Dual-Band Band-Pass Frequency Selective Surface Based on the Matryoshka Geometry with Angular Stability and Polarization Independence	Alfredo Neto (Federal Institute of Paraíba & Grupo de Telecomunicações e Eletromagnetismo Aplicado - GTEMA, Brazil); Jefferson Costa Silva (Instituto Federal da Paraíba & IFPB, Brazil); Alexandre Serres (UFCC, Brazil); Marina Alencar (IFPB, Brazil); Ianes Coutinho (Instituto Federal da Paraíba, Brazil); Thamiris da Silva Evangelista (Instituto Federal de Educação Ciência e Tecnologia da Paraíba, Brazil)
Poster Session 2: Frequency and polarization selective surfaces	Poster2-E07	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Microwave Polarization Converter with Multilayer Metasurface	Fuheng Zhang (Fudan University, China); Guomin Yang (Fudan University, China); Ya-Qiu Jin (Fudan University, China)
Poster Session 2: Frequency and polarization selective surfaces	Poster2-E07	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Novel Dichroic Subreflector Design for Cassegrain Antennas	Seymur Shukurov (Yedigöller University & Profen Communication Technologies, Turkey)
Poster Session 2: Frequency and polarization selective surfaces	Poster2-E07	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Retrieval of Effective Permittivity and Permeability of Periodic Structures on Dielectric and Magnetic Substrates	Peng Mei (Aalborg University, Denmark); Shuai Zhang (Aalborg University, Denmark); Xianqi Lin (University of Electronic Science and Technology of China, China); Gert Pedersen (Aalborg University, Denmark)
Poster Session 2: Imaging and inverse scattering	Poster2-E05	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Application of MRI, fMRI and Cognitive Data for Alzheimer's Disease Detection	Chiara Dachena (University of Cagliari, Italy); Sergio Casu (University of Cagliari, Italy); Matteo Lodi (University of Cagliari, Italy); Alessandro Fanti (University of Cagliari, Italy); Giuseppe Mazzarella (University of Cagliari, Italy)
Poster Session 2: Imaging and inverse scattering	Poster2-E05	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	A New Focused Hyperthermia Based on SpaceFrequency DORT	Sajjad Sadeghi (University of Tehran, Iran); Alireza Madannejad (Research Assistant, University of Tehran, Iran); Faezeh Ravanbakhsh (Student, University of Shahid Beheshti, Iran); Javad Ebrahimzadeh (University of Uppsala, Sweden); Mauricio D Perez (Uppsala University & National Technological University, Sweden); Robin Augustine (Uppsala University, Sweden)
Poster Session 2: Imaging and inverse scattering	Poster2-E05	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Towards an Effective Inverse Design of Artificial Materials Based Devices Through the Scattering Matrix Method	Roberta Palmeri (Università Mediterranea di Reggio Calabria, Italy); Tommaso Isernia (University of Reggio Calabria, Italy)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Wideband 8-Antenna Array with High Isolation for Sub-6 GHz MIMO Applications	Xiao-Ting Yuan (Shenzhen University, China); Xuan-Ji Wu (Shenzhen University, China); Zhe Chen (City University of Hong Kong, Hong Kong); Chong Zhi Han (Shenzhen University, China); Xiao Zhang (Shenzhen University, China); Tao Yuan (Shenzhen University, China)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Uplink Design of Millimeter Wave Based Moving Network System	Dae-Soon Cho (ETRI, Korea (South))
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Characterizing 60 GHz Patch Antenna Segments for Fully Digital Transceiver	Jaakko Haarla (Aalto University School of Electrical Engineering, Finland); Vasilii Semkin (VTT Technical Research Centre of Finland, Finland); Kai Zheng (NYU, USA); Aditya Dhananjay (NYU, USA); Marco Mezzavilla (NYU Tandon School of Engineering, USA); Juha Ala-Laurinaho (Aalto University, Finland); Ville Vilkkari (Aalto University & School of Electrical Engineering, Finland)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	High-gain Resonant Continuous Transverse Stub Array Using Ridge Gap-Waveguide Technology	Javier Benavides-Vazquez (University Carlos III of Madrid, Spain); Jose-Luis Vazquez-Roy (University Carlos III of Madrid, Spain); Eva Rajo-Iglesias (University Carlos III of Madrid, Spain)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A Gap Waveguide Fed Circular Polarization Antennas in the Millimeter Wave Range	Dayan Pérez (Public University of Navarra (UPNA) & Institute of Smart Cities (ISC), Spain); Alicia E. Torres-García (Public University of Navarra, Spain); Iñigo Ederri (Universidad Pública de Navarra & Institute of Smart Cities, Universidad Pública de Navarra, Spain); Miguel Beruete (Universidad Publica de Navarra, Spain)

Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Design of Compact H-plane SIW Antenna at Ka Band	Cleofás Segura-Gómez (Universidad de Granada, Spain); Angel Palomares-Caballero (Universidad de Granada, Spain); Antonio Alex-Amor (Technical University of Madrid, Spain); Juan Valenzuela-Valdés (Universidad de Granada, Spain); Pablo Padilla (University of Granada, Spain)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Trapped Microstrip-Ridge Gap Waveguide for Standalone Millimeter Wave Structures	Amir Arayeshnia (Imam Khomeini International University, Iran); Ali Araghi (University of Surrey, United Kingdom (Great Britain)); Mohsen Khallily (University of Surrey & 5G Innovation Centre, Institute for Communication Systems (ICS), United Kingdom (Great Britain)); Pei Xiao (University of Surrey, United Kingdom (Great Britain)); Rahim Tafazolli (University of Surrey, United Kingdom (Great Britain))
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A Multiple-Feed Connected Leaky Slot Antenna for In-Antenna Power Combining in 0.13Um SiGe BiCMOS Technology	Jiangcheng Chen (University of Oulu, Finland); Shihai He (University of Oulu, Finland); Markus Berg (University of Oulu & Excellant Ltd., Finland); Aarno Pärssinen (University of Oulu, Finland)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Millimeter-Wave Wide Scan Beam Steering 5G MIMO Antenna Array in Mobile Terminals	Mohammad Mehdi Samadi Taheri (Amirkabir University of Technology, Iran); Abdolali Abdipour (Amirkabir University of Technology, Iran); Shuai Zhang (Aalborg University, Denmark); Gert Pedersen (Aalborg University, Denmark)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Practical Low-Loss Substrate-Integrated-Waveguide Feed Network for mm-Wave PCB Antenna Designs	James R Henderson (Plextek, United Kingdom (Great Britain)); Marcus C Walden (Plextek, United Kingdom (Great Britain))
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A V-Band Low Sidelobe Cavity-Backed Slot Array Antenna Based on Gap Waveguide	Davoud Zarifi (University of Kashan, Iran); Ali Farahbakhsh (Graduate University of Advanced Technology, Iran); Ashraf Uz Zaman (Chalmers University of Technology, Sweden)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Polarization-Reconfigurable Patch Antenna-on-Package for Millimeter-Wave Operations with DC Bias Circuit Design	Hsinju Chen (National Taiwan University, Taiwan); Shih-Yuan Chen (National Taiwan University, Taiwan)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Magneto-Electric Dipole Antenna for 5-G Applications	Giuseppe Scalise (University of Calabria, Italy); Luigi Boccia (University of Calabria, Italy); G. Amendola (Universita della Calabria, Italy); Mohadig Roussita (Ampleon Netherlands BV, The Netherlands); Alireza Shamsafar (Ampleon Netherlands BV, The Netherlands)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	High-gain and Low-profile Dielectric Cuboid Antenna at J-band	Yuto Samura (Gifu, Japan); Kazuki Yamada (Gifu, Japan); Oleg Vladilenovich Minin (National Research Tomsk State University, Russia); Atsushi Kanno (National Institute of Information and Communications Technology, Japan); Norihiko Sekine (National Institute for Information and Communications Technology, Japan); Junichi Nakajima (Softbank, Japan); Igor Vladilenovich Minin (Siberian State Academy of Geodesy, Russia); Shintaro Hisatake (Gifu University, Japan)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A Series-fed High-Gain Gap Waveguide Planar Array Antenna Fed by Quasi-TEM Wave	Tianling Zhang (Xidian University, China); Lei Chen (Xidian University, China); Ashraf Uz Zaman (Chalmers University of Technology, Sweden); Jian Yang (Chalmers University of Technology, Sweden)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A 16x16-Element Single-Layer Full-Corporate-Fed SIW Slot Array Antenna	Miao Zhang (Xiamen University, China); Baoquan Duan (Xiamen University, China); Jiro Hirokawa (Tokyo Institute of Technology, Japan); Qing Huo Liu (Duke University, USA); Guan-Long Huang (Shenzhen University, China)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Broadband Dual-Polarized Stacked Microstrip Antenna with Pin- And Edge-Feed for 5G Applications in Ka-Band	Karina Schneider (Karlsruhe Institute of Technology, Germany); Sören Marahrens (Karlsruhe Institute of Technology (KIT), Germany); Joerg Eisenbeis (Karlsruhe Institute of Technology, Germany); Jerzy Kowalewski (Karlsruhe Institute of Technology, Germany); Thomas Zwick (Karlsruhe Institute of Technology (KIT), Germany)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Switched Beam Lens Antennas Fed with Magneto-Electric Dipoles	Qian Zhu (Huawei Technologies Co., Ltd., China); Jingjing Huang (Huawei Technologies Co. Ltd., China); Rui Ni (Huawei Technologies Co Ltd, China); Mengyao Ma (Huawei Technologies Co., Ltd., China)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Design of Efficient Photomixer-based Terahertz Dielectric Resonator Antenna	Xiaohang Li (University of Sheffield, United Kingdom (Great Britain)); Wenfei Yin (The University of Sheffield, United Kingdom (Great Britain)); Salam Khams (University of Sheffield, United Kingdom (Great Britain))
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Axicon-hyperbolic Lens for Reflectivity Measurements of Curved Surfaces	Aleksi Tamminen (Aalto University, Finland); Samu-Pille Välli (Aalto University, Finland); Juha Ala-Laurinaho (Aalto University, Finland); Mika Salkola (Icare Finland Oy, Finland); Antti V. Räsänen (Aalto University, Finland); Zachary D Taylor (Aalto University, Finland)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Wideband Tapered Slot Antenna for D-Band Applications	Yunfeng Dong (Technical University of Denmark, Denmark); Arsen Turhaner (Technical University of Denmark, Denmark); Vitaliy Zhurbenko (Technical University of Denmark, Denmark); Tom Johansen (Technical University of Denmark, Denmark)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Dual Circularly Polarized Waveguide Array Antenna Formed by Full-Metallic Bow-Tie Radiating Cavities	Eduardo Garcia-Marin (Universidad Autonoma de Madrid, Spain); Pablo Sanchez-Olivares (Universidad Politecnica de Madrid, Spain); Jose Luis Masa-Campos (Universidad Autonoma de Madrid, Spain); Jorge A Ruiz-Cruz (Universidad Autonoma de Madrid & Escuela Politecnica Superior, Spain); Javier Herranz-Alpanseque (RFCAS, Spain)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Circularly Polarized Conical Beam Antenna with Stable 3dB Axial Ratio Beamwidth	Junxiang Yang (Nanjing University of Science and Technology, China); Shi-Shan Qi (Nanjing University of Science and Technology, China); Wen Wu (Nanjing University of Science & Technology, China)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Improved Equivalent Norton Circuit for Pulsed Photoconductive Antennas	Andrea Degasperis (Delft University of Technology, The Netherlands); Arturo Fiorellini Bernardis (Delft University of Technology, The Netherlands); Andrea Neto (Delft University of Technology, The Netherlands); Nuria Llobart (Delft University of Technology, The Netherlands)
Poster Session 2: Mm-, sub-mm-wave, and nano-optical antennas	Poster2-A04	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Circular-Polarization Mushroom EBG Antenna Module for 122 GHz Monostatic Radar Sensor in LTCC Technology	Akanksha Bhutani (Karlsruhe Institute of Technology, Germany); Sören Marahrens (Karlsruhe Institute of Technology (KIT), Germany); Benjamin Göttel (Wellenzahl Radar- und Sensortechnik GmbH & Co KG, Germany); Thomas Zwick (Karlsruhe Institute of Technology (KIT), Germany)
Poster Session 2: Mm-wave and UWB propagation	Poster2-P05	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Channel Measurement and Analysis for Polarimetric Wideband Outdoor Scenarios at 26 GHz: Directional Vs Omni-Directional	Sohail Payami (University of Surrey, United Kingdom (Great Britain)); Mohsen Khallily (University of Surrey & 5G Innovation Centre, Institute for Communication Systems (ICS), United Kingdom (Great Britain)); Soheil Taheri (VIAVI Solutions, United Kingdom (Great Britain)); Konstantinos Nikitopoulos (University of Surrey, United Kingdom (Great Britain)); Rahim Tafazolli (University of Surrey, United Kingdom (Great Britain))
Poster Session 2: Mm-wave and UWB propagation	Poster2-P05	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Ray-tracing Based Channel Clustering and Analysis at 28 GHz in Conference Environment	He Ding (Beijing University of Posts and Telecommunications, China); Lei Tian (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, China); Pan Tang (Beijing University of Posts and Telecommunications, China); Li Yu (Beijing University of Posts and Telecommunications, China); Wapeng Zhang (Beijing University of Posts and Telecommunications, China); Tao Jiang (Beijing University of Posts and Telecommunications, China); Jianhua Zhang (Beijing University of Posts and Telecommunications, China)
Poster Session 2: Mm-wave and UWB propagation	Poster2-P05	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	A Comparative Study for Indoor Factory Environments at 4.9 and 28 GHz	Yicheng Guan (Beijing University of Posts and Telecommunications & Key Lab of Universal Wireless Communications, Ministry of Education, China); Jianhua Zhang (Beijing University of Posts and Telecommunications, China); Lei Tian (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, China); Pan Tang (Beijing University of Posts and Telecommunications, China); Tao Jiang (Beijing University of Posts and Telecommunications, China)

Poster Session 2: Mm-wave and UWB propagation	Poster2-P05	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	5G Millimeter-Wave NLOS Coverage Using Specular Building Reflections	Robbert Schulpen (Eindhoven University of Technology, The Netherlands); L. A. (Sander) Bronckers (Eindhoven University of Technology, The Netherlands); A. B. (Bart) Smolders (Eindhoven University of Technology, The Netherlands); Ulf Johannsen (Eindhoven University of Technology, The Netherlands)
Poster Session 2: Mm-wave and UWB propagation	Poster2-P05	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Availability of 7 Km-Long Parallel 18 GHz Band and E-band Links for Multi Band Solutions	Christina Larsson (Ericsson Research & Ericsson AB, Sweden); Lei Bao (Ericsson AB, Sweden)
Poster Session 2: Mm-wave and UWB propagation	Poster2-P05	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Multi-band Characterization of Propagation in Industry Scenarios	Diego Duplex (Ilmenau University of Technology, Germany); Robert Müller (TU Ilmenau, Germany); Markus Landmann (Fraunhofer Institute for Integrated Circuits IIS, Germany); Jian Luo (Huawei Technologies Dusseldorf GmbH, Germany); Giovanni Del Galdo (Fraunhofer Institute for Integrated Circuits IIS & Technische Universität Ilmenau, Germany); Reiner S. Thomä (Ilmenau University of Technology, Germany)
Poster Session 2: Mm-wave and UWB propagation	Poster2-P05	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Indoor mmWave Channel Characterization with Large Virtual Antenna Arrays	Alfred Mudonhi (CEA Leti and Université Catholique de Louvain & Université Grenoble-Alpes, France); Raffaele D'Errico (CEA, LETI, Minatoc Campus & Univ., Grenoble-Alpes, France); Claude Oestges (Université Catholique de Louvain, Belgium)
Poster Session 2: Mm-wave and UWB propagation	Poster2-P05	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Cluster Intensity and Spread Characteristics in Classroom Scenario at 10 and 28 GHz Bands	Panawit Harpinitsak (Tokyo Institute of Technology, Japan); Kentaro Saito (Tokyo Institute of Technology, Japan); Wei Fan (Aalborg University, Denmark); Johannes Hejlsbak (Nokia Bell Labs, Denmark); Jun-ichi Takada (Tokyo Institute of Technology, Japan); Gert Pedersen (Aalborg University, Denmark)
Poster Session 2: Mm-wave and UWB propagation	Poster2-P05	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Pulse Propagation in Human Head: Analysis and Design for UWB Radar Imaging	Amir Hossein Naghavi (Shahed University, Iran); Hamid Reza Hassani (Shahed University, Iran); Daniel Oloumi (Infineon Technologies AG, Villach, Austria)
Poster Session 2: Optimisation methods in EM	Poster2-E04	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Antenna Design Exploration and Optimization Using Machine Learning	Christoph Maeuer (Germany, Germany); Peter William Futter (Altair Development S.A. (Pty) Ltd, South Africa); Gopinath Gampala (Altair Engineering Inc., USA)
Poster Session 2: Optimisation methods in EM	Poster2-E04	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Optimal Beamforming Using Clustered Evolutionary Teaching and Learning	Amirashkan Darvish (Concordia University, Canada); Ahmed Kishk (Concordia University, Canada); Ataollah Ebrahimzadeh (Babol Noshirvani University of Technology, Iran); Samineh Sarbazi Golazari (Concordia University, Canada)
Poster Session 2: Optimisation methods in EM	Poster2-E04	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Fast Globalized Gradient-Based Optimization of Multi-Band Antennas by Means Smart Jacobian Updates and Response Features	Slawomir Koziel (Gdansk University of Technology, Poland); Anna Pietrenko-Dabrowska (Gdansk University of Technology, Poland)
Poster Session 2: Optimisation methods in EM	Poster2-E04	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Low-Cost Design-Oriented Surrogate Modeling of Multi-Band Antennas by Nested Kriging and Response Features	Slawomir Koziel (Gdansk University of Technology, Poland); Anna Pietrenko-Dabrowska (Gdansk University of Technology, Poland)
Poster Session 2: Propagation for vehicular communications	Poster2-P09	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Clustering Performance Evaluation Algorithm for Vehicle-to-Vehicle Radio Channels	Chen Huang (Beijing Jiaotong University, China); Ruizi He (Beijing Jiaotong University, China); Bo Ai (Beijing Jiaotong University & State Key Lab of Rail Traffic Control and Safety, China); Mi Yang (Beijing Jiaotong University, China); Yangli-Ao Geng (Beijing Jiaotong University, China); Zhangdui Zhong (Beijing Jiaotong University, China)
Poster Session 2: Propagation for vehicular communications	Poster2-P09	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Measurements of Reflection and Penetration Losses in Low Terahertz Band Vehicular Communications	Vitaly Petrov (Tampere University, Finland); Johannes M. Eckhardt (Technische Universität Braunschweig, Germany); Dmitri Molchanov (Tampere University, Finland); Yevgeni Kouchevay (Tampere University, Finland, Finland); Thomas Kürner (Technische Universität Braunschweig, Germany)
Poster Session 2: Propagation for vehicular communications	Poster2-P09	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	In-Stationary Tapped Delay Line Channel Modeling and Simulation	Nina Hassan (Ilmenau University of Technology, Germany); Reiner S. Thomä (Ilmenau University of Technology, Germany); David W Matolak (University of South Carolina, USA)
Poster Session 2: Propagation for vehicular communications	Poster2-P09	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	On the Second Order Statistics of 3D Non-Stationary UAV Channels Allowing Velocity Variations	Yawen Wang (Nanjing University of Aeronautics and Astronautics, China); Neng Cheng (Nanjing University of Aeronautics and Astronautics, China); Xiaomin Chen (Nanjing University of Aeronautics and Astronautics, China); Wei Fan (Aalborg University, Denmark); Qiuming Zhu (Nanjing University of Aeronautics and Astronautics, China); Wei Zhi Zhong (Nanjing University of Aeronautics and Astronautics, China)
Poster Session 2: Propagation for vehicular communications	Poster2-P09	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Modeling and Simulation for UAV Air-to-Ground mmWave Channels	Lele Cheng (Nanjing University of Aeronautics and Astronautics, China); Qiuming Zhu (Nanjing University of Aeronautics and Astronautics, China); Cheng-Xiang Wang (Southeast University & Heriot-Watt University, China); Wei Zhi Zhong (Nanjing University of Aeronautics and Astronautics, China); Boyu Hua (Nanjing University of Aeronautics and Astronautics, China); Shan Jiang (Nanjing University of Aeronautics and Astronautics, China)
Poster Session 2: Propagation in biological tissues and body-area propagation	Poster2-P10	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Pathloss Calculation for Fat-Intra Body Communication Using Poynting Vector Theory	Javad Ebrahimzadeh (University of Uppsala, Sweden); Seyed Abbas Akbarzadeh Jahromi (University of Tehran, Sweden); Mauricio D Perez (Uppsala University & National Technological University, Sweden); Robin Augustine (Uppsala University, Sweden)
Poster Session 2: Propagation in biological tissues and body-area propagation	Poster2-P10	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Verification of a Simplified Channel Modeling Technique for Ultra Wideband In-Body Communication with Simulations	Jan-Christoph Brumm (Hamburg University of Technology, Germany); Gerhard Bauch (Hamburg University of Technology, Germany)
Poster Session 2: Propagation in biological tissues and body-area propagation	Poster2-P10	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	A Low Cost Stable Adipose Phantom for Microwave Breast Cancer Investigation	Akinola Eesuola (University of Kent, United Kingdom (Great Britain))
Poster Session 2: Propagation in biological tissues and body-area propagation	Poster2-P10	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Compact Honey-Cell CSRR-based Microwave Biosensor for Monitoring Glucose Levels	Ala Eldin Omer (University of Waterloo, Canada); George Shaker (University of Waterloo & Spark Tech Labs, Canada); Safieddin Safawi Naeini (University of Waterloo, Canada); Hamid Kokabi (Laboratory of Electronics and Electromagnetism (L2E), Sorbonne University, Canada); Georges Alquié (UPMC, France); Frederique Frederique Deshours (Laboratory of Electronics and Electromagnetism (L2E), Sorbonne University, France)
Poster Session 2: Propagation in biological tissues and body-area propagation	Poster2-P10	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Propagation Analysis for an Implanted Antenna Model at Pancreas	Konstantina Zarafeta (University of Patras, Greece); Stavros Koulouridis (University of Patras, Greece); Stavros Kotsopoulos (Wireless Telecommunications Laboratory, Greece)
Poster Session 2: Propagation in biological tissues and body-area propagation	Poster2-P10	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	A Preliminary Analysis of User's Body Impact on Signal Polarization in WBANs	Kenan Turbic (INESC-ID / IST, University of Lisbon, Portugal); Mariella Särestöniemi (Erikki Koiso-Kanttilan katu 1 & Center for Wireless Communication, University of Oulu, Finland); Matti Hämmäläinen (University of Oulu, Finland); Timo Kumpulainen (University of Oulu, Finland); Luis M. Correia (IST/INESC-ID - University of Lisbon & INESC, Portugal)
Poster Session 2: Propagation in biological tissues and body-area propagation	Poster2-P10	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Automated Measurement Setup for the On-body Link of Wireless Body Area Networks	Andreas Pfrommer (Sivantos GmbH, Germany); Martin Schmidt (Sivantos GmbH, Germany)
Poster Session 2: Propagation in biological tissues and body-area propagation	Poster2-P10	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Procedure for Simulating the Direct Path Loss Between Body-Worn Antennas	Oleksandr Rybalko (Oticon A/S, Denmark); Jens Troelsen (Oticon A/S, Denmark); Rune Sø (Oticon A/S, Denmark); Morten Thougard (Oticon A/S, Denmark)
Poster Session 2: Radar, localisation, and sensing	Poster2-P12	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Evolution of the Image Quality over Time for a Freehand Monostatic mm-Wave Radar Imager	Guillermo Alvarez Nariandi (University of Oviedo, Spain); Jaime Laviada (Universidad de Oviedo, Spain); Fernando Las-Heras (University of Oviedo, Spain)
Poster Session 2: Radar, localisation, and sensing	Poster2-P12	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Extracting the Features of the Shallowly Buried Objects Using LeNet Convolutional Network	Mostafa Elsaadouny (Ruhr-Universität Bochum, Germany); Jan Barowski (Ruhr-Universität Bochum, Germany); Ilona Rolles (Ruhr-Universität Bochum, Germany)
Poster Session 2: Radar, localisation, and sensing	Poster2-P12	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Two-dimensional OAM Radar Imaging Using Uniform Circular Antenna Arrays	Yanzhi Zeng (Chongqing University of Posts and Telecommunications, China); Yang Wang (Chongqing University of Posts and Telecommunications, China); Zhihui Chen (Chongqing University of Posts and Telecommunications, China); Jiliang Zhang (The University of Sheffield, United Kingdom (Great Britain)); Jie Zhang (University of Sheffield, Dept. of Electronic and Electrical Engineering, United Kingdom (Great Britain))
Poster Session 2: Radar, localisation, and sensing	Poster2-P12	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Super-Resolution DOA Estimation Using Dynamic Metasurface Antenna	Shengyao Chen (Nanjing University of Science and Technology, China); Boyu Sima (Nanjing University of Science and Technology, China); Feng Xi (Nanjing University of Science and Technology, China); Wen Wu (Nanjing University of Science & Technology, China); Zhong Liu (NUST, China)

Poster Session 2: Radar, localisation, and sensing	Poster2-P12	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Intensity-only Imaging Using Broadband Correlations in Reverberation Chambers	Philipp del Hougne (Institut de Physique de Nice, France); Philippe Besnier (IETR, France); Fabrice Mortessagne (Institut de Physique de Nice, France); Ulrich Kuhl (Institut de Physique de Nice, France); Olivier Legrand (Institut de Physique de Nice, France); Matthieu Davy (IETR, Université de Rennes 1, France, France)
Poster Session 2: Radar, localisation, and sensing	Poster2-P12	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Experimental Results on Rain Detection at Ka-Band Based on Range-Doppler Signal Processing	Ashkan Taremi Zadeh (Goethe University Frankfurt am Main, Germany); Moritz Mälzer (Goethe University Frankfurt am Main, Germany); Jonas Simon (Goethe University Frankfurt am Main, Germany); Sebastian Beck (Goethe-University Frankfurt, Germany); Jochen Moll (Goethe University Frankfurt am Main, Germany); Viktor Krozer (Goethe University of Frankfurt am Main, Germany)
Poster Session 2: Radar, localisation, and sensing	Poster2-P12	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Estimation of the Number of Persons in a Reverberant Environment Using Bistatic Radar	Marwan Yusuf (Ghent University, Belgium); Brecht De Beelde (Ghent University & IMEC, Belgium); Emmeric Tanghe (Ghent University, Belgium); Eli De Poorter (Ghent University & Imec, Belgium); Luc Martens (Ghent University - imec, Belgium); Pierre Laly (University of Lille, France); Davy P Gaillot (University of Lille, France); Martine Liénard (University of Lille, France); Wout Joseph (Ghent University/IMEC, Belgium)
Poster Session 2: Radar, localisation, and sensing	Poster2-P12	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Simulation Validation of High Resolution Indoor Terahertz Synthetic Aperture Radar Imaging	Aman Batra (University of Duisburg-Essen, Germany); Michael Wiemeler (Universität Duisburg-Essen, Germany); Diana Goehringer (Technische Universität Dresden, Germany); Thomas Kaiser (Universität Duisburg-Essen, Germany)
Poster Session 2: Radar, localisation, and sensing	Poster2-P12	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Temporal-Range-Doppler Features Interpretation and Recognition of Hand Gestures Using mmW FMCW Radar Sensors	Guiluan Zhang (Harbin Institute of Technology, China); Shengchang Lan (Harbin Institute of Technology, China); Kang Zhang (Harbin Institute of Technology, China); Linting Ye (Harbin Institute of Technology, China)
Poster Session 2: Radar, localisation, and sensing	Poster2-P12	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Human Motion Detection Using Planar Array FMCW Radar Through 3D Point Clouds	Ibrahim Alnujaim (California State University, Fresno, USA); Ikmo Park (Ajou University, Korea (South)); Youngwook Kim (California State University, Fresno, USA)
Poster Session 2: Radar, localisation, and sensing	Poster2-P12	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Data Transfer and Communication in Radar Networks	Peter Müller (Fraunhofer FHR, Germany); Matthias Weiß (Fraunhofer FHR, Germany); Stephan Sandenbergh (Fraunhofer FHR, Germany); Daniel O Hagan (Fraunhofer FHR, Germany); Peter Knott (Fraunhofer FHR, Germany)
Poster Session 2: Radio science and remote sensing	Poster2-P13	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Wideband Superconducting Integrated Filter-bank for THz Astronomy	Alejandro Pascual Laguna (Delft University of Technology & SRON, The Netherlands); Kenichi Karatsu (SRON, The Netherlands); David Thoen (Kavli Institute of NanoScience, Delft University of Technology, The Netherlands); Vignesh Murugesan (SRON, The Netherlands); Akira Endo (Delft University of Technology, The Netherlands); Jochem Baselmans (SRON, The Netherlands)
Poster Session 2: Radio science and remote sensing	Poster2-P13	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	On the Use of Adjoint Methods for Refractivity Estimation in the Troposphere	Uggar Karabag (ENAC & ISAE-SUPAERO, France); Youssef Diouane (ISAE-SUPAERO, France); Rémi Douvenot (ENAC, France)
Poster Session 2: Radio science and remote sensing	Poster2-P13	Propagation	18 Mar 2020	Exhibition Hall	13:20	13:20	Monitoring the Greenland and Antarctica Ice Sheets Using Ultra-Low-Frequency Electromagnetic Resonances	Alexander G. Voronovich (325 Broadway & NOAA/Earth System Research Laboratory, USA)
Poster Session 2: Scattering and diffraction	Poster2-E06	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Depolarization Due to Wedge Diffraction in Satellite Radiowave Communication	Ankit Regmi (University of Oulu, Finland); Md. Rafiqul Islam (University of Oulu, Finland); Aarno Pärssinen (University of Oulu, Finland); Markus Berg (University of Oulu & Excellant Ltd., Finland)
Poster Session 2: Scattering and diffraction	Poster2-E06	Electromagnetics	18 Mar 2020	Exhibition Hall	13:20	13:20	Rotation of the Polarization Plane by Grooved Flanges in a Circular Waveguide	Anatoliy Kirilenko (O. Ya. Usikov Institute for Radiophysics and Electronics NASU & V. N. Karazin Kharkiv National University, Ukraine); Sergiy Steshenko (O. Ya. Usikov Institute for Radiophysics and Electronics NASU, Ukraine); Vadim Derkach (O. Ya. Usikov Institute for Radiophysics and Electronics NASU, Ukraine); Yevhenii Ostryzhnyi (O. Ya. Usikov Institute for Radiophysics and Electronics NASU, Ukraine)
Poster Session 2: Slotted-waveguide and leaky-wave antennas	Poster2-A10	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	The Slotted Waveguide Array Antenna with Reflection Canceling Stairs in Millimeter Waveband	Wenbo Liu (Graduate School of Engineering, Takushoku University, Japan); Yasuhiro Tsunemitsu (Takushoku University, Japan)
Poster Session 2: Slotted-waveguide and leaky-wave antennas	Poster2-A10	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Electronic Beam Scanning Leaky-Wave Antenna Based on Delta Shape Half-Mode Substrate Integrated Waveguide	Nima Javanbakht (Carleton University, Canada); Barry Syrett (Carleton University, Canada); Rony E. Amaya (Carleton University, Canada); Jafar Shaker (Communications Research Centre Canada, Canada)
Poster Session 2: Slotted-waveguide and leaky-wave antennas	Poster2-A10	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Quasi-Periodic Leaky-Wave Antenna Based on Substrate Integrated Waveguide and Liquid Crystal Technologies	Anastasis C Polycarpou (University of Nicosia, Cyprus)
Poster Session 2: Slotted-waveguide and leaky-wave antennas	Poster2-A10	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Design of an Array of Stacked Groove Gap Waveguide Leaky-Wave Antennas in the Ka Band	Nafsika Memeletzoglou (University Carlos III of Madrid, Spain); Eva Rajo-Iglesias (University Carlos III of Madrid, Spain)
Poster Session 2: Slotted-waveguide and leaky-wave antennas	Poster2-A10	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A Novel Circularly-Polarized T-shaped Slot Array Antenna in Ka-band	Miguel Ferrando-Rocher (Universitat Politècnica de València, Spain); José Ignacio Herranz-Herruzo (Universidad Politécnica de Valencia, Spain); Daniel Sánchez-Escuderos (Universitat Politècnica de València, Spain); Alejandro Valero-Nogueira (Universidad Politécnica de Valencia, Spain)
Poster Session 2: Slotted-waveguide and leaky-wave antennas	Poster2-A10	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	A Low-Profile Millimeter-Wave Circularly-Polarized Multilayer Waveguide Antenna Array for Satellite Communication Application	Hong-Tao Zhang (NO. 38 Research Institute of CETC, China); Wei Wang (No. 38 Research Institute of CETC, China); Guan-Long Huang (Shenzhen University, China); Yongqing Zou (East China Research Institute of Electronic Engineering (ECRIE), China)
Poster Session 2: Slotted-waveguide and leaky-wave antennas	Poster2-A10	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Practical Design of Radiating Part of Post-Wall Waveguide-Fed Parallel Plate Slot Array Antenna by Method of Moments	Koh Hashimoto (Toshiba Corporation, Japan); Makoto Higaki (Toshiba Corporation, Japan)
Poster Session 2: Slotted-waveguide and leaky-wave antennas	Poster2-A10	Antennas	18 Mar 2020	Exhibition Hall	13:20	13:20	Electronically-Tunable Scanning Antennas by Using Slotted Rectangular Waveguides Loaded by Reconfigurable Surface Susceptances	Santi Concetto Pavone (Università degli Studi di Catania, Italy); Loreto Di Donato (University of Catania, Italy); Gino Sorbello (University of Catania, Italy)
Poster Session 3: Active and integrated antennas	Poster3-A14	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Reconfigurable Antenna Array with Active Integrated Switching Network for 5G Communication	Tingting Fan (Shanghai Jiao Tong University, China); Ronghong Jin (Shanghai Jiao Tong University, China); Ziheng Ding (Shanghai Jiao Tong University, China)
Poster Session 3: Active and integrated antennas	Poster3-A14	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Post-Manufacturing Calibration Procedure for Medium-Sized Silicon-Based Active Phased Arrays for mm-Wave Wireless Communications	Antonius Johannes van den Biggelaar (Eindhoven University of Technology, The Netherlands); Niels Vertegaal (Eindhoven University of Technology, The Netherlands); Ulf Johannsen (Eindhoven University of Technology, The Netherlands); Marcel Geurts (NXP Semiconductors, The Netherlands); A. B. (Bart) Smolders (Eindhoven University of Technology, The Netherlands)
Poster Session 3: Active and integrated antennas	Poster3-A14	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Hybrid Beamforming-Based Transceiver with Antenna in Package for Millimeter-Wave Small Cell	Ruiheng Zhang (Shanghai University, China); Guangli Yang (Shanghai University, China)
Poster Session 3: Active and integrated antennas	Poster3-A14	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Frequency Reconfigurable Self-oscillating Active Integrated Antenna Using Metamaterial Resonators and Diode Switches	Tzyh-Ghuang Ma (National Taiwan University of Science and Technology, Taiwan); Huy Nam Chu (National Taiwan University of Science and Technology, Taiwan); You-Jiun Wang (National Taiwan University of Science and Technology, Taiwan)
Poster Session 3: Active and integrated antennas	Poster3-A14	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Compact and Broadband Four-Way Dual Polarization Waveguide Power Divider for Antenna Arrays	Charalampos Stoumpos (Thales Alenia Space & Heriot-Watt University, France); Jean Philippe Frayssé (Thales Alenia Space, France); Ségolène Tubau (Thales Alenia Space, France); George Goussetis (Heriot-Watt University, United Kingdom (Great Britain)); Ronan Saeleau (University of Rennes 1, France); Hervé Legay (Thales Alenia Space, France)
Poster Session 3: Active and integrated antennas	Poster3-A14	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Integration of Circularly Polarized Microstrip Slot Array Antenna with Amorphous Silicon Solar Cells	Zheng Zhang (the School of Aerospace Science and Technology, Xidian University, China); Li Xiaoping (Xidian University, China); Bowen Bai (the School of Aerospace Science and Technology, Xidian University, China); Yanchao Zhang (Xidian University, China); Yanming Liu (Xidian University, China); Chao Sun (the School of Aerospace Science and Technology, Xidian University, China)
Poster Session 3: Active and integrated antennas	Poster3-A14	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	AMOLED In-Display Antennas	Senglee Foo (Huawei Technologies Canada, Canada)

Poster Session 3: Active and integrated antennas	Poster3-A14	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Transmit and Receive Module with a Fully-Digital Interface	Yasuaki Wada (Toshiba Infrastructure Systems & Solutions Corporation & Komukai Complex, Japan); Koji Fujita (Toshiba Infrastructure Systems & Solutions Corporation & Komukai Complex, Japan); Yoshinori Kuji (Toshiba Infrastructure Systems & Solutions Corporation & Komukai Complex, Japan); Masaki Iwasaki (Toshiba Infrastructure Systems & Solutions Corporation & Komukai Complex, Japan); Tomohide Mizuno (Toshiba Infrastructure Systems & Solutions Corporation & Komukai Complex, Japan); Masahiro Tanabe (Toshiba Infrastructure Systems & Solutions Corporation, Japan)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Novel Frequency Reconfigurable Yagi-Like MIMO Antenna System	Syed Jehangir (United Arab Emirates University, United Arab Emirates); Rifaqat Hussain (KFUPM, Saudi Arabia); Mohammad S. Sharawi (Polytechnique Montreal, Canada)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Beam Steerable Resonant Cavity Antenna Based on Tunable Partially Reflective Surface	Shufeng Zheng (Xidian University, China); Fan Di (Xidian University, China); Na Zhou (Xidian University, China); Le Kang (Xidian University, China); Muhammad Wasif Niaz (Northwestern Polytechnical University, China)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Ultra Wideband Frequency Reconfigurable Antenna for Wireless Systems	Banu Didem Alkas (Istanbul Technical University, Turkey); Ozgur Ozdemir (Istanbul Technical University, Turkey)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Mechanically Circular Polarization Reconfigurable Antenna	Jeen-Sheen Row (National Changhua University of Education, Taiwan); Po-Kai Wang (National Changhua University of Education, Taiwan)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A New Beam-Steering Antenna with Variable Gain	Ghada Elzwawi (EMT-INRS, Canada); Rabela Alwahishi (INRS, Canada); Tayeb A. Denidni (INRS-EMT, Canada)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Single-Layer Planar Antenna Unaffected by a Possibly Close-by Metal Surface	Serafin Benedikt Fischer (University of Stuttgart, Germany); Jan Hesselbarth (University of Stuttgart, Germany, Germany)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Reconfigurable SRR Antenna	Kammel Rachedi (Institut Langevin ESPCI Paris CNRS, France); Julien de Rosny (CNRS, ESPCI Paris, PSL Research University, France); Abdelwaheb Ourir (Institut Langevin ESPCI Paris CNRS, France); Dinh-Thuy Phan-Huy (Orange-France Telecom, France); Yvan Kokar (IETR-NSA Rennes, France)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Compact Pattern Reconfigurable Antenna for UHF Internet of Things Applications	Saeed A. Haydhah (King Fahad University of Petroleum and Minerals, Saudi Arabia); Fabien Ferrero (University Nice Sophia Antipolis, CNRS, LEAT & CREMANT, France); Leonardo Lizi (University Côte d'Azur, CNRS, LEAT, France); Azzedine Zerguine (KFUPM, Saudi Arabia); Mohammad S. Sharawi (Polytechnique Montreal, Canada)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Miniaturization of ESPAR Antenna Using Low-Cost 3D Printing Process	Mateusz Czelen (Gdansk University of Technology, Poland); Mateusz Rzymowski (Gdansk University of Technology & WiComm Center of Excellence, Poland); Krzysztof Nyka (Gdansk University of Technology, Poland); Lukasz Kulas (Gdansk University of Technology, Faculty of Electronics, Telecommunications and Informatics, Poland)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Design of Compact Superdirective and Reconfigurable Array Antenna Associated with Non-Foster Elements for IoT	Jean Marc Ribero (Université Côte d'Azur & CNRS, LEAT, France); Aliou Diallo (Université Côte d'Azur- LEAT- CNRS, France); Souai Sana (University of Tunis ELMAHAR & Sophia Antipolis Nice University, Tunisia); Taoufik Aguil (Laboratoire des Systèmes de Communications, Tunisia)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Concept of Pattern-Reconfigurable Single-Element Antenna Based on Half-Mode Substrate-Integrated Cavity	Feng-Xue Liu (Jiangsu Normal University & Southeast University, China); Wenbin Dou (Southeast University & State Key Of MMW, Southeast University, China); Jie Cui (Jiangsu Vocational Institute of Architectural Technology, China); Shenglian Jammy Chen (The University of Adelaide, Australia); Christophe Fumeaux (The University of Adelaide & School of Electrical and Electronic Engineering, Australia)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Sectoral Conformal Array Antenna with an Improved Circular Polarized Patch for UHF Radiosonde Receivers	Farhad Ghorbani (K. N. Toosi University of Technology, Iran); Hadi Aliaikbarian (K. N. Toosi University of Technology, Iran); Mehdi Shiriachian (Amirkabir University of Technology, Iran); Gholamreza Moradi (Amirkabir University of Technology, Iran)
Poster Session 3: Adaptive and reconfigurable antennas	Poster3-A13	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Microstrip Tunable Antenna Based on Commercial Graphene Nanoplatelets	Muhammad Yasir (Politecnico di Torino, Italy); Patrizia Savi (Politecnico di Torino, Italy)
Poster Session 3: Additive manufacturing	Poster3-A21	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	3D Printed Helix Antenna for 77 GHz	Konstantin Lomakin (Friedrich-Alexander University, Germany); Mark Sippel (Friedrich-Alexander University, Germany); Ingrid Ullmann (Institute of Microwaves and Photonics, Germany); Klaus Helmreich (Universität Erlangen-Nürnberg, Germany); Gerald Gold (FAU Erlangen-Nürnberg, Germany)
Poster Session 3: Additive manufacturing	Poster3-A21	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Direct-Write Dispenser Printing for Rapid Antenna Prototyping on Thin Flexible Substrates	Mahmoud Wagih (University of Southampton, United Kingdom (Great Britain))
Poster Session 3: Additive manufacturing	Poster3-A21	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Self-Sustained Biconical Antenna Realized in Additive Manufacturing Technology	Alessandro Calcaterra (Eletttronica Group, Italy); Domenico Gaetano (Eletttronica Group, Italy); Christian Canestri (Eletttronica Group, Italy); Pietro Bia (Eletttronica Group, Italy); Cosmo Mitrano (Eletttronica Group, Italy)
Poster Session 3: Additive manufacturing	Poster3-A21	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Ultra-broadband Multilayer Microwave Absorber by Multimaterial 3D Printing	Thi Quynh Van Hoang (Thales Research & Technology, France); Brigitte Loiseaux (Thales Research & Technology, France)
Poster Session 3: Additive manufacturing	Poster3-A21	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Temperature Characterization of High-Q Resonators of Different Materials for mm-Wave Indoor Localization Tag Landmarks	Alejandro Jiménez-Sáez (Technische Universität Darmstadt, Germany); Martin Schöbler (TU Darmstadt, Germany); Damian Pandel (University of Duisburg-Essen, Germany); Christopher Krause (Fraunhofer IMS, Germany); Yixiong Zhao (Fraunhofer-Institut für Mikroelektronische Schaltungen und Systeme IMS, Germany); Gerd vom Bögel (Fraunhofer IMS, Germany); Niels Benson (Institute for Nanostructures and Technology (NST), University of Duisburg-Essen, Germany); Rolf Jakoby (Institute for Microwave Engineering and Photonics, Technische Universität Darmstadt, Germany)
Poster Session 3: Additive manufacturing	Poster3-A21	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Conformal Spherical DRA for MEO Applications in Ka-band Realized with Additive Manufacturing	Valerio Panaro (Airbus Italia S.p.A., Italy); Giovanni Toso (European Space Agency, ESA ESTEC, The Netherlands); Esteban Menargues (SWISSto12, Switzerland); Alfredo Catalani (European Space Agency – ESTEC, Noordwijk, The Netherlands, Italy)
Poster Session 3: Additive manufacturing	Poster3-A21	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Simulation of Effective Medium Theory for Additive Manufacturing of Dielectric Media	Gregory A Mitchell (Army Research Laboratory, USA); Quang Nguyen (United States CCDC Army Research Laboratory, USA); Theodore K Anthony (US Army Research Laboratory, USA)
Poster Session 3: Antennas for wireless power transmission and harvesting	Poster3-A20	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Waveform Optimization for Efficiency Improvement of Traditional RF-to-dc Rectifiers Without Input Matching Network	Viet-Duc Pham (University Paris-Est Marne-la-Vallée, France); Hakim Takhedmit (Paris-Est Marne-la-Vallée University, France); Laurent Cirio (Université de Paris-Est Marne-la-Vallée, France)
Poster Session 3: Antennas for wireless power transmission and harvesting	Poster3-A20	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Impact of Multisine and RF Pulse Signals on the Efficiency of Different Rectifier Topologies for WPT	Viet-Duc Pham (University Paris-Est Marne-la-Vallée, France); Hakim Takhedmit (Paris-Est Marne-la-Vallée University, France); Laurent Cirio (Université de Paris-Est Marne-la-Vallée, France)
Poster Session 3: Antennas for wireless power transmission and harvesting	Poster3-A20	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Dual-Port, Dual-Polarized and Wideband Slot Rectenna for Ambient RF Energy Harvesting	Saqer S Alja'afreh (Mutah University, Jordan); Chaoyun Song (University of Liverpool, United Kingdom (Great Britain)); Yi Huang (The University of Liverpool, United Kingdom (Great Britain)); Lei Xing (Nanjing University of Aeronautics and Astronautics, United Kingdom (Great Britain)); Qian Xu (Nanjing University of Aeronautics and Astronautics, China)
Poster Session 3: Antennas for wireless power transmission and harvesting	Poster3-A20	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Gain-Enhanced Vivaldi Array Antenna with Corrugated Slots on Both Edges for Microwave Power Transmission	Sol Kim (KAIST, Korea (South)); Jeong-Wook Kim (KAIST, Korea (South)); Kwang-Seok Kim (Korea Advanced Institute of Science and Technology, Korea (South)); Jong-Won Yu (KAIST, unknown)
Poster Session 3: Antennas for wireless power transmission and harvesting	Poster3-A20	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	High-Efficiency Rectifiers with Wide Input Power Range and Application on Powering Wireless Sensors	Xiujin Zhang (South China University of Technology, China); Jun-Hui Ou (South China University of Technology, China); Mo Huang (University of Macau, China)

Poster Session 3: Conformal antennas	Poster3-A06	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Green Coordinates for Generation of Conformal Antenna Geometries	Ekmek Altinozen (George Green Institute for Electromagnetics Research & Nottingham University, United Kingdom (Great Britain)); Harrison Ian (University of Nottingham, United Kingdom (Great Britain)); Ana Vukovic (University of Nottingham, United Kingdom (Great Britain)); Phillip Sewell (University of Nottingham, United Kingdom (Great Britain))
Poster Session 3: Conformal antennas	Poster3-A06	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Element Positioning Effect on the Performance of Conformal Arrays: Synthesis and Diagnostics	Giovanni Leone (Università della Campania Luigi Vanvitelli, Italy); Fortuna Munno (Università della Campania Luigi Vanvitelli, Italy); Rocco Pierri (Università della Campania Luigi Vanvitelli, Italy)
Poster Session 3: Conformal antennas	Poster3-A06	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Design and Evaluation of a Radio-Interferometry Antenna for the REXUS 25 Sounding Rocket	Ivar Jansen (Eindhoven University of Technology, The Netherlands); Ronis T. Maximidis (Eindhoven University of Technology, The Netherlands); Mark Wijnvliet (Eindhoven University of Technology, The Netherlands); A. B. (Bart) Smolders (Eindhoven University of Technology, The Netherlands)
Poster Session 3: Conformal antennas	Poster3-A06	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Power Allocation Optimization of A Conformal Antenna Array for Satellite Applications	Yijun Zhou (I2R, Singapore); Xianming Qing (Institute for Infocomm Research, Singapore); N Nasimuddin (Institute for Infocomm Research, Singapore); Terence S.P. See (Institute for Infocomm Research, Singapore); Chan Kuen Sim (Institute for Microelectronics, A*Star, Singapore); Yunjia Zeng (Institute for Infocomm Research, Singapore); Guan Seng Ngo (Addvalue Innovation Pte Ltd, Singapore)
Poster Session 3: Conformal antennas	Poster3-A06	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Spherical Harmonic Theory Investigations for Spherical Antenna Arrays	Leonidas Marantis (University of Piraeus, Greece); Paul Brennan (University College London, United Kingdom (Great Britain)); Athanasios G. Kanatas (University of Piraeus, Greece)
Poster Session 3: Conformal antennas	Poster3-A06	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Design of Multiband Conformal Antenna for Sounding Rocket	Unai Beskoetxea (Anter, Spain); JuanCarlos Iriarte (Public University of Navarra & Antenna Group, Spain); Iñigo Eddera (Universidad Pública de Navarra & Institute of Smart Cities, Universidad Pública de Navarra, Spain); Itziar Maestrujoán (Anter, Spain)
Poster Session 3: Conformal antennas	Poster3-A06	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Rapid Analysis of Arbitrary-Shaped Conformal Beam-Scanning Arrays	Denys Nikolaev (École Polytechnique Fédérale de Lausanne, Switzerland); Agnese Mazinghi (University of Florence, Italy); Anja K. Skriver (EPFL, Switzerland)
Poster Session 3: Conformal antennas	Poster3-A06	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Conformal 2.4 GHz Antenna with Room Temperature Vulcanized (RTV) Silicone Rubber Substrate	Denis Le Goff (National University of Singapore, Singapore); Yuchan Song (National University of Singapore, Singapore); Ghilsain Riondet (National University of Singapore, Singapore); Koen Mouthana (National University of Singapore, Singapore)
Poster Session 3: General antenna measurements	Poster3-M10	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Beam Optimization for 28 GHz Phased Array Utilizing Measurement Data	Mikko Leino (Aalto University, Finland); Jan Bergman (Aalto University, Finland); Juha Ala-Laurinaho (Aalto University, Finland); Ville Viikari (Aalto University & School of Electrical Engineering, Finland)
Poster Session 3: General antenna measurements	Poster3-M10	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Comparison of Antenna Radiation Efficiency Measurement Techniques in Reverberation Chamber Using or Not a Reference Antenna	Wafa Krouka (Université Paris-Est & ESYCOM, France); Francois Sarrazin (University of Paris-Est-Marne-la-Vallée & ESYCOM, France); Jérôme Sol (INSA Rennes, France); Philippe Besnier (IETR, France); Elodie Richalot (Université Paris-Est (Marne-la-Vallée), France)
Poster Session 3: General antenna measurements	Poster3-M10	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Numerical Study of Chebyshev RF Absorber Arrangements Versus Tilted RF Absorber Pyramids	Vince Rodriguez (NSI-MI Technologies, LLC & University of Mississippi, USA)
Poster Session 3: General antenna measurements	Poster3-M10	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Robot-based Calibration of Multi-GNSS Receiver Antennas Using Real Satellite Signals	Johannes Kröger (Leibniz Universität Hannover, Germany); Yannick Brevé (Leibniz Universität Hannover, Germany); Tobias Kersten (Leibniz Universität Hannover, Germany); Steffen Schön (Leibniz Universität Hannover, Germany)
Poster Session 3: General antenna measurements	Poster3-M10	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	SSEEM - An Innovative Spread Spectrum System for SatCom Antenna Radiation Patterns Measurements	Marco Andrenacci (MBI, Italy); Riccardo Andreotti (MBI Srl, Italy); Claudia Casali (M.B.I., Italy); Michele Gammone (M.B.I., Italy); Leonardo Nanna (M.B.I., Italy); Alessandro Le Pera (Eutelsat S.A., France); Fritz Schurig (Eutelsat S.A., France); Daniele V. Finocchiaro (Eutelsat S.A., France)
Poster Session 3: General antenna measurements	Poster3-M10	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	L/S & C Band Medium Gain Ridge Horn Intercomparison Campaign Results	Maria Alberica Saporetti (Microwave Vision Italy, Italy); Lars Foged (Microwave Vision Italy, Italy); Antonis A Alexandridis (NCSR Demokritos, Greece); Isabel Expósito (University of Vigo, Spain); Cosme Cullotta-Lopez (RWTH Aachen University, Germany); Bengt Svensson (Saab AB, Sweden); Ana Arboleya (Universidad Rey Juan Carlos, Spain); Martin Böttcher (IMST GmbH, Germany); Manuel Sierra-Castañer (Universidad Politécnica de Madrid, Spain)
Poster Session 3: General antenna measurements	Poster3-M10	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Electric Field Analysis and Measurement for a Resistively Loaded Monocone	Jiang Tingyong (EPFL, Switzerland); Wang Xiaojia (Northwest Institute of Nuclear Technology, China); Zhou Heng (Northwest Institute of Nuclear Technology, Switzerland)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Miniaturization of Base-station Antenna Element Using Non-uniform Meta-surface	Yuwei Qiu (Northwestern Polytechnical University, China); Hailiang Zhu (Northwestern Polytechnical University, China); Jinliang Bai (National Key Laboratory of Test Physics and Numerical Mathematics, China); Pei Zheng (National Key Laboratory of Science and Technology on Test Physics and Numerical Mathematics, China); Gao Wei (Northwestern Polytechnical University, China)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Mechanically Tunable MTM-EBG-based Bandstop Filter	Jacob A Brown (University of Alberta, Canada); Ashwin K. Iyer (University of Alberta, Canada)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Wideband Vertically Polarized Dual-Beam Antenna Using Modulated Metasurfaces	Ali Mohammad Hakimi (Iran University of Science and Technology, Iran); Homayoon Oraizi (Iran University of Science and Technology, Iran); Ali Keivani (Iran University of Science and Technology, Iran); Amrollah Amini (Iran University of Science and Technology, Iran)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Ultra Wideband Dual Polarization Metamaterial Absorber for 5G Frequency Spectrum	Majid Amiri (University of Technology Sydney, Sydney, Australia, Australia); Farzad Tofigh (University of Technology Sydney, Australia); Negin Shariati (University of Technology Sydney, Australia); Justin Lipman (University of Technology Sydney (UTS), Australia); Mehran Abohasan (University of Technology Sydney, Australia)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	A Hybrid SSPPs-EBG Filter with Glide Symmetry for 5G Applications	Marzieh SalarRahimi (KU Leuven, Belgium); Guy Vandenbosch (Katholieke Universiteit Leuven (KU Leuven), Belgium)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	A Compact Mass-producible E-band Bandpass Filter Based on Multi-layer Waveguide Technology	Abbas Vosoogh (Metasum AB, Sweden); Astrid Algaba Brazález (Ericsson Research, Ericsson AB, Sweden); Yinggang Li (Ericsson AB, Sweden); Zhongxia Simon He (Chalmers University of Technology & Microwave Electronic Lab, Sweden)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	All-Dielectric Huygens' Metasurface Pair for mm-Wave Circularly-Polarized Beam-Forming	Mohamed K. Emara (Carleton University, Canada); Takashi Tomura (Tokyo Institute of Technology, Japan); Jiro Hirokawa (Tokyo Institute of Technology, Japan); Shulabh Gupta (Carleton University, Canada)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	THz Power Divider Based on Self-Complementary Metasurface	Andrey Sayanskiy (ITMO University, Russia); Vladimir Lenets (ITMO University, Russia); Sergei A. Kuznetsov (Rzhanov Institute of Semiconductor Physics SB RAS, Russia); Stanislav Glybovski (ITMO University, Russia); Juan Domingo Baena (Universidad Nacional de Colombia, Colombia)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Wideband Substrate Integrated Luneburg Lens Using Glide-Symmetric Technology	Lei Wang (Heriot-Watt University, United Kingdom (Great Britain))
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Labyrinth Absorber Based on Metageometries Metasurface for Fungi Detection	Irati Jáuregui-López (Universidad Pública de Navarra, Spain); Pablo Rodríguez-Ulibarri (Asociación de Industria Navarra, Spain); Sergei A. Kuznetsov (Rzhanov Institute of Semiconductor Physics SB RAS, Russia); Miguel Beruete (Universidad Pública de Navarra, Spain)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Flat Meta-Reflector for Broadband Circularly Polarized Parabolic Antenna	Vivien Tavernier (LEME, UPL, Univ Paris Nanterre, France); Badreddine Ratni (Univ Paris Nanterre, France); Alexandre Piche (Airbus Defence and Space, France); Shah Nawaz Burukur (LEME, France)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Study of Broadband/Dual-band Stack Prism Absorber	Chao Gu (Queen's University Belfast, United Kingdom (Great Britain)); Vincent Fusco (Queen's University Belfast, United Kingdom (Great Britain))

Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	A Highly Efficient Multifunctional Metasurface for C- And X-Band Applications	Syed Muhammad Qasim Ali Shah (National University of Sciences and Technology, Pakistan); Fahad Ahmed (Research Institute for Microwave and Millimeter-Wave Studies (RIMMS) & (NUST), Pakistan, Pakistan); Noshewan Shoaib (Research Institute for Microwave and Millimeter-Wave Studies (RIMMS) & National University of Sciences and Technology (NUST), Pakistan)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Towards Real-time Independent Control of Reflection Magnitude and Phase in Electromagnetic Metasurfaces	Ahmed Ashoor (Carleton University, Canada); Shulabh Gupta (Carleton University, Canada)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Tailoring Fe80Co20 Composite Material for High Permeability at High RF Frequency for Antenna Applications	Amir I Zaghloul (US Army Research Laboratory & Virginia Tech, USA)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Dynamic Metasurfaces Based Aperture for Estimating the Directions of Arrival (DOA)	Yun Bo Li (Southeast University, China); Jia Lin Shen (Southeast University, China); Tie Jun Cui (Southeast University, China)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Fano Resonance Based Multiple Angle Retrodirective Metasurface	Mohammed Kalaagi (Universite Lille 1 & The French Institute of Science and Technology for Transport, Spatial Planning, Development and Networks, France); Divitha Seetharamdoo (IFSTTAR, LEOST & Univ Lille Nord de France, France)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Generation of Multi-Mode OAM Waves Through 1-Bit Direct-Radiating Programmable Metasurfaces	Xudong Bai (Shanghai Aerospace Electronics Co., Ltd, China)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	1-Bit Digital Coding Metasurfaces for Efficient Generation of Convergent Multi-Mode OAM Beams	Fanwei Kong (Shanghai Aerospace Electronics Co., Ltd, China); Yuntao Sun (Shanghai Aerospace Electronics Co., Ltd, China); Xudong Bai (Shanghai Aerospace Electronics Co., Ltd, China)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Flangeless Waveguide Connection Based on Gap Waveguide Technology	Wanzhao Cui (China Academy of Space Technology Xi'an, China); Xiang Chen (Xi'an Jiaotong University & China Academy of Space Technology (Xi'an), China); Dongquan Sun (Xidian University, China); Yongning He (Xi'an Jiaotong University, China)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Robustness in Subwavelength Locally-Resonant Metamaterial Waveguides	Bakhtiyar Orabayev (EPFL & The Laboratory of Wave Engineering, Switzerland); Nadège Kaina (EPFL, Switzerland); Romain Fleury (EPFL, Switzerland)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	The Influence of Lattice Constant on Tuning EBG Waveguide	Judson Benevol Xavier (Brazilian Army Technology Center & State University of Campinas, Brazil); Luciano Oliveira (State University of Campinas, Brazil); Hugo Enrique Hernandez Figueroa (Unicamp, Brazil)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Scattering-free Energy Storage in Open Cavities Bounded by Metasurfaces	Angelica Viola Marini (Università degli Studi Roma Tre, Italy); Davide Ramaccia (RomaTre University, Italy); Alessandro Toscano (University Roma Tre (IT), Italy); Filiberto Bilotti (University Roma Tre, Italy)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Preliminary Investigation of 8-dot Wire Concept	Boris Okorn (Rudjer Boskovic Institute, Croatia); Andrey Sayanskiy (ITMO University, Russia); Vladimir Lenets (ITMO University, Russia); Stanislav Glybovski (ITMO University, Russia); Silvio Hrabar (University of Zagreb, Croatia)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Ultrathin Zigzag Half-Wave Plate Metasurface with Near-Unity Axial Ratio and High Transmission Efficiency in Terahertz Range	Alexia Moreno-Peñarubia (Public University of Navarre & Institute of Smart Cities (ISC), Public University of Navarre, Spain); Sergei A. Kuznetsov (IEEE Member & Novosibirsk State University, Novosibirsk, Russia); Miguel Beruete (Universidad Pública de Navarra, Spain)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Phase-Gradient Metasurfaces for Efficient Conversion of Surface Wave to Propagating Wave	Rui Feng (Xidian University, China); Badreddine Ratni (Univ Paris Nanterre, France); Jianjia Yi (Key Laboratory of Integrated Services Networks, Xidian University, China); Alexandre Piche (Airbus Defence and Space, France); André de Lustrac (Institut d'Electronique Fondamentale - Université Paris-Sud, France); Hallin Zhang (Xidian University, China); Shah Nawaz Burokur (LEME, France)
Poster Session 3: Metamaterials, metasurfaces and EBG	Poster3-E08	Electromagnetics	19 Mar 2020	Exhibition Hall	13:20	13:20	Tunable Terahertz Polarization Converter Based on Graphene Metasurfaces	Behnaz Bakhtiari (Iran University of Science and Technology, Iran); Homayoon Oraizi (Iran University of Science and Technology, Iran)
Poster Session 3: MIMO and OTA testing	Poster3-M09	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Recent Developments in Radiated Two-Stage MIMO OTA Test Method	Ya Jing (Keysight Technologies, China); Thorsten Hertel (Keysight Technologies, USA); Hongwei Kong (Keysight Technologies (China) Co., Ltd., China); Penghui Shen (General Test Systems, China); Yang Liu (GTS, China)
Poster Session 3: MIMO and OTA testing	Poster3-M09	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	On the Measurement of Radiated Power for 5G Mobile Device with Spectrum Analyzer	Jun Luo (ETS-Lindgren, USA); Edwin Mendivil (ETS-Lindgren, USA); Michael Christopher (ETS-Lindgren, USA)
Poster Session 3: MIMO and OTA testing	Poster3-M09	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Throughput and Spherical Coverage Performance of mmWave Dual Polarized Antenna Arrays	Ali Hazmi (Magister Oy & Huawei Technologies, Finland); Ruliyuan Tian (Huawei Technologies, Finland)
Poster Session 3: MIMO and OTA testing	Poster3-M09	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Field Emulator for Wireless Communication Devices Base on Programmable Metasurface	Bowen Hao (Beihang University, China); Peng Huo (Beihang University, China); Zhiping Li (Beihang University, China)
Poster Session 3: MIMO and OTA testing	Poster3-M09	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Measurement of OFDM Signals with PAPR Reduction in the Presence of Hardware Impairments	Hua Wang (Keysight Technologies, Denmark); Xiaoming Chen (Xi'an Jiaotong University, China); Jiaying Zhang (EM-Testing, China)
Poster Session 3: MIMO and OTA testing	Poster3-M09	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Impact of Probe Coupling on Emulation Accuracy in Massive MIMO OTA Testing	Huiling Pei (Xi'an Jiaotong University, China); Xiaoming Chen (Xi'an Jiaotong University, China); Wei Xue (Xi'an Jiaotong University, China); Ming Zhang (Xi'an Jiaotong University, China); Tommy Svensson (Chalmers University of Technology, Sweden)
Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Dual-Element Folded Strip Monopole with SRR Loading for Multiband Handset MIMO Applications	Saqer S Alja'afreh (Mutah University, Jordan); Qian Xu (Nanjing University of Aeronautics and Astronautics, China); Lei Xing (Nanjing University of Aeronautics and Astronautics, United Kingdom (Great Britain)); Yi Huang (The University of Liverpool, United Kingdom (Great Britain)); Chaoyun Song (University of Liverpool, United Kingdom (Great Britain)); E'qab Almajali (University of Sharjah, United Arab Emirates)
Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Multi-Mode Smartphone Antenna Array for 5G Massive MIMO Applications	Naser Ojaroudi Parchin (University of Bradford, United Kingdom, United Kingdom (Great Britain)); Haleh Jahanbakhsh Basherlou (Bradford College, United Kingdom (Great Britain)); Yasir Ismael Abdulraheem Al-Yasir (University of Bradford, United Kingdom (Great Britain)); Maryam Sajedin (University of Aveiro, Portugal); Jonathan Rodriguez (Instituto de Telecomunicações, Portugal); Raed A Abd-Alhameed (University of Bradford, United Kingdom (Great Britain))
Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Ultra-Wideband MIMO Diversity Antenna System for Future Handsets	Naser Ojaroudi Parchin (University of Bradford, United Kingdom, United Kingdom (Great Britain)); Haleh Jahanbakhsh Basherlou (Bradford College, United Kingdom (Great Britain)); Yasir Ismael Abdulraheem Al-Yasir (University of Bradford, United Kingdom (Great Britain)); Ali A. S. AlAbdullah (University of Bradford, United Kingdom (Great Britain)); Raed A Abd-Alhameed (University of Bradford, United Kingdom (Great Britain))
Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Compact Multiband FICA Antenna with Coupled-Fed Mechanism for Mobile Phone Applications	Di Wu (Shenzhen University, China); Yu-Xiang Sun (Shenzhen University, China)
Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Multi-Band/Wide Band Printed Quad Helical Antenna	Fayez Hyjazie (Huawei Technologies Co. Ltd., Canada); Halim Boutayeb (Huawei Technologies, Canada)
Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Design of Dual-band Coupled-fed Dipole Array Antenna Element for PCL Systems	Sungsik Wang (Hongik University, Korea (South)); Junsik Park (Hanwsha Systems, Korea (South)); Hosung Choo (Hongik University, Korea (South))
Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Validation Tests for the Application of a Circular PMA with Slotted Ground Plane for Partial Discharges Detection in Power Transformers	Arthur Souza (UFCEG, Brazil); Luiz Nobrega (Universidade Federal de Campina Grande, Brazil); Alexandre Serres (UFCEG, Brazil); Edson G da Costa (Federal University of Campina Grande, Brazil); George Xavier (Universidade Federal de Campina Grande, Brazil); Ana Cruz (UFCEG, Brazil); Matheus Gomes (UFCEG, Brazil)

Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	An Ultra-Wideband Stacked Spiral-Helix Composite Antenna	Jiachun Jiang (Shenzhen University, China); Long Zhang (Shenzhen University, China); Ning Luo (Shenzhen University, China); Yejun He (Shenzhen University, China); Sai-Wai Wong (Shenzhen University, China); Xiao Zhang (Shenzhen University, China); Steven Gao (University of Kent, United Kingdom (Great Britain))
Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Shared Aperture Dual S- And X-band Antenna for Nano-Satellite Applications	Daniel E. Serup (Aalborg University, Denmark); Robin Williams (Aalborg University, Denmark); Shuai Zhang (Aalborg University, Denmark); Gert Pedersen (Aalborg University, Denmark)
Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Low Attenuation Dichroic Sub-Reflector for Wide Incident Angles for Ka/Ku Band Satellite Antenna Systems: An ECA Analysis	Chung-Chin Jian (Atom Element Matter B. V., The Netherlands); Yu-Lun Su (Atom Element Matter B. V., The Netherlands); Thomas Lohrey (Atom Element Matter B. V., The Netherlands); Yu-Ling Lee (Atom Element Matter B. V., The Netherlands); Hsi-Sheng Goan (National Taiwan University, Taiwan)
Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Roof/Side Mount Combination Antenna for LTE and Satellite Communication Applications	Liu Guilfeng (The 54th Research Institute of China Electronics Technology Group Corporation, China); Biao Du (JLRAT, China); Chuanfeng Niu (Joint Laboratory of Radio Astronomy Technology, China); Yingran He (The 54th Research Institute of CETC, China)
Poster Session 3: Multiband and wideband antennas	Poster3-A11	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Single-feed Compact Wideband Circularly Polarized Antenna for INMARSAT/GNSS Applications	N Nasiruddin (Institute for Infocomm Research, Singapore); Xianming Qing (Institute for Infocomm Research, Singapore)
Poster Session 3: Other antenna topics	Poster3-A23	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	CPW-Fed U-shaped Transparent Antenna for 5G Vehicle Sensor Application	Jeong-Wook Kim (KAIST, Korea (South)); Kwang-Seok Kim (Korea Advanced Institute of Science and Technology, Korea (South)); Sol Kim (KAIST, Korea (South)); Jong-Won Yu (, unknown); Kuk-Heon Choi (Advanced Standard R&D Lab, LG Electronics Inc., Korea (South)); Seungmin Woo (LG Electronics Inc., Korea (South))
Poster Session 3: Other antenna topics	Poster3-A23	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Reverse Engineering Based on Insertion Loss for Estimating Sheet Resistance of Transparent Antenna	Kwang-Seok Kim (Korea Advanced Institute of Science and Technology, Korea (South)); Jeong-Wook Kim (KAIST, Korea (South)); Sol Kim (KAIST, Korea (South)); Jong-Won Yu (, unknown); Byeongyong Park (LG Electronics, Korea (South)); Ilnam Cho (LG Electronics, Korea (South))
Poster Session 3: Other antenna topics	Poster3-A23	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Differential-Fed Dual-Polarized High-Gain Filtering Antenna Based on SIW Technology for 5G Applications	Yasir Ismael Abduraheem Al-Yasir (University of Bradford, United Kingdom (Great Britain)); Naser Ojaraoui Parchin (University of Bradford, United Kingdom (Great Britain)); Mohammad Fares (University of Basra, Iraq); Ahmed Maan Abdulkhaleq (University of Bradford & SARAS Technology, United Kingdom (Great Britain)); Mustafa Bakr (University of Leeds, United Kingdom (Great Britain)); Mohammed Al-Sadoon (Richmond Road, Bradford, BD7 1DP & University of Bradford, United Kingdom (Great Britain)); Jamal Kosha (University of Bradford, United Kingdom (Great Britain)); Raed A Abd-Alhameed (University of Bradford, United Kingdom (Great Britain))
Poster Session 3: Other antenna topics	Poster3-A23	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Eco-Friendly Metamaterial Antenna for 2.4 GHz WLAN Applications	Georgina Serres (Federal University of Campina Grande, Brazil); Raimundo Freire (Universidade Federal de Campina Grande - PB, Brazil); Samuel Moraes (Federal University of Campina Grande, Brazil); Camila Caroline Rodrigues de Albuquerque (Federal University of Campina Grande, Brazil); Jéssyca Araujo (Federal University of Campina Grande, Brazil); Alexandre Serres (UFCG, Brazil); Laura de Carvalho (UFCG, Brazil); Joabson Nogueira de Carvalho (Instituto Federal de Educação, Ciência e Tecnologia da Paraíba, IFPB, Brazil)
Poster Session 3: Other antenna topics	Poster3-A23	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Antenna Phase Center and Angular Dispersion Estimation Using Planar Acquisition Setup Applied to Microwave Breast Imaging	Joao M. Felicio (Instituto de Telecomunicações, Portugal); Jose Bloucas (Instituto de Telecomunicações, Portugal); Jorge R. Costa (Instituto de Telecomunicações / ISCTE-IUL, Portugal); Carlos A. Fernandes (Instituto de Telecomunicações, Instituto Superior Técnico, Portugal)
Poster Session 3: Other antenna topics	Poster3-A23	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Holographic Antenna Using Slotted Hologram Patterns for High Efficiency	Sang Hyuck Han (Yonsei University, Korea (South)); Seongjin Park (Yonsei University, Korea (South)); Young Joong Yoon (Yonsei University, Korea (South))
Poster Session 3: Other antenna topics	Poster3-A23	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Bird-Cage Coil for MRI Studies of Unsaturated Granular Materials	Sina Marhabaie (Laboratoire Navier (UMR 8205 CNRS, IFSTTAR, Ecole des Ponts ParisTech), France); Hakim Tahedmit (Paris-Est Marne-la-Vallée University, France); Patrick Poulchet (ESIEE, France); Marjorie Grzeskowiak (ISAE Supaero, France); Abdoulaye Fall (Université Paris-Est, France)
Poster Session 3: RFID antennas/sensors and systems	Poster3-A15	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Concept of Beam Steerable Transponder Based on Load Modulation	Tauseef Ahmad Siddiqui (School of Electrical Engineering, Aalto University, Finland); Prabhath Khanal (Chalmers University of Technology, Sweden); Jari Holopainen (Aalto University School of Electrical Engineering, Finland); Ville Viikari (Aalto University & School of Electrical Engineering, Finland)
Poster Session 3: RFID antennas/sensors and systems	Poster3-A15	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	High PAPR Multi-Tone Waveforms as a Method of Boosting DC Voltage in RF Wireless Power Transfer Systems	Kyriakos Neophytou (University of Cyprus, Cyprus); Marco A. Antoniadis (University of Cyprus, Cyprus)
Poster Session 3: RFID antennas/sensors and systems	Poster3-A15	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A UHF RFID Reader Antenna with Tunable Axial Ratio and Fixed Beamwidth	Rui Chen (University of Cambridge, United Kingdom (Great Britain)); Shuai Yang (University of Cambridge, United Kingdom (Great Britain)); Aleck M Ndifon (Cambridge University, United Kingdom (Great Britain)); Ian White (University of Cambridge, United Kingdom (Great Britain)); Richard Pentty (Cambridge University, United Kingdom (Great Britain)); Michael J Crisp (University of Cambridge, United Kingdom (Great Britain))
Poster Session 3: RFID antennas/sensors and systems	Poster3-A15	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	On Complex Radar Cross Section and Backscatter Modulation Efficiency in RFID Systems	Christoph Degen (Hochschule Niederrhein University of Applied Sciences, Germany); Patrick Bosselmann (Bochum University of Applied Sciences, Germany)
Poster Session 3: RFID antennas/sensors and systems	Poster3-A15	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Modified Yagi-Uda Reader Antenna for UHF RFID Smart-Glove	Rajesh K Singh (University of Pisa, Italy); Andrea Michel (University of Pisa, Italy); Paolo Nepa (University of Pisa, Italy); Alfredo Salvatore (Sensor ID, Italy)
Poster Session 3: RFID antennas/sensors and systems	Poster3-A15	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Reduced Size RFID Reader Antenna Based on Reconfigurable Feeding Network Realized with Artificial Transmission Lines	Enrico Tolin (Politecnico di Torino & IMST GmbH, Italy); Achim Bahr (IMST GmbH, Germany); Simona Bruni (IMST GmbH, Germany); Francesca Vipiana (Politecnico di Torino, Italy)
Poster Session 3: RFID antennas/sensors and systems	Poster3-A15	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	An Enhanced Road Vehicle Positioning Method Using Roadside Furniture with Radio Frequency Identity Tags and the EPC Gen2 Standard	Zhan Wang (Loughborough University, United Kingdom (Great Britain)); Robert Michael Edwards (Loughborough University, United Kingdom (Great Britain))
Poster Session 3: RFID antennas/sensors and systems	Poster3-A15	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Passive RFID Tag for Biomass Tracking	Amjad Ali (University of Nottingham, United Kingdom (Great Britain)); Roderick Mackenzie (University of Nottingham, United Kingdom (Great Britain)); Edward Lester (University of Nottingham, United Kingdom (Great Britain)); Orla Williams (University of Nottingham, United Kingdom (Great Britain)); Steve Greedy (University of Nottingham, United Kingdom (Great Britain))
Poster Session 3: RFID antennas/sensors and systems	Poster3-A15	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Compact Printed Wideband Circularly Polarized Slot Antenna for Universal UHF RFID Reader	Nathapat Supreeyattitkul (Civil Aviation Training Center of Thailand, Thailand); Nonthapat Teerasuttakorn (Civil Aviation Training Center of Thailand, Thailand); Phanuphong Boontamchaay (Civil Aviation Training Center of Thailand, Thailand); Manurak Rattanasuttkian (Civil Aviation Training Center of Thailand, Thailand)
Poster Session 3: Satellite and aerospace antenna characterisation	Poster3-M07	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Impact of Lightning Diverter Strips on Antenna Radiation Patterns	Ana Vukovic (University of Nottingham, United Kingdom (Great Britain)); Phillip Sewell (University of Nottingham, United Kingdom (Great Britain)); Trevor Benson (University of Nottingham, United Kingdom (Great Britain)); Chris Jones (BAE SYSTEMS, United Kingdom (Great Britain)); Simeon Earl (BAE SYSTEMS, United Kingdom (Great Britain))
Poster Session 3: Satellite and aerospace antenna characterisation	Poster3-M07	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Proposal of GNSS Satellite Antenna Performance Evaluation Based on Reconstructed Gain Patterns	Gerardo Allende-Alba (German Aerospace Center, Germany); Steffen Thøelert (German Aerospace Center (DLR), Germany)
Poster Session 3: Satellite and aerospace antenna characterisation	Poster3-M07	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Deployable Helix Antennas for Nano and Micro Satellites	Tao Huang (Oxford Space Systems, United Kingdom (Great Britain)); Juan Reveles (Oxford Space Systems, United Kingdom (Great Britain)); Daniel Nascimento (Oxford Space Systems, United Kingdom (Great Britain)); Vinoth Gurusamy (Oxford Space Systems, United Kingdom (Great Britain)); Benedetta Fiorelli (European Space Agency, The Netherlands)
Poster Session 3: Satellite and aerospace antenna characterisation	Poster3-M07	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Simple and Robust Probes for Near-Field Antenna Measurements at Low UHF Bands	Vincent Laquerbe (CNES, France); Gwenn Le Fur (CNES, France); Daniel Belot (CNES, France); Feat Leat (CNES, France); Romain Contreres (CNES, France)

Poster Session 3: UWB antennas and time-domain techniques	Poster3-A16	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Single-Chip Impulse-Radar Integrated Circuits for Microwave-Imaging	Takamaro Kikkawa (Hiroshima University, Japan); Akhiro Toya (Kure National College of Technology, Japan); Yoshihiro Masui (Hiroshima Institute of Technology, Japan); Hiroyuki Ito (Tokyo Institute of Technology, Japan); Takuichi Hirano (Tokyo City University, Japan); Mitsutoshi Sugawara (Hiroshima University, Japan); Tomoaki Maeda (A-R-Tec Corporation, Japan); Masahiro Ono (A-R-Tec Corporation, Japan); Yoshitaka Murasaka (A-R-Tec Corporation, Japan); Toshifumi Imamura (A-R-Tec Corporation, Japan); Atsushi Iwata (A-R-Tec Corporation, Japan); Tsuyoshi Matsumaru (Syswave Corporation, Japan); Michimasa Yamaguchi (Syswave Corporation, Japan)
Poster Session 3: UWB antennas and time-domain techniques	Poster3-A16	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A 2-18 GHz Semi-Omnidirectional Antenna	Gokhan Ucuncu (Aselsan Inc., Turkey); Mustafa Kuloglu (Aselsan Inc., Turkey)
Poster Session 3: UWB antennas and time-domain techniques	Poster3-A16	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Clown Shaped Super Wideband Antenna	Sarthak Singh (Malaviya National Institute of Technology, India); Rahul Kumar Garg (LNM Institute of Information Technology, India); Raghuvir Tomar (LNMIIIT, Jaipur, India)
Poster Session 3: UWB antennas and time-domain techniques	Poster3-A16	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Pulsed 2D ElectroMagnetic Field Propagation in a Rectangular Waveguide	Martin Stumpf (Brno University of Technology, Czech Republic); Ioan E. Lager (Delft University of Technology, The Netherlands); Guy Vandenbosch (Katholieke Universiteit Leuven (KU Leuven), Belgium)
Poster Session 3: UWB antennas and time-domain techniques	Poster3-A16	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Time-Domain Reflectometry for Measuring Scattering Parameters: Comparison of M-sequence Device and Step-generator TDR	Shekoufeh Abdollahi (K. N. Toosi University of Technology, Iran); Somayeh Chamaani (K. N. Toosi University of Technology, Iran); Jürgen Sachs (Ilmenau University of Technology, Germany)
Poster Session 3: UWB antennas and time-domain techniques	Poster3-A16	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A Novel Approach for Compact Antenna with Parasitic Elements Aimed at Ultra-Wideband Applications	Sudeep Baudha (BITS PILANI K K BIRLA GOA Campus, India); Manish Varun Yadav (BITS Pilani K K Birla Goa Campus & BITS PILANI, India); Ishita Srivastava (BITS PILANI K K BIRLA GOA CAMPUS, India)
Poster Session 3: UWB antennas and time-domain techniques	Poster3-A16	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Low Profile Absorber Backed Extremely Wideband Antennas	Umair Naeem (Centre for Wireless Innovation, ECIT Institute, Queen's University Belfast, United Kingdom (Great Britain)); Vincent Fusco (Queen's University Belfast, United Kingdom (Great Britain)); Dmitry E Zelenchuk (Queen's University of Belfast, United Kingdom (Great Britain)); Robert Cahill (Queens University Belfast, United Kingdom (Great Britain))
Poster Session 3: Wearable and implantable antennas	Poster3-A12	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Graphene Printed Flexible and Conformal Array Antenna on Paper Substrate for 5.8GHz Wireless Communications	Xinyao Zhou (University of Manchester, United Kingdom (Great Britain)); Ting Leng (University of Manchester, United Kingdom (Great Britain)); Kewen Pan (University of Manchester, United Kingdom (Great Britain)); Mahmoud Abdelrahman Abdalla (MTC, Cairo, Egypt); Zhirun Hu (University of Manchester, United Kingdom (Great Britain))
Poster Session 3: Wearable and implantable antennas	Poster3-A12	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Circularly Polarized Corner-Truncated and Slotted Microstrip Patch Antenna on Textile Substrate for Wearable Passive UHF RFID Tags	Duc Viet Le (University of Tampere, Finland); Leena Ukkonen (Tampere University of Technology, Finland); Toni Björninen (Tampere University, Finland)
Poster Session 3: Wearable and implantable antennas	Poster3-A12	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Antenna Packaging for In-body Applications	Jordi Romeu (Universitat Politècnica de Catalunya, Spain); Giselle González-López (Universitat Politècnica de Catalunya, Spain); Sebastian Blanch Boris (Universitat Politècnica de Catalunya, Spain); Luis Jofre (Universitat Politècnica de Catalunya, Spain)
Poster Session 3: Wearable and implantable antennas	Poster3-A12	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	A 915 MHz Wristwatch-Integrated Antenna for Wireless Health Monitoring	Sanjeev Kumar (Tyndall National Institute, University College Cork, Ireland); John Laurence Buckley (Tyndall National Institute & University College Cork, Ireland); John Barton (Tyndall National Institute, Ireland); Robert Newberry (Sanmina Corporation, USA); Gary Dunlop (Sanmina Corporation, Ireland); Matthew Rodencal (Sanmina Corporation, USA); Carlo Webster (Tyndall National Institute, Ireland); Mélusine Pigeon (Tyndall National Institute, Ireland); William G. Scanlon (Tyndall National Institute, Ireland); Brendan O'Flynn (Tyndall National Institute, Ireland)
Poster Session 3: Wearable and implantable antennas	Poster3-A12	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	E-Field Distribution in Ex-Vivo Porcine Skin Layer from a Subsurface UHF Transmitter	Noor Albadri (Griffith University, Australia); Yana Salchak (Griffith University, Australia); David V Thiel (Griffith University, Australia); Hugo G Espinosa (Griffith University, Australia)
Poster Session 3: Wearable and implantable antennas	Poster3-A12	Antennas	19 Mar 2020	Exhibition Hall	13:20	13:20	Textile Antenna as Moisture Sensor	Davor Bonefačić (University of Zagreb, Faculty of Electrical Engineering and Computing, Croatia)
Poster Session 3: Other measurement topics	Poster3-M11	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Design of Constant Width Branch Line Directional Coupler for the Microwave Sensing Application	Pramod K B Rangiah (Researcher & Uppsala University, Sweden); Javad Ebrahimizadeh (University of Uppsala, Sweden); Jacob Velerander (Uppsala University, Sweden); Roger Karlsson (Uppsala University, Sweden); Bappaditya Mandal (Uppsala University, Uppsala, Sweden); Mauricio D Perez (Uppsala University & National Technological University, Sweden); Robin Augustine (Uppsala University, Sweden)
Poster Session 3: Other measurement topics	Poster3-M11	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Reflectometry Enhancement by Saline Injection in Microwave-based Skin Burn Injury Diagnosis	Alireza Madannejad (Research Assistant, University of Tehran, Iran); Javad Ebrahimizadeh (University of Uppsala, Sweden); Fatemeh Ravanbakhsh (Student, Islamic Azad University, Iran); Mauricio D Perez (Uppsala University & National Technological University, Sweden); Robin Augustine (Uppsala University, Sweden)
Poster Session 3: Other measurement topics	Poster3-M11	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Enhanced Double-Null Technique on General Planar Array for Two-Target Angular Resolution	Luoshengbin Wang (National University of Defense Technology, China); Wei Dong (National University of Defense Technology, China); Zhenhai Xu (National University of Defense Technology, China); Xinghua Liu (National University of Defense Technology, China); Guoyu Wang (University of Defense Technology, China)
Poster Session 3: Other measurement topics	Poster3-M11	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	A Study on Effect of Building Wall Structure on UWB SAR Image	Kien Nguyen Trung (Kongju National University, Korea (South)); Ic Pyo Hong (Kongju National University, Korea (South))
Poster Session 3: Other measurement topics	Poster3-M11	Measurements	19 Mar 2020	Exhibition Hall	13:20	13:20	Novel Compact Waveguide Flange Adapter for Passive Intermodulation Measurement Systems	Xiang Chen (Xi'an Jiaotong University & China Academy of Space Technology (Xi'an, China); Wanzhao Cui (China Academy of Space Technology Xi'an, China); Dongquan Sun (Xidian University, China); Yongning He (Xi'an Jiaotong University, China)
Propagation Aspects in Remote Sensing	T09-P13	T09 Space (incl. cubesat) / Regular Session / Propagation	19 Mar 2020	B8	16:40	17:00	Remote Sensing of Tropical Precipitation with Radar and Radiometric Measurements	Animesh Maltra (University of Calcutta, India); Soumyajyoti Jana (University of Calcutta, India); Gargi Rakshit (University of Calcutta, India)
Propagation Aspects in Remote Sensing	T09-P13	T09 Space (incl. cubesat) / Regular Session / Propagation	19 Mar 2020	B8	17:00	17:20	Calibrating Ka Band Satellite Down-Link Modem Measurements for Rainfall Monitoring	Franz Teschl (Graz University of Technology, Austria); Reinhard Teschl (Graz University of Technology, Austria); Valentin Eder (Space Analyses GmbH, Austria)
Propagation Aspects in Remote Sensing	T09-P13	T09 Space (incl. cubesat) / Regular Session / Propagation	19 Mar 2020	B8	17:20	17:40	Sea Surface Characterization Using Dual Polarized GNSS Reception System	Ankit Regmi (University of Oulu, Finland); Aarno Pärssinen (University of Oulu, Finland); Markus Berg (University of Oulu & Excellant LTD., Finland)
Propagation Aspects in Remote Sensing	T09-P13	T09 Space (incl. cubesat) / Regular Session / Propagation	19 Mar 2020	B8	17:40	18:00	The MEKaP Project: Measuring Tropospheric Impairments at Ka Band with MEO Satellites	Lorenzo Luini (Politecnico di Milano, Italy); Carlo Riva (Politecnico di Milano, Italy); Alberto Panzeri (Politecnico di Milano, Italy); Armando Rocha (University of Aveiro & Instituto de Telecomunicações, Portugal); Susana Mota (University of Aveiro & Institute of Telecommunications, Portugal); Frank S. Marzano (Sapienza University of Rome, Italy); Augusto Marziani (Sapienza University of Rome, Italy); Marianna Biscarini (Sapienza University of Rome, Italy); Fernando Consalvi (FUB, Italy); Vincenzo Schena (Thales Alenia Space Italia, Italy); Antonio Martellucci (European Space Agency, The Netherlands)
Propagation Aspects in Remote Sensing	T09-P13	T09 Space (incl. cubesat) / Regular Session / Propagation	19 Mar 2020	B8	18:00	18:20	The Variability of Scattering from Leaves and its Impact on Propagation	Jamil Bataineh (University of Bath, United Kingdom (Great Britain)); Robert J Watson (University of Bath, United Kingdom (Great Britain))
Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	13:30	13:50	60 GHz V2I Channel Variability for Different Elevation Angle Switching Strategies	Herbert Groll (TU Wien, Austria); Erich Zöchmann (TU Wien, Austria); Markus Hofer (AIT Austrian Institute of Technology, Austria); Hussein Hamoud (University of Southern California, USA); Seun Sangdojin (Georgia Institute of Technology, USA); Thomas Zemen (AIT Austrian Institute of Technology GmbH, Austria); Jiri Blumenstein (Brno University of Technology, Czech Republic); Ales Prokes (Brno University of Technology & Sensor, Information and Communication Systems Research Centre, Czech Republic); Andreas Molisch (University of Southern California, USA); Christoph F Mecklenbräuer (TU Wien, Austria)

Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	13:50	14:10	Emulation of End-To-End Communications Systems in Railway Scenarios: Physical Layer Results	Juan Moreno (Metro de Madrid S.A. & Universidad Politécnica de Madrid, Spain); Sofiane Kharbech (University of Lille, France); Laurent Clavier (Institut Mines-Telecom, Telecom Lille & IEMN / IRCICA, France); Redha Kassi (University of Lille, France); Raúl Torrego (IK4-IKERLAN, Spain); Altior Arriola (IK4-IKERLAN, Spain); Ifaki Val (IK4-IKERLAN, Spain); Marion Berbineau (IFSTTAR, COSYS, LEOST & University Lille Nord de France, France); Jose Soler (Technical University of Denmark, Denmark); Ying Yan (Technical University of Denmark, Denmark)
Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	14:10	14:30	Large Scale Fading Characteristics for Vehicle-to-Cyclist Channel in Urban Environment at 5 GHz	Ibrahim Rashdan (German Aerospace Center (DLR), Germany); Michael Walter (German Aerospace Center (DLR), Germany); Wei Wang (Chang'an University, China); Giuseppe Caire (Technische Universität Berlin, Germany)
Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	14:30	14:50	28-GHz High-Speed Train Measurements and Propagation Characteristics Analysis	Jae-Joon Park (ETRI, Korea (South)); Juyl Lee (ETRI, Korea (South)); Kyung-Won Kim (ETRI, Korea (South)); Myung-Don Kim (ETRI, Korea (South))
Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	14:50	15:10	Millimeter-Wave Channel Characterization for Vehicle-to-Infrastructure Communication	Lina Wu (Beijing Jiaotong University, China); Daping He (Beijing Jiaotong University, China); Ke Guan (Beijing Jiaotong University, China); Bo Ai (Beijing Jiaotong University, China); Junhyeong Kim (ETRI, Korea (South)); Hee Sang Chung (ETRI, Korea (South))
Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	15:10	15:30	Millimeter-Wave Channel Characteristics for V2V Communications in the Garage Entrance	Xue Zhang (Beijing University of Posts and Telecommunications, China); Pan Tang (Beijing University of Posts and Telecommunications, China); Lei Tian (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, China); Jianhua Zhang (Beijing University of Posts and Telecommunications, China)
Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	16:00	16:20	Architecture and Performance of the Base Station Prototype for MN Systems	Sung Woo Choi (ETRI, Korea (South)); Junhyeong Kim (ETRI, Korea (South)); Seon-Ae Kim (Electrics and Telecommunications Research Institute, Korea (South)); Hee Sang Chung (ETRI, Korea (South)); Igyu Kim (ETRI of KOREA, Korea (South))
Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	16:20	16:40	Bi-directional Vehicle-to-Vehicle Radio Channel Characteristics over Bridge at 5.9 GHz	Kun Yang (Super Radio AS, Norway); Ning Zhou (Super Radio AS, Norway); Terje Røste (NTNU, Norway); Junyi Yu (Wuhan University of Technology, China); Fang Li (Wuhan University of Technology, China); Wei Chen (Wuhan University of Technology, China); Egil Eide (Norwegian University of Science and Technology, Norway); Torbjørn Ekman (Norwegian University of Science and Technology, Norway); Changzhen Li (Wuhan University of Technology, China); Fuxing Chang (Wuhan University of Technology, China)
Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	16:40	17:00	Comparison of a Fast Analytical Ray Tracer and Channel-Sounder Measurements for V2V Communications	Nils Dreyer (TU Braunschweig, Germany); Thomas Kürner (Technische Universität Braunschweig, Germany)
Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	17:00	17:20	Path Loss Models and Large Scale Fading Statistics for C-Band Train-to-Train Communication	Paul Unterhuber (German Aerospace Center (DLR), Germany); Ibrahim Rashdan (German Aerospace Center (DLR), Germany); Michael Walter (German Aerospace Center (DLR), Germany); Thomas Kürner (Technische Universität Braunschweig, Germany)
Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	17:20	17:40	Shadowing and Multipath-fading Statistics at 2.4 GHz and 39 GHz in Vehicle-to-Vehicle Scenarios	Hui Wang (Tongji University, China); Xuefeng Yin (Tongji University, China); José Rodríguez-Piñeiro (Tongji University, China); Juyl Lee (ETRI, Korea (South)); Myung-Don Kim (ETRI, Korea (South))
Propagation Channels for Wide-Sense Vehicle-to-X Communications	T02-P09	T02 Millimetre wave 5G / Regular Session / Propagation	16 Mar 2020	A3	17:40	18:00	Measurement and Diffuse Multipath Analysis of V2V Propagation Channel at 5.9 GHz in Tunnel Area	Suying Jiang (Chang'an University, China); Xu Zhang (Chang'an University, China); Wei Wang (Chang'an University, China); Mi Yang (Beijing Jiaotong University, China); Ruisi He (Beijing Jiaotong University, China)
Propagation for Unmanned Aerial Vehicles (UAVs)	T06-P09	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Propagation	19 Mar 2020	B7	08:30	08:50	A USRP-based Channel Sounder for UAV Communications	Guojin Zhang (Aalborg University, Denmark); Xuesong Cai (Aalborg University, Denmark); Wei Fan (Aalborg University, Denmark); Gert Pedersen (Aalborg University, Denmark)
Propagation for Unmanned Aerial Vehicles (UAVs)	T06-P09	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Propagation	19 Mar 2020	B7	08:50	09:10	Wideband Channel Measurements and First Findings for Low Altitude Drone-to-Drone Links in an Urban Scenario	Dennis Becker (German Aerospace Center (DLR), Germany); Uwe-Carsten G. Fiebig (German Aerospace Center (DLR), Germany); Lukas Marcel Schalk (German Aerospace Center (DLR), Germany)
Propagation for Unmanned Aerial Vehicles (UAVs)	T06-P09	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Propagation	19 Mar 2020	B7	09:10	09:30	Micro-UAV Radar Imaging via DGPS and Microwave Tomography	Giuseppe Esposito (IREA-CNR, Italy); Carlo Novello (IREA-CNR & University of Napoli Federico II, Italy); Giovanni Ludeno (IREA-CNR, Italy); Gianluca Gennarelli (IREA-CNR, Italy); Giancarmine Fasano (University of Naples Federico II, Italy); Alfredo Renga (University of Naples Federico II, Italy); Francesco Soldovieri (CNR, Italy); Ilaria Catapano (IREA-CNR, Italy)
Propagation for Unmanned Aerial Vehicles (UAVs)	T06-P09	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Propagation	19 Mar 2020	B7	09:30	09:50	Performance of 5G Terrestrial Network Deployments for Serving UAV Communications	Zeyu Huang (Tongji University, China); José Rodríguez-Piñeiro (Tongji University, China); Tomás Domínguez-Bolaño (University of A Coruña, Spain); Xuefeng Yin (Tongji University, China); Juyl Lee (ETRI, Korea (South)); David W Matolak (University of South Carolina, USA)
Propagation for Unmanned Aerial Vehicles (UAVs)	T06-P09	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Propagation	19 Mar 2020	B7	09:50	10:10	Identifying low-RCS Targets Using micro-Doppler High-Resolution Radar in the Millimeter Waves	Nezah Balal (Ariel University, Ariel, Israel); Yair Richter (Ariel University, Ariel, Israel); Yosef Pinhasi (Ariel University, Israel)
Propagation in biological tissues	T11-P10	T11 Fundamental research and emerging technologies / Regular Session / Propagation	19 Mar 2020	B7	10:40	11:00	EM-Thermal Co-Simulation of Microwave Ablation Applicator in Liver Tissue Phantom with Bowtie-Slot Surface Antenna	Muhammad Saad Khan (RheinMain University of Applied Sciences, Germany); Georg Rose (OVGU, Germany); Bernd Schweizer (RheinMain University of Applied Sciences, Germany); Andreas Brensing (Hochschule RheinMain, Germany)
Propagation in biological tissues	T11-P10	T11 Fundamental research and emerging technologies / Regular Session / Propagation	19 Mar 2020	B7	11:00	11:20	Characterization of an Integrated Radiofrequency System for MR-guided Hyperthermia	Gennaro G. Bellizzi (Erasmus University Medical Center, Italy); Kemal Sumser (Erasmus MC Cancer Institute, The Netherlands); Ria Forner (UMC Utrecht, The Netherlands); Tomas Dridzal (Czech Technical University in Prague, Czech Republic); Margarethus M. Paulides (Eindhoven University of Technology, The Netherlands)
Propagation in biological tissues	T11-P10	T11 Fundamental research and emerging technologies / Regular Session / Propagation	19 Mar 2020	B7	11:20	11:40	An Open-Access Experimental Dataset for Breast Microwave Imaging	Tyson Reimer (University of Manitoba, Canada); Jordan Krenkevich (University of Manitoba, Canada); Stephen Pistorius (University of Manitoba, Canada)
Propagation in biological tissues	T11-P10	T11 Fundamental research and emerging technologies / Regular Session / Propagation	19 Mar 2020	B7	11:40	12:00	Determining the Concentration of Red Blood Cells Using Dielectric Properties	Jeantide Said Camilleri (University of Malta, Malta); Lourdes Farrugia (University of Malta, Malta); Julian Bonello (University of Malta, Malta); Nikolai Paul Pace (University of Malta, Malta); Adam Santorelli (National University of Ireland, Galway & Translational Medical Device Lab, Ireland); Emily Porter (University of Texas at Austin, USA); Martin O'Halloran (National University of Ireland, Ireland); Charles Sammut (University of Malta, Malta)
Propagation in biological tissues	T11-P10	T11 Fundamental research and emerging technologies / Regular Session / Propagation	19 Mar 2020	B7	12:00	12:20	Temperature-Corrected SAR Focusing in Cancer Hyperthermia	Rossella Gaffoglio (LINKS Foundation, Italy); Marco Righero (LINKS Foundation, Italy); Giorgio Giordanengo (LINKS Foundation & Politecnico di Torino, Italy); Marcello Zucchi (Politecnico di Torino, Italy); Giuseppe Vecchi (Politecnico di Torino, Italy)
Propagation modelling and simulation	T01-P02	T01 LTE and Sub-6GHz 5G / Regular Session / Propagation	19 Mar 2020	B1	10:40	11:00	Penetration Loss into Train Wagons: Q-factor Measurements	Nima Jamaly (Swisscom, Switzerland); Reto Schoch (Schoch Technik GmbH, Switzerland); Daniel Wenger (Swisscom, Switzerland); Stefan Mauron (Swisscom (Schweiz) AG, Switzerland)
Propagation modelling and simulation	T01-P02	T01 LTE and Sub-6GHz 5G / Regular Session / Propagation	19 Mar 2020	B1	11:00	11:20	Generation of Realistic Railway Based Mobility Scenarios	Christoph Herold (Technische Universität Braunschweig, Germany); Lennart Thielecke (Technische Universität Braunschweig, Germany); Thomas Kürner (Technische Universität Braunschweig, Germany)
Propagation modelling and simulation	T01-P02	T01 LTE and Sub-6GHz 5G / Regular Session / Propagation	19 Mar 2020	B1	11:20	11:40	A Study on Vegetation Loss Model with Seasonal Characteristics	Daigo Ogata (Softbank Corp., Japan); Akihiro Sato (Softbank Corp., Japan); Sho Kimura (Softbank Corp., Japan); Hideki Omote (Softbank Corp., Japan)
Propagation modelling and simulation	T01-P02	T01 LTE and Sub-6GHz 5G / Regular Session / Propagation	19 Mar 2020	B1	11:40	12:00	Channel Modeling for Wireless Sensor Networks Deployment in the Smart City	Fran Greenberg (RAFAEL, Israel); Amitay Bar (Rafael, Israel); Edmund Kiodzh (Rafael, Israel); Liat Peled-Eitan (RAFAEL, Israel)
Propagation modelling and simulation	T01-P02	T01 LTE and Sub-6GHz 5G / Regular Session / Propagation	19 Mar 2020	B1	12:00	12:20	Analytic Propagation Approximation over Variable Terrain and Comparison to Data	Dmitry Chizhik (Nokia Bell Labs, USA); Jani Moilanen (Nokia Bell Labs, Finland); Siegfried Klein (Nokia Bell Labs, Germany); Luis Maestro (Nokia Bell Labs, USA); Reinaldo Valenzuela (Nokia Bell Labs, USA)

Propagation modelling and simulation	T10-P02	T10 EM modelling and simulation tools / Regular Session / Propagation	20 Mar 2020	B9	08:30	08:50	Deterministic Radio Channel Characterization for Near-Ground Wireless Sensor Networks Deployment Optimization in Smart Agriculture	Hicham Klaina (University of Vigo, Spain); Imanol Picallo (Universidad Pública de Navarra, Spain); Peio Lopez Iturrri (Universidad Publica de Navarra, Spain); Leyre Azpilicueta (Tecnologico de Monterrey, Mexico); Mikel Celaya-Echarri (Tecnologico de Monterrey, Mexico); Otman Aghzout (ENSA Tetouan - UAE, Morocco); Francisco Falcone (Universidad Publica de Navarra, Spain); Ana Alejos (Universidade de Vigo, Spain)
Propagation modelling and simulation	T10-P02	T10 EM modelling and simulation tools / Regular Session / Propagation	20 Mar 2020	B9	08:50	09:10	Indoor Channel Estimation Using Single-Snapshot Wideband Measurement	Yun Ai (Norwegian University of Science and Technology, Norway); Michael Cheffena (Norwegian University of Science and Technology, Norway); Marshad Mohamed (Norwegian University of Science and Technology, Norway); Ahmed Al-Saman (Norwegian University of Science and Technology, Norway)
Propagation modelling and simulation	T10-P02	T10 EM modelling and simulation tools / Regular Session / Propagation	20 Mar 2020	B9	09:10	09:30	Terahertz MIMO Fading Analysis and Doppler Modeling in a Data Center Environment	Chia-Lin Cheng (Georgia Tech, USA); Seun Sangdooyin (Georgia Institute of Technology, USA); Alenka Zajic (Georgia Institute of Technology, USA)
Propagation modelling and simulation	T10-P02	T10 EM modelling and simulation tools / Regular Session / Propagation	20 Mar 2020	B9	09:30	09:50	Radiowave Propagation Modelling in the Presence of Wildfires: Initial Results	Stefânia Faria (Instituto de Telecomunicações, Portugal); Nuno R. Leonor (Instituto de Telecomunicações, Portugal); Carlos A. Fernandes (Instituto de Telecomunicações, Instituto Superior Técnico, Portugal); Joao M. Felicio (Instituto de Telecomunicações, Portugal); Carlos Salema (I.S.T. - Technical U. Lisbon / IT Lisbon, Portugal); Rafael F. S. Caldeirinha (Polytechnic Institute of Leiria & Instituto de Telecomunicações, Portugal)
Propagation modelling and simulation	T10-P02	T10 EM modelling and simulation tools / Regular Session / Propagation	20 Mar 2020	B9	09:50	10:10	Implementation and Evaluation of Ray-Tracing Acceleration Methods in Wireless Communication	Hang Mi (Beijing Jiaotong University & State Key Laboratory of Rail Traffic Control and Safety, China); Daping He (Beijing Jiaotong University, China); Ke Guan (Beijing Jiaotong University, China); Bo Ai (Beijing Jiaotong University, China); Chenji Liu (Jiangxi Mobile Communication Company Limited, China); Tianyun Shui (Jiangxi Mobile Communication Company Limited, China); Liju Zhu (Jiangxi Mobile Communication Company Limited, China); Hui Mei (Jiangxi Mobile Communication Company Limited, China)
Propagation modelling and simulation	T10-P02	T10 EM modelling and simulation tools / Regular Session / Propagation	20 Mar 2020	B9	10:40	11:00	A Speed Up of Split-Step Wavelet for the Computation of Long Range Propagation	Thomas Bonnafont (ENAC, France); Rémi Douvenot (ENAC, France); Alexandre Chabory (ENAC, France)
Propagation modelling and simulation	T10-P02	T10 EM modelling and simulation tools / Regular Session / Propagation	20 Mar 2020	B9	11:00	11:20	3D Simulation of Infinite Baffle Diffraction	Christopher G Hynes (Simon Fraser University, Canada); Roshanak Zabihi (Simon Fraser University, Canada); Rodney Vaughan (Simon Fraser University, Canada)
Propagation modelling and simulation	T10-P02	T10 EM modelling and simulation tools / Regular Session / Propagation	20 Mar 2020	B9	11:20	11:40	Simulation-based Investigation on Massive Multi-Antenna System as to Spatial Channel Hardening for Mobile Single User in a Controlled Multipath Environment	Yang Miao (University of Twente, The Netherlands); Sofie Pollin (KU Leuven, Belgium); Andrés Alayón Glazunov (University of Twente & Chalmers University of Technology, The Netherlands)
Propagation modelling and simulation	T10-P02	T10 EM modelling and simulation tools / Regular Session / Propagation	20 Mar 2020	B9	11:40	12:00	Time-Domain Modelling of Solid State RF Receiver Protection Systems	Luke J K Matthews (The University of Nottingham, United Kingdom (Great Britain)); Ana Vukovic (University of Nottingham, United Kingdom (Great Britain)); Christopher Mellor (Nottingham University, United Kingdom (Great Britain)); Phillip Sewell (University of Nottingham, United Kingdom (Great Britain)); Trevor Benson (University of Nottingham, United Kingdom (Great Britain))
Propagation modelling and simulation	T10-P02	T10 EM modelling and simulation tools / Regular Session / Propagation	20 Mar 2020	B9	12:00	12:20	A Gamma Beta Mixture Model for Channel Multipath Components Clustering	Cheng Sun (Beijing University of Posts and Telecommunications, China); Yupeng Li (Beijing University of Posts and Telecommunications, China); Pan Tang (Beijing University of Posts and Telecommunications, China); Jianhua Zhang (Beijing University of Posts and Telecommunications, China); Lei Tian (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, China)
Radar scattering measurement and calibration techniques	T11-M02	T11 Fundamental research and emerging technologies / Regular Session / Measurements	17 Mar 2020	B4	08:30	08:50	Radar Cross Section Measurement Within Reverberation Chamber: Stirrer Position Issues	Ariston Reis (Université Paris-Est Marne-la-Vallée, France); Francois Sarrazin (University of Paris-Est-Marne-la-Vallée & ESYCOM, France); Poulguen Philippe (DGA, France); Jérôme Sol (INSA Rennes, France); Philippe Besnier (IETR, France); Elodie Richalot (Université Paris-Est (Marne-la-Vallée), France)
Radar scattering measurement and calibration techniques	T11-M02	T11 Fundamental research and emerging technologies / Regular Session / Measurements	17 Mar 2020	B4	08:50	09:10	Measurements on Extended Vertical Objects for Radar Field Probes	Pax S. P. Wei (The Boeing Company, (retired), USA)
Radar scattering measurement and calibration techniques	T11-M02	T11 Fundamental research and emerging technologies / Regular Session / Measurements	17 Mar 2020	B4	09:10	09:30	Effects of the Antenna Measurement Uncertainties on the Estimation of the Differential Reflectivity	Brais Sánchez-Rama (University of Vigo, Spain); Veronica Santalla del Rio (University of Vigo, Spain); Rubén Nocelo López (University of Vigo, Spain); Maria Vera-Isasa (University of Vigo, Spain)
Radar scattering measurement and calibration techniques	T11-M02	T11 Fundamental research and emerging technologies / Regular Session / Measurements	17 Mar 2020	B4	09:30	09:50	Analysis of the Cross-polar Radiation Effects on Differential Reflectivity Calibration	Veronica Santalla del Rio (University of Vigo, Spain); Rubén Nocelo López (University of Vigo, Spain); Brais Sánchez-Rama (University of Vigo, Spain)
Radar scattering measurement and calibration techniques	T11-M02	T11 Fundamental research and emerging technologies / Regular Session / Measurements	17 Mar 2020	B4	09:50	10:10	On Models and Approaches for Human Vital Signs Extraction from Short Range Radar Signals	Mikolaj Wojciech Czerkawski (University of Strathclyde, United Kingdom (Great Britain)); Christos V. Ilioudis (University of Strathclyde, United Kingdom (Great Britain)); Carmine Clemente (University of Strathclyde, United Kingdom (Great Britain)); Craig Michie (University of Strathclyde, United Kingdom (Great Britain)); Ivan Andonovic (University of Strathclyde, United Kingdom (Great Britain)); Christos Tachtatzis (University of Strathclyde, United Kingdom (Great Britain))
Radar, localisation and sensing for aircraft and automotive applications	T06-P12	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Propagation	19 Mar 2020	B7	16:40	17:00	Experimental Evaluation on TDOA-based Aircraft Position Verification	Junichi Naganawa (Electronic Navigation Research Institute, Japan); Hiromi Miyazaki (Electronic Navigation Research Institute, Japan)
Radar, localisation and sensing for aircraft and automotive applications	T06-P12	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Propagation	19 Mar 2020	B7	17:00	17:20	Measurements of Opportunistic Aircraft Signals and Verification of a Propagation Prediction Tool in Mountainous Region	Junichi Naganawa (Electronic Navigation Research Institute, Japan); Karma Wangchuk (Tokyo Institute of Technology, Japan); Sangay Sangay (Department of Air Transport, Japan); Karma Gayley (Bhutan Civil Aviation Authority, Bhutan); Devi Adhikari (Bhutan Civil Aviation Authority, Bhutan); Biromi Miyazaki (Electronic Navigation Research Institute, Japan)
Radar, localisation and sensing for aircraft and automotive applications	T06-P12	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Propagation	19 Mar 2020	B7	17:20	17:40	3D-SAR Processing of UAV-mounted GPR Measurements: Dealing with Non-Uniform Sampling	Maria García Fernández (University of Oviedo, Spain); Yuri Álvarez (Universidad de Oviedo, Spain); Fernando Las-Heras (University of Oviedo, Spain)
Radar, localisation and sensing for aircraft and automotive applications	T06-P12	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Propagation	19 Mar 2020	B7	17:40	18:00	Millimeter-Wave Automotive Radar Scheme with Passive Reflector for Blind Corner Conditions	Dimitri Solomitskii (Tampere University, Finland); Carlos Baquero Barneto (Tampere University, Finland); Matias Turunen (Tampere University of Technology, Finland); Markus Allén (Tampere University, Finland); Yevgeni Koucheryav (Tampere University of Technology, Finland); Mikko Valkama (Tampere University, Finland)
Radar, localisation and sensing for aircraft and automotive applications	T06-P12	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Propagation	19 Mar 2020	B7	18:00	18:20	Metasurface-Based Radar Jammers and Deceptors Implemented Through Time-Varying Metasurfaces	Davide Ramaccia (RomaTre University, Italy); Dimitrios Sounas (Wayne State University, USA); Andrea Alù (The University of Texas at Austin, USA); Alessandro Toscano (University Roma Tre (IT), Italy); Filiberto Biloti (University Roma Tre, Italy)
Recent Advances in Terahertz Antennas for Radio-Astronomy and Space Exploration	C555	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	B8	08:30	08:50	Towards a Si/GaAs Based Flat-Panel Quasi-Optical Metasurface Antenna with Switchable Beam Characteristics	Okan Yurduseven (Queen's University Belfast & Duke University, United Kingdom (Great Britain)); Choonsup Lee (JPL, USA); David González-Ovejero (Centre National de la Recherche Scientifique - CNRS, France); Mauro Ettore (University of Rennes 1 & UMR CNRS 6164, France); Ronan Sauleau (University of Rennes 1, France); Vincent Fusco (Queen's University Belfast, United Kingdom (Great Britain)); Goutam Chattopadhyay (NASA-JPL/Caltech, USA); Nacer Chahat (NASA-JPL, Caltech, USA)
Recent Advances in Terahertz Antennas for Radio-Astronomy and Space Exploration	C555	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	B8	08:50	09:10	Analysis Methods for Multimoded Horns for Future THz Missions (SAFARI Instrument for SPICA)	Neil Trappe (NUI Maynooth, Ireland); Gert de Lange (SRON Netherlands Organization for Space Research, The Netherlands); Creidhe O'Sullivan (National University of Ireland Maynooth, Ireland); Maarten van der Vorst (European Space Agency, The Netherlands); Marcin Gradziel (National University of Ireland, Maynooth, Ireland); Michael Audley (SRON Netherlands Organization for Space Research, The Netherlands); Peter Ade (Cardiff University, United Kingdom (Great Britain))

Recent Advances in Terahertz Antennas for Radio-Astronomy and Space Exploration	CS55	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	B8	09:10	09:30	Antennas, Arrays, and Systems for Submillimeter-Wave Radio Astronomy	Goutam Chattopadhyay (NASA-JPL/Caltech, USA); Maria Alonso-delPino (Jet Propulsion Laboratory, USA); Jacob Kooi (, USA)
Recent Advances in Terahertz Antennas for Radio-Astronomy and Space Exploration	CS55	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	B8	09:30	09:50	Effect of Metal Resistive Losses on the Gain of a THz Planar Spiral Antenna	Elliott R Brown (2565 Vayview Drive, USA); Kerlos Atia Abdalmalak (Universidad Carlos III de Madrid, Spain); Weidong Zhang (Wright State University, USA)
Recent Advances in Terahertz Antennas for Radio-Astronomy and Space Exploration	CS55	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	B8	09:50	10:10	Compact Millimeter and Submillimeter-Wave Photonic Radiometer for Cubesats	Michal Grzegorz Wasiak (Carlos III University of Madrid, Spain); Gabriel Santamaria Botello (Universidad Carlos III de Madrid, Spain); Kerlos Atia Abdalmalak (Universidad Carlos III de Madrid, Spain); Florian Sedlmair (Max Planck Institute for the Science of Light, Germany); Alfredo Rueda (Max Planck Institute for the Science of Light, Germany); Daniel Segovia-Vargas (Universidad Carlos III de Madrid, Spain); Harald Schwefel (Max Planck Institute for the Science of Light, Germany); Luis Enrique García Muñoz (Universidad Carlos III de Madrid, Spain)
Recent Advances in Terahertz Antennas for Radio-Astronomy and Space Exploration	CS55	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	B8	10:40	11:00	Comparison of Modified Soret Lenses for Dual Band Integrated Detectors	Alicia E. Torres-García (Public University of Navarra, Spain); Jose M. Perez (Universidad Publica de Navarra, Spain); Ramon Gonzalo (Public University of Navarra, Spain); Iñigo Eddera (Universidad Pública de Navarra & Institute of Smart Cities, Universidad Pública de Navarra, Spain)
Recent Advances in Terahertz Antennas for Radio-Astronomy and Space Exploration	CS55	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	B8	11:00	11:20	The Optical Combiner of QUBIC: The Q & U Bolometric Interferometer for Cosmology	C Reidhe O'Sullivan (National University of Ireland Maynooth, Ireland); David Burke (National University of Ireland, Maynooth, Ireland); Donnacha Gayer (National University of Ireland, Maynooth, Ireland); James Murphy (National University of Ireland, Maynooth, Ireland); Stephen Scully (Institute of Technology Carlow, Ireland); Michele De Leo (Università di Roma – La Sapienza, Italy); Marco De Petris (Università di Roma – La Sapienza, Ireland); Massimo Gervasi (Università di Milano – Bicocca and INFN Milano-Bicocca, Italy); Mario Zannoni (Università di Milano – Bicocca and INFN Milano-Bicocca, Italy); Peter Ade (Cardiff University, United Kingdom (Great Britain)); Jose Alberro (GEMA Universidad Nacional de La Plata, Ireland); Alejandro Almela (Instituto de Tecnologías en Detección y Astropartículas, Argentina); Giorgio Amico (Università di Roma – La Sapienza, Italy); L Arnaldi (Centro Atómico Bariloche and Instituto Balseiro (CNEA), Argentina); Didier Auguste (Laboratoire de L'Accelérateur Linéaire, Orsay CNRS-IN2P3, France); Jonathan Aumont (Institut de Recherche en Astrophysique et Planétologie, Toulouse (CNRS-INSU), France); Susanna Azzoni (University of Manchester, United Kingdom (Great Britain)); Stefano Banfi (Università di Milano – Bicocca and INFN Milano-Bicocca, Italy); Elia Battistelli (Università di Roma – La Sapienza, Italy); Alessandro Bau (Università di Milano – Bicocca and INFN Milano-Bicocca, Italy); Benoit Belier (Paris Sud University, France); Laurent Berge (Centre de Spectrométrie Nucléaire et de Spectrométrie de Masse, Orsay, France); Jean-Philippe Bernard (Centre de Spectrométrie Nucléaire et de Spectrométrie de Masse, Orsay, France); Marco Bersanelli (Università degli Studi di Milano, Italy); N Bleurvaq (Astroparticule et Cosmologie, Paris, France); J Bonaparte (Centro Atomico Constituyentes, France); J Bonis (Laboratoire de L'Accelérateur Linéaire, Orsay CNRS-IN2P3, France); A Bottani (GEMA Universidad Nacional de La Plata, Argentina); Emory Bunn (University of Richmond, USA); Alberto Etchegoyen (Instituto de Tecnologías en Detección y Astropartículas, Argentina); Yannick Giraud-Heraud (Astroparticule et Cosmologie, Paris, France); Marcin Gradieli (National University of Ireland, Maynooth, Ireland); John Anthony Murphy (National University of Ireland Maynooth, Ireland); Laurent Grandsire (Astroparticule et Cosmologie, Paris, France); Jean-Christophe Hamilton (Astroparticule et Cosmologie, Paris, France); Aniello Mennella (Università degli Studi di Milano, Italy); Michel Piat (Astroparticule et Cosmologie, Paris, France); Lucio Picirillo (University of Manchester, United Kingdom (Great Britain)); Andrea Tartari (INFN - Pisa Section, Italy); Stephen Torchinsky (Astroparticule et Cosmologie, Paris, France); Sophie Henrot-Versille (Laboratoire de L'Accelérateur Linéaire, Orsay CNRS-IN2P3, France);
Recent Advances in Terahertz Antennas for Radio-Astronomy and Space Exploration	CS55	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	B8	11:20	11:40	Optics for the Submillimeter Wave Instrument on Jupiter Mission JUICE	Nikko Kotiranta (University of Bern, Switzerland); Karl Jacob (University of Bern, Switzerland); Tobias Plüss (University of Bern, Switzerland); Paul Hartogh (Max Planck Institute for Solar System Research, Germany); Axel Murk (University of Bern, Switzerland)
Recent Advances in Terahertz Antennas for Radio-Astronomy and Space Exploration	CS55	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	B8	11:40	12:00	Jupiter Icy Moon Explorer, Submillimeter Wave Instrument: Status and Performances of the 1200 GHz High Spectral Resolution Receiver Front End	Jeanne Treuttel (Observatoire de Paris, France)
Recent Advances in Terahertz Antennas for Radio-Astronomy and Space Exploration	CS55	T09 Space (incl. cubesat) / Convened Session / Antennas	18 Mar 2020	B8	12:00	12:20	Design and Characterization of 275-500 GHz Corrugated Horns and Optics for a Wideband Radio Astronomy Receiver	Bangwon Lee (Korea Astronomy and Space Science Institute, Korea (South)); Alvaro Gonzalez (National Astronomical Observatory of Japan, Japan); Keiko Kaneko (National Astronomical Observatory of Japan, Japan); Ryo Sakai (National Astronomical Observatory of Japan, Japan); Jung-Won Lee (Korea Astronomy and Space Science Institute, Korea (South))
Recent Advances on Electronically Steerable Antenna Arrays at mm-Wave Frequencies	CS56	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A3	16:40	17:00	Design of Wideband Wide-Scanning Dual-Polarized Phased Array Covering Simultaneously Both the Ku- And the Ka-Satcom Bands	Alexander J van Katwijk (Delft University of Technology, The Netherlands); Andrea Neto (Delft University of Technology, The Netherlands); Giovanni Toso (European Space Agency, ESA ESTEC, The Netherlands); Daniele Cavallo (Delft University of Technology, The Netherlands)
Recent Advances on Electronically Steerable Antenna Arrays at mm-Wave Frequencies	CS56	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A3	17:00	17:20	Towards the Realization of the E-Wall Concept at Mm-Waves	Marzieh SalarRahimi (KU Leuven, Belgium); Marcel Geurts (NXP Semiconductors, The Netherlands); Tonny Kamphuis (NXP Semiconductors, The Netherlands); Guy Vandenbosch (Katholieke Universiteit Leuven (KU Leuven), Belgium)
Recent Advances on Electronically Steerable Antenna Arrays at mm-Wave Frequencies	CS56	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A3	17:20	17:40	Phased Array at Mm-Waves Based on Filter-Integrated Antenna Elements	Darwin Blanco (Ericsson, Sweden); Christos Koltidsas (Ericsson, Sweden)
Recent Advances on Electronically Steerable Antenna Arrays at mm-Wave Frequencies	CS56	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A3	17:40	18:00	Review of W-band Reconfigurable Reflectarray and Transmitarray Antennas at Tsinghua University	Xiaotian Pan (Tsinghua University, China); Fan Yang (Tsinghua University, China); Shenheng Xu (Tsinghua University, China); Maokun Li (Tsinghua University, China)
Recent Advances on Electronically Steerable Antenna Arrays at mm-Wave Frequencies	CS56	T02 Millimetre wave 5G / Convened Session / Antennas	17 Mar 2020	A3	18:00	18:20	Liquid Crystal-based Reconfigurable Metasurface for Beam Scanning at Millimeter Wave Frequencies	Enrica Martini (University of Siena, Italy); Gabriele Minatti (Wave Up S. r. l., Italy); Francesco Caminita (Wave-Up SRL, Italy); Giorgio Giordano (ENAC Foundation & Politecnico di Torino, Italy); Giovanni Toso (European Space Agency, ESA ESTEC, The Netherlands); Stefano Maci (University of Siena, Italy); Giuseppe Vecchi (Politecnico di Torino, Italy)
Recent Research on Wind Turbines: EM Modelling and Measurements	Convened Poster 1-CS57	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Wind Turbine Blade Deflection Sensing Using Blade-Mounted Ultrawideband Antennas	Ondřej Fránek (Aalborg University & APMS Section, Denmark); Shuai Zhang (Aalborg University, Denmark); Kim Olesen (Aalborg University, Denmark); Patrick Eggers (Aalborg University, Denmark); Claus Byskov (LM Wind Power, Denmark); Gert Pedersen (Aalborg University, Denmark)
Recent Research on Wind Turbines: EM Modelling and Measurements	Convened Poster 1-CS57	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	An Improved Forecast Method for the Interaction of Wind Turbines with Doppler VOR	Thorsten Schrader (Physikalisch-Technische Bundesanstalt, Germany); Jochen Bredemeyer (FCS Flight Calibration Services GmbH, Germany); Thomas Kleine-Ostmann (Physikalisch-Technische Bundesanstalt, Germany); Marius Mihalachi (Physikalisch-Technische Bundesanstalt, Germany)
Recent Research on Wind Turbines: EM Modelling and Measurements	Convened Poster 1-CS57	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Validity Domain of the Oduaiya Expression for Computing the Conventional VOR Multipath Error	Seif Ben-Hassine (ENAC, France); Alexandre Chabory (ENAC, France); Christophe Morlaes (ENAC, France); Rémi Douvenot (ENAC, France)
Recent Research on Wind Turbines: EM Modelling and Measurements	Convened Poster 1-CS57	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	An Overview of Wind Turbine Interference Research Activities at Fraunhofer FHR	Frank Weinmann (Fraunhofer FHR, Germany)
Recent Research on Wind Turbines: EM Modelling and Measurements	Convened Poster 1-CS57	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	17 Mar 2020	A2 (Poster Area)	13:20	13:20	Acceleration of Physical Optics Interactions Using Inhomogeneous Plane Waves	Oumaima Mhadhib (Icteam, Université Catholique de Louvain, Belgium); Jean Cavillot (Université Catholique de Louvain (UCL), Belgium); Thomas Pairon (Université Catholique de Louvain, Belgium); Christophe Craeye (UCL, Belgium)
Reconfigurable Antennas for Compact Devices	CS58	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B1	16:40	17:00	Electrically Small Antenna with Broadside and Monopole-Like Beam Reconfigurability	Ming-Chun Tang (Chongqing University, China); Yingjie Chen (Chongqing University, China); Xiaoming Chen (Chongqing University, China); Richard Ziolkowski (University of Technology Sydney & University of Arizona, Australia)

Reconfigurable Antennas for Compact Devices	CS58	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B1	17:00	17:20	Frequency Reconfigurable Antenna Loaded with Magneto Dielectric Materials at VHF Band	Lotfi Batel (CEA-Leti, France); Christophe Delaveaud (CEA-LETI, France); Jean-François Pintos (CEA-LETI, France); Jean-Luc Mattei (Université de Bretagne Occidentale, LabSTICC, France); Vincent Laur (Lab-STICC / University of Brest, France); Alexis Chevalier (University of Brest & Lab-STICC UMR CNRS 3192, France)
Reconfigurable Antennas for Compact Devices	CS58	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B1	17:20	17:40	Four-Element Beam Switching Antenna for Compact IoT Devices	Marios Patriotis (The University of New Mexico, USA); Firas Ayoub (University of New Mexico & COSMIAC - University of New Mexico, USA); Christos Christodoulou (The University of New Mexico, USA)
Reconfigurable Antennas for Compact Devices	CS58	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B1	17:40	18:00	Compact 4-Element Radiation Pattern Agile Antenna for Spatial Filtering in IoT Networks	Luca Santamaria (University Côte d'Azur, CNRS, LEAT, France); Leonardo Lizzi (University Côte d'Azur, CNRS, LEAT, France); Fabien Ferrero (University Nice Sophia Antipolis, CNRS, LEAT & CREMANT, France); Robert Staraj (University Cote d'Azur, CNRS, LEAT, France)
Reconfigurable Antennas for Compact Devices	CS58	T04 IoT and M2M / Convened Session / Antennas	17 Mar 2020	B1	18:00	18:20	Reconfigurable Filtenna for 5G/LEO Constellations Mobile Terminals	Luís Carlos Rodrigues (University of Aveiro & Instituto de Telecomunicações, Portugal); Tiago Varum (Instituto de Telecomunicações, Universidade de Aveiro, Portugal); João Matos (Instituto de Telecomunicações, Universidade de Aveiro, Portugal)
Reconfigurable Reflectarray and Transmitarrays	CS59	T09 Space (incl. cubesat) / Convened Session / Antennas	20 Mar 2020	B8	08:30	08:50	On the Design of Multiband Antenna Employing AFSR Structure as Ground Plane for Low Out-of-Band RCS	Ahmed Abdelmottaleb Omar (Pohang University of Science and Technology (POSTECH), Korea (South)); Zhongxiang Shen (Nanyang Technological University, Singapore); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))
Reconfigurable Reflectarray and Transmitarrays	CS59	T09 Space (incl. cubesat) / Convened Session / Antennas	20 Mar 2020	B8	08:50	09:10	Steerable Reflectarray Using Tunable Height Dielectric for High-Power Applications	Kendrick Q Henderson (The Ohio State University - The ElectroScience Lab, USA); Nima Ghahichehian (The Ohio State University, USA)
Reconfigurable Reflectarray and Transmitarrays	CS59	T09 Space (incl. cubesat) / Convened Session / Antennas	20 Mar 2020	B8	09:10	09:30	Bandwidth and Efficiency Enhancement for 2-D Beamsweeping Reflectarray Operating at X Band	Michael Trampler (L3Harris, USA); Ricardo Lovato (University of Central Florida, USA); Xun Gong (University of Central Florida, USA)
Reconfigurable Reflectarray and Transmitarrays	CS59	T09 Space (incl. cubesat) / Convened Session / Antennas	20 Mar 2020	B8	09:30	09:50	A 2-Bit Phase-Shifting Unit Cell Design for Beam-Steerable Reflectarrays	Hung Luyen (University of Wisconsin-Madison, USA); John Booske (University of Wisconsin-Madison, USA); Nader Behdad (University of Wisconsin-Madison, USA)
Reconfigurable Reflectarray and Transmitarrays	CS59	T09 Space (incl. cubesat) / Convened Session / Antennas	20 Mar 2020	B8	09:50	10:10	Design of Multilayer, Dualband Metasurface Reflectarrays	Jordan Budhu (University of Michigan, USA); Anthony Grbic (University of Michigan, Ann Arbor, USA); Eric Michielssen (University of Michigan, USA)
Reconfigurable Reflectarray and Transmitarrays	CS59	T09 Space (incl. cubesat) / Convened Session / Antennas	20 Mar 2020	B8	10:40	11:00	Time Modulated Reflectarray Unit-Cells with Nonreciprocal Polarization Control	Santiago Spatola (Universidad Politécnica de Madrid, Spain); Juan Sebastián Gómez-Díaz (University of California, Davis, USA); Eduardo Carrasco (Universidad Politécnica de Madrid, Spain)
Reconfigurable Reflectarray and Transmitarrays	CS59	T09 Space (incl. cubesat) / Convened Session / Antennas	20 Mar 2020	B8	11:00	11:20	P-i-n Diode Based Electronically Steerable Transmitarrays for SOTM at Ka-band	Francesco Foglia Manzillo (CEA-LETI, France); Maciej Smierzchalski (CEA, France); Antonio Clemente (CEA-LETI Minatex, France); Ronan Sauleau (University of Rennes 1, France)
Reconfigurable Reflectarray and Transmitarrays	CS59	T09 Space (incl. cubesat) / Convened Session / Antennas	20 Mar 2020	B8	11:20	11:40	Design of Microwave Imaging System Based on Reconfigurable Transmitarray with Variable Focuses	Xiaotian Pan (Tsinghua University, China); Fan Yang (Tsinghua University, China); Shenheng Xu (Tsinghua University, China); Maokun Li (Tsinghua University, China)
Reconfigurable Reflectarray and Transmitarrays	CS59	T09 Space (incl. cubesat) / Convened Session / Antennas	20 Mar 2020	B8	11:40	12:00	A Design Methodology for Reconfigurable Reflectarrays with a Deformable Ground	Claire Benteney (Heriot Watt University, France); Raphael Gillard (IETR & INSA, France); Erwan Fourn (INSA of Rennes & IETR, France); George Goussetis (Heriot-Watt University, United Kingdom (Great Britain)); Hervé Legay (Thales Alenia Space, France); Leri Datsashvili (Large Space Structures (LSS) GmbH, Germany)
Reconfigurable Reflectarray and Transmitarrays	CS59	T09 Space (incl. cubesat) / Convened Session / Antennas	20 Mar 2020	B8	12:00	12:20	Performance Assessment of a Reconfigurable Circularly Polarized Reflectarray at K-Band	Roger Farias (Instituto Superior Técnico, Portugal); Custodio Peixeiro (IST-University of Lisbon, Portugal); Marcos V. T. Heckler (Universidade Federal do Pampa, Brazil)
Reflect arrays and transmit arrays	T09-A19	T09 Space (incl. cubesat) / Regular Session / Antennas	18 Mar 2020	A2	08:30	08:50	Multifocus Reflectarray Concept: Preliminary Design and Possible Applications	Christophe Granet (Lyrebird Antenna Research Pty Ltd, Australia); Michael F. Paivig (TICRA, Denmark); Min Zhou (TICRA, Denmark); Stig Sørensen (TICRA, Denmark)
Reflect arrays and transmit arrays	T09-A19	T09 Space (incl. cubesat) / Regular Session / Antennas	18 Mar 2020	A2	08:50	09:10	Design of Ka-band Reflectarray Antennas for High Resolution SAR Instrument	Min Zhou (TICRA, Denmark); Michael F. Paivig (TICRA, Denmark); Stig Sørensen (TICRA, Denmark); Jakob Rosenkrantz de Lasson (TICRA, Denmark); David Marote Alvarez (Airbus/CASA, Spain); Michael Notter (Airbus DS Ltd, United Kingdom (Great Britain)); Dennis T. Schobert (European Space Agency, The Netherlands)
Reflect arrays and transmit arrays	T09-A19	T09 Space (incl. cubesat) / Regular Session / Antennas	18 Mar 2020	A2	09:10	09:30	Preliminary Simulations of a 1.8-M Parabolic Reflectarray in a Geostationary Satellite to Generate a Complete Multi-Spot Coverage for Tx	Daniel Martínez-de-Rioja (Universidad Politécnica de Madrid, Spain); Jose A. Encinar (Universidad Politécnica de Madrid, Spain); Yolanda Rodríguez-Vaqueiro (University of Vigo, Spain); Antonio Pino (University of Vigo, Spain)
Reflect arrays and transmit arrays	T09-A19	T09 Space (incl. cubesat) / Regular Session / Antennas	18 Mar 2020	A2	09:30	09:50	Band Enhancement in Reflectarrays for Space Communications Based on Multi-Frequency Synthesis Procedure	Daniel R. Prado (Universidad de Oviedo & Signal Theory and Communications, Spain); Manuel Arrebola (Universidad de Oviedo, Spain); Marcos R. Pino (Universidad de Oviedo, Spain); George Goussetis (Heriot-Watt University, United Kingdom (Great Britain))
Reflect arrays and transmit arrays	T09-A19	T09 Space (incl. cubesat) / Regular Session / Antennas	18 Mar 2020	A2	09:50	10:10	A Wideband Reflectarray Using Slotted Patch with Concave Arms	Ming Min (Nanjing University of Science and Technology, China); Lu Guo (Nanjing University of Science and Technology, China); Wenjie Feng (Nanjing University of Science and Technology, China)
Reflect arrays and transmit arrays	T09-A19	T09 Space (incl. cubesat) / Regular Session / Antennas	18 Mar 2020	A2	10:40	11:00	Bandwidth Improvement of Reflectarray Cells Using Variable Rotation Technique at Two Frequencies for Dual Circular Polarization	Daniel Martínez-de-Rioja (Universidad Politécnica de Madrid, Spain); Eduardo Martínez-de-Rioja (Universidad Rey Juan Carlos, Spain); Jose A. Encinar (Universidad Politécnica de Madrid, Spain); Rafael Florencio (University of Alcalá, Spain); Rafael R. Boix (University of Seville, Spain)
Reflect arrays and transmit arrays	T09-A19	T09 Space (incl. cubesat) / Regular Session / Antennas	18 Mar 2020	A2	11:00	11:20	Design of a Wideband Linear-to-Circular Polarizing Reflector for Ka-band Satellite Applications	Eduardo Martínez-de-Rioja (Universidad Rey Juan Carlos, Spain); Jose A. Encinar (Universidad Politécnica de Madrid, Spain)
Reflect arrays and transmit arrays	T09-A19	T09 Space (incl. cubesat) / Regular Session / Antennas	18 Mar 2020	A2	11:20	11:40	A Low-Profile and Efficient Front-End Antenna for Point-to-Point Wireless Communication Links	Mst Nishat Yasmin Koli (Macquarie University, Australia); Muhammad Usman Afzal (Macquarie University, Australia); Karu Esselle (University of Technology Sydney, Australia); Raheel Maqsood Hashmi (Macquarie University & IEEE, Australia); Md Zahidul Islam (Teleaus: Serveno Australia Pty Ltd, Australia)
Reflect arrays and transmit arrays	T09-A19	T09 Space (incl. cubesat) / Regular Session / Antennas	18 Mar 2020	A2	11:40	12:00	Perforated Dielectric Reflectarray in Ka-band	Andrea Massaccesi (Politecnico di Torino, Italy); Michele Beccaria (Politecnico di Torino, Italy); Paola Pirinoli (Politecnico di Torino, Italy)
Reflect arrays and transmit arrays	T09-A19	T09 Space (incl. cubesat) / Regular Session / Antennas	18 Mar 2020	A2	12:00	12:20	A Reconfigurable Origami Reflectarray	Abdul sattar Kaddour (Florida International University, USA); Constantinos L. Zekios (Florida International University, ECE & FIU, USA); Stavros Georgakopoulos (Florida International University, USA)
RFID and backscattering antennas	T04-A15	T04 IoT and M2M / Regular Session / Antennas	17 Mar 2020	B2	16:40	17:00	Tag Design for RFID AC Current Sensing System	Irfan Ullah (University of Kent, United Kingdom (Great Britain)); Robert J Horne (University of Kent, United Kingdom (Great Britain)); Benito Sanz-Izquierdo (University of Kent, United Kingdom (Great Britain)); John Batchelor (University of Kent, United Kingdom (Great Britain))
RFID and backscattering antennas	T04-A15	T04 IoT and M2M / Regular Session / Antennas	17 Mar 2020	B2	17:00	17:20	Design of a Resistant Circularly Polarized Tag Antenna with High Performances in the EU UHF RFID Band	Khodor Jebbawi (IM2NP, France); Amal Afy (IM2NP, Aix-Marseille University, France); Matthieu Egels (IM2NP, France); Philippe Pannier (IM2NP, France)
RFID and backscattering antennas	T04-A15	T04 IoT and M2M / Regular Session / Antennas	17 Mar 2020	B2	17:20	17:40	Effect of Bending on a Textile UHF-RFID Tag Antenna	Mohamed El Bakkali (Abdelmalek Essadi University, Spain); Marc Martínez (Universitat Politècnica de Catalunya, Spain); Raul Fernandez-Garcia (Universitat Politècnica de Catalunya, Spain); Ignacio Gil (Universitat Politècnica de Catalunya, Spain); Otman El Mrabet (Abdelmalek Essadi University, Morocco)
RFID and backscattering antennas	T04-A15	T04 IoT and M2M / Regular Session / Antennas	17 Mar 2020	B2	17:40	18:00	Performances of a 3.6 GHz Epidermal Loop for Future 5G-RFID Communications	Francesco Amato (University of Roma Tor Vergata, Italy); Cecilia Occhiuzzi (University of Roma Tor Vergata & DICL, Italy); Gaetano Marrocco (University of Rome Tor Vergata, Italy)
RFID and backscattering antennas	T04-A15	T04 IoT and M2M / Regular Session / Antennas	17 Mar 2020	B2	18:00	18:20	Monolithic Antenna Array for Epidermal 5G Backscattering Communications	Cecilia Occhiuzzi (University of Roma Tor Vergata & DICL, Italy); Gaetano Marrocco (University of Rome Tor Vergata, Italy)
Satellite propagation	T09-P08	T09 Space (incl. cubesat) / Regular Session / Propagation	17 Mar 2020	B8	08:30	08:50	First and Second Order Statistics of Two Years Alphasat Ka/Q Band Satellite Propagation Measurements in Budapest	Bernard Adjei-Frimpong (Budapest University of Technology and Economics, Hungary); László Csurgai-Horváth (Budapest University of Technology and Economics, Hungary)
Satellite propagation	T09-P08	T09 Space (incl. cubesat) / Regular Session / Propagation	17 Mar 2020	B8	08:50	09:10	A Physical-Statistical Hybrid Model for Land Mobile Satellite Propagation Channel at Ku/Ka Band	Sebastien Rougerie (CNES, France); Jonathan Israel (ONERA - The French Aerospace Lab, France)

Satellite propagation	T09-P08	T09 Space (incl. cubesat) / Regular Session / Propagation	17 Mar 2020	B8	09:10	09:30	Fade Slope Analysis with Q-band Alphasat Satellite Measurements in Madrid	Domingo Pimiento-del-Valle (Universidad Politécnica de Madrid, Spain); Pedro Garcia-del-Pino (Universidad Politécnica de Madrid, Spain); Jose M Riera (Universidad Politécnica de Madrid, Spain)
Satellite propagation	T09-P08	T09 Space (incl. cubesat) / Regular Session / Propagation	17 Mar 2020	B8	09:30	09:50	Heights of the 0°C Isotherm and the Bright Band in Madrid: Comparison and Variability	Ana Benarroch (Universidad Politécnica de Madrid, Spain); Gustavo Siles (Universidad Privada Boliviana, Bolivia); Jose M Riera (Universidad Politécnica de Madrid, Spain); Santiago Pérez-Peña (Universidad Politécnica de Madrid, Spain)
Satellite propagation	T09-P08	T09 Space (incl. cubesat) / Regular Session / Propagation	17 Mar 2020	B8	09:50	10:10	An Empirical Model for Time Diversity Statistics at Ka- And Q-band	Armando Rocha (University of Aveiro & Instituto de Telecomunicações, Portugal); Susana Mota (University of Aveiro & Institute of Telecommunications, Portugal)
Satellite propagation	T09-P08	T09 Space (incl. cubesat) / Regular Session / Propagation	17 Mar 2020	B8	10:40	11:00	Statistical Analysis of Satellite Communication Experimental Time Diversity in Slovenia	Arsim Kelmedin (Jozef Stefan Institute, Slovenia); Ales Svigel (Jozef Stefan Institute, Slovenia); Andrej Hrovat (Jozef Stefan Institute, Slovenia)
Satellite propagation	T09-P08	T09 Space (incl. cubesat) / Regular Session / Propagation	17 Mar 2020	B8	11:00	11:20	Cloud Free LOS Probability Estimation for MEO Optical Satellite Systems and Optical Satellite Network Dimensioning	Christos N. Efrem (National Technical University of Athens, Greece); Nikolaos Lyras (National Technical University of Athens, Greece); Charilaos Kourgiorgias (Science and Technology Facilities Council/RAL Space, United Kingdom (Great Britain)); Athanasios D. Panagopoulos (National Technical University of Athens, Greece); Pantelis-Daniel Arapoglou (European Space Agency, The Netherlands)
Satellite propagation	T09-P08	T09 Space (incl. cubesat) / Regular Session / Propagation	17 Mar 2020	B8	11:20	11:40	Variability of Gaseous Attenuation at Very Low Elevation Angle Slant Paths; Measurements and Modelling	Erik W Alsaker (University of Bergen, Norway); Martin Rytir (Norwegian Defence Research Establishment (FFI), Norway)
Satellite propagation	T09-P08	T09 Space (incl. cubesat) / Regular Session / Propagation	17 Mar 2020	B8	11:40	12:00	Potentialities of the Numerical Weather Prediction Model WRF to Produce Attenuation Statistics in Tropical Regions	Valentin Le Mire (ONERA, France); Xavier Boulanger (CNES, France); Laurent Castanet (ONERA, France); Bouchra Benammar (Centre National d'Etudes Spatiales (CNES), France); Laurent Féral (Laboratoire LAPLACE, France)
Satellite propagation	T09-P08	T09 Space (incl. cubesat) / Regular Session / Propagation	17 Mar 2020	B8	12:00	12:20	Performance Trends at 26 GHz for a Receiving Ground Station at Polar Latitudes: The SNOWBEAR Project	Matteo Marchetti (University of Pavia, Italy); Donato Lospalluto (University of Pavia, Italy); Filippo Concaro (European Space Agency, Germany); Filomena Romano (CNR-IMAA, Italy); Domenico Cimini (CNR-IMAA, Italy); Marco Pasian (University of Pavia, Italy)
Scattering and diffraction	T11-E06	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	20 Mar 2020	B4	08:30	08:50	Characteristic Far-Field Analysis of Scattering Due to Plane Wave Excitations	Xiong Kai Benjamin Chng (DSO National Laboratories, Singapore)
Scattering and diffraction	T11-E06	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	20 Mar 2020	B4	08:50	09:10	A Technique for Including Edge Diffraction Effects on RCS Evaluation at Fresnel Region Ranges	Ilie Valentin Mihai (University Politehnica of Bucharest & The Institut d'Electronique et de Télécommunications de Rennes, Romania); Razvan D. Tamas (Constanta Maritime University, Romania); Ala Sharaia (Université de Rennes 1 & IETR, France)
Scattering and diffraction	T11-E06	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	20 Mar 2020	B4	09:10	09:30	Perfect Matching of Reactive-Loaded Transmission Lines Through Complex Excitation	Angelica Viola Marini (Università degli Studi Roma Tre, Italy); Davide Ramaccia (RomaTre University, Italy); Alessandro Toscano (University Roma Tre (IT), Italy); Filiberto Biotti (University Roma Tre, Italy)
Scattering and diffraction	T11-E06	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	20 Mar 2020	B4	09:30	09:50	Negative Reflection and Refraction and Filter Characteristics in the Leaky Wave-supportable Gratings - TE Polarization Case	Soonwoo Park (Kyungpook National University, Korea (South)); Hongjoon Kim (Kyungpook National University, Korea (South)); Young-Ki Cho (Kyungpook National University, Korea (South)); Ji-Hwan Ko (Kumoh National Institute of Technology, Korea (South))
Scattering and diffraction	T11-E06	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	20 Mar 2020	B4	09:50	10:10	How Radiation Propagates in Random Media: Spatial Structure of Transmission Eigenchannels	Ping Fang (Beijing University of Posts and Telecommunications, Israel); Chushun Tian (Institute for Advanced Study, Tsinghua University, China); Liyi Zhao (Tsinghua University, China); Yury Blokh (Technion-Israel Institute of Technology, Israel); Valentin Freilikh (Bar-Ilan University, Israel); Franco Nori (Center for Emergent Matter Science (CEMS), RIKEN, Japan)
Scattering and diffraction	T11-E06	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	20 Mar 2020	B4	10:40	11:00	Study on the Location of mmWave Antenna for the Autonomous Car's Detection and Ranging Sensors	Ali Araghi (University of Surrey, United Kingdom (Great Britain)); Mohsen Khalili (University of Surrey & 5G Innovation Centre, Institute for Communication Systems (ICS), United Kingdom (Great Britain)); Pei Xiao (University of Surrey, United Kingdom (Great Britain)); Rahim Tafazolli (University of Surrey, United Kingdom (Great Britain))
Scattering and diffraction	T11-E06	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	20 Mar 2020	B4	11:00	11:20	Electromagnetic Scattering by an Inhomogeneous Body of Revolution: a General Approach Based on the Hybrid Projection Method	Sergei P. Skobelev (Radiophysika, Russia); Ekaterina Semernya (Moscow Institute of Physics and Technology, Russia)
Scattering and diffraction	T11-E06	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	20 Mar 2020	B4	11:20	11:40	Performance of Absorbing Periodic Structures of Cylindrical Black Holes Arranged on a Perfectly Conducting Screen	Yana Chizhevskaya (Moscow Institute of Physics and Technology, Russia); Olga Smolnikova (Company Radiophysika, Russia); Sergei P. Skobelev (Radiophysika, Russia)
Scattering and diffraction	T11-E06	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	20 Mar 2020	B4	11:40	12:00	Metasurface Modeling of Periodic Diffraction Gratings Based on Generalized Sheet Transition Conditions (GSTCs)	Ville Tiukuvaara (Carleton University, Canada); Tom Smy (Carleton University, Canada); Shulabh Gupta (Carleton University, Canada)
Scattering and diffraction	T11-E06	T11 Fundamental research and emerging technologies / Regular Session / Electromagnetics	20 Mar 2020	B4	12:00	12:20	Scattering Control of Wideband Phased Arrays Using Metamaterial Absorbers	Zhechen Zhang (University of Electronic Science and Technology of China, China); Shi Wen Yang (University of Electronic Science and Technology of China, China); Yankai Ma (University of Electronic Science and Technology of China, China); Yikai Chen (University of Electronic Science and Technology of China, China); Shi-Wei Qu (University of Electronic Science and Technology of China, China)
Sensors and Systems for Microwave Biomedical Imaging and Sensing	CS60	T05 Biomedical and health / Convened Session / Antennas	17 Mar 2020	B6	08:30	08:50	Microwave Radar Breast Screening: System Interaction with the Post-Biopsy Clip	Lena Kranold (McGill University, Canada); Milica Popović (McGill University, Canada)
Sensors and Systems for Microwave Biomedical Imaging and Sensing	CS60	T05 Biomedical and health / Convened Session / Antennas	17 Mar 2020	B6	08:50	09:10	Breast Cancer Imaging Using a 24 GHz Ultra-Wideband MIMO FMCW Radar: System Considerations and First Imaging Results	Maria Virginia Prati (Politecnico di Milano, Italy); Jochen Moll (Goethe University Frankfurt am Main, Germany); Christian Kexel (Goethe University Frankfurt, Germany); Duy Hai Nguyen (Goethe University Frankfurt, Germany); Avik Santra (Infineon Technologies AG, Germany); Andrea Aliverti (Politecnico di Milano, Italy); Viktor Krozer (Goethe University of Frankfurt am Main, Germany); Vadim Issakov (Infineon Technologies AG, Germany)
Sensors and Systems for Microwave Biomedical Imaging and Sensing	CS60	T05 Biomedical and health / Convened Session / Antennas	17 Mar 2020	B6	09:10	09:30	Qualitative Techniques for Generating Spatial Prior Information for Biomedical Microwave Imaging	Martina Teresa Bevacqua (Università Mediterranea di Reggio Calabria, Italy); Nasim Abdollahi (University of Manitoba, Canada); Ian Jeffrey (University of Manitoba, Canada); Tommaso Isernia (University of Reggio Calabria, Italy); Joe LoVetri (University of Manitoba, Canada)
Sensors and Systems for Microwave Biomedical Imaging and Sensing	CS60	T05 Biomedical and health / Convened Session / Antennas	17 Mar 2020	B6	09:30	09:50	Head and Neck Numerical Phantom Development for Cervical Lymph Node Microwave Imaging	Ana Catarina Pelicano (Faculdade de Ciências, Universidade de Lisboa, Portugal); Raquel C. Conceição (Instituto de Biofísica e Engenharia Biomédica, Faculdade de Ciências, Universidade de Lisboa, Portugal)
Sensors and Systems for Microwave Biomedical Imaging and Sensing	CS60	T05 Biomedical and health / Convened Session / Antennas	17 Mar 2020	B6	09:50	10:10	Integrating Nodal Adjoint Jacobian Method in the Discrete Dipole Approximation-based Image Reconstruction Algorithm	Samar Hosseinzadegan (Chalmers University of Technology, Sweden); Andreas Fhager (Chalmers University of Technology, Sweden); Mikael Persson (Chalmers University of Technology, Sweden); Paul M Meaney (Dartmouth College, USA)
Sensors and Systems for Microwave Biomedical Imaging and Sensing	CS60	T05 Biomedical and health / Convened Session / Antennas	17 Mar 2020	B6	10:40	11:00	A Tomographic Multistatic System for Biomedical Microwave Sensing	Igor Bisio (University of Genoa, Italy); Claudio Estatico (University of Genoa, Italy); Alessandro Fedeli (University of Genoa, Italy); Fabio Lavagetto (University of Genoa, Italy); Matteo Pastorino (University of Genoa, Italy); Andrea Randazzo (University of Genoa, Italy); Andrea Sciarone (University of Genoa, Italy)
Sensors and Systems for Microwave Biomedical Imaging and Sensing	CS60	T05 Biomedical and health / Convened Session / Antennas	17 Mar 2020	B6	11:00	11:20	Pilot Patient Study with the Wavelia Microwave Breast Imaging System for Breast Cancer Detection: Clinical Feasibility and Identified Technical Challenges	Angie Fasoula (Microwave Vision (MVG), France); Luc Duchesne (Microwave Vision (MVG), France); Brian M. Moloney (Lambe Institute for Translational Research, Ireland); Julio Daniel Gil Cano (Microwave Vision (MVG), France); Cecile Chenot (Microwave Vision (MVG), France); Barbara L. Oliveira (HRB Clinical Research Facility Galway, Ireland); Jean-Gaël Bernard (Microwave Vision (MVG), France); Sami M. Abd Elwahab (Lambe Institute for Translational Research, Ireland); Michael Kerin (Lambe Institute for Translational Research, Ireland)

Sensors and Systems for Microwave Biomedical Imaging and Sensing	CS60	T05 Biomedical and health / Convened Session / Antennas	17 Mar 2020	B6	11:20	11:40	Coverage Estimation for Microwave Imaging Using Full Multistatic Radar Imaging Algorithms with Restricted Opening	Hamza Benchakroun (National University of Ireland Galway, Ireland); Angie Fasoula (Microwave Vision Group, France); Luc Duchesne (MVG Industries, France); Martin O'Halloran (National University of Ireland, Galway, Ireland); Declan O'Loughlin (National University of Ireland Galway, Ireland)
Sensors and Systems for Microwave Biomedical Imaging and Sensing	CS60	T05 Biomedical and health / Convened Session / Antennas	17 Mar 2020	B6	11:40	12:00	Investigation of Influences on the Detectability of Magnetic Nanoparticles by Means of Microwaves for Biomedical Applications	Sebastian Ley (Technische Universität Ilmenau, Germany); Bernd Faenger (University Hospital Jena & Institute of Diagnostic and Interventional Radiology, Germany); Jürgen Sachs (Ilmenau University of Technology, Germany); Ingrid Hilger (University Hospital Jena, Germany); Marko Helbig (Technische Universität Ilmenau, Germany)
Sensors and Systems for Microwave Biomedical Imaging and Sensing	CS60	T05 Biomedical and health / Convened Session / Antennas	17 Mar 2020	B6	12:00	12:20	Phaseless Approach to Microwave Biomedical Imaging: System Requirements Towards Clinical Applications	Sandra Costanzo (University of Calabria, Italy); Giuseppe Lopez (University of Calabria, Italy)
Signal Processing Techniques for Advanced Electromagnetics Synthesis, Analysis, and Measurements	Convened Poster 2-CS61	T10 EM modelling and simulation tools / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Multiband Patch Antenna Design for RF Energy Harvesting Applications Using Coyote Optimization Algorithm	Achilles D. Boursianis (Aristotle University of Thessaloniki, Greece); Dimitrios Georgoulas (Aristotle University of Thessaloniki, Greece); Maria Papadopoulou (Aristotle University of Thessaloniki, Greece); Apostolia Karampatea (Aristotle University of Thessaloniki, Greece, Greece); Juliano Pierzean (Universidade Federal do Paraná - UPPR, Brazil); Leandro dos Santos Coelho (Pontifical Catholic University of Paraná & Federal University of Paraná, Brazil); Viviana Mariani (Pontificia Universidade Católica do Paraná & Universidade Federal do Paraná, Brazil); Katherine Siakavara (Aristotle University of Thessaloniki, Greece, Greece); Sotirios Goudos (Aristotle University of Thessaloniki, Greece)
Signal Processing Techniques for Advanced Electromagnetics Synthesis, Analysis, and Measurements	Convened Poster 2-CS61	T10 EM modelling and simulation tools / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Synthesis of Sparse Linear Arrays Including Directivity via a Hybrid L1 Minimization Algorithm	Feng Yang (University of Electronic Science and Technology of China & University of Electronic Science and Technology of China (UESTC), China); Shihwen Yang (University of Electronic Science and Technology of China (UESTC), China); Yikai Chen (University of Electronic Science and Technology of China, China); Paolo Rocca (University of Trento, Italy)
Signal Processing Techniques for Advanced Electromagnetics Synthesis, Analysis, and Measurements	Convened Poster 2-CS61	T10 EM modelling and simulation tools / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Efficient and Effective Synthesis of Large Arrays for 5G and Beyond	Daniele Pinchera (University of Cassino, Italy); Fulvio Schettino (Università degli Studi di Cassino, Italy); Mario Lucido (University of Cassino and Southern Lazio, Italy); Marco Donald Migliore (University of Cassino, Italy)
Signal Processing Techniques for Advanced Electromagnetics Synthesis, Analysis, and Measurements	Convened Poster 2-CS61	T10 EM modelling and simulation tools / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Shannon and Kolmogorov in Space Communication Channels	Marco Donald Migliore (University of Cassino, Italy)
Signal Processing Techniques for Advanced Electromagnetics Synthesis, Analysis, and Measurements	Convened Poster 2-CS61	T10 EM modelling and simulation tools / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	The Sparsity and Incoherence in Compressive Sensing as Applied to Field Reconstruction	Baozhu Li (Nanjing Normal University, China); Marco Salucci (ELEDIA Research Center, Italy); Paolo Rocca (University of Trento, Italy); James Ben (Nanjing Normal University, China); Wanchun Tang (Nanjing Normal University, China)
Signal Processing Techniques for Advanced Electromagnetics Synthesis, Analysis, and Measurements	Convened Poster 2-CS61	T10 EM modelling and simulation tools / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Tools for the Efficient Implementation of the DBIM Algorithm in Microwave Imaging Experiments	Pan Lu (King's College London, United Kingdom (Great Britain)); Juan Córcoles (Universidad Autónoma de Madrid, Spain); Panagiotis Kosmas (King's College London, United Kingdom (Great Britain))
Signal Processing Techniques for Advanced Electromagnetics Synthesis, Analysis, and Measurements	Convened Poster 2-CS61	T10 EM modelling and simulation tools / Convened Session / Antennas	18 Mar 2020	A2 (Poster Area)	13:20	13:20	Direction of Clutter Estimation by Total-Variation Compressive Sensing	Mohammad Hannan (ELEDIA Research Center, University of Trento, Italy); Alessandro Polo (ELEDIA Research Center, University of Trento, Italy); Paolo Rocca (University of Trento, Italy)
Small Antenna in a Human Body Environment	CS62	T04 IoT and M2M / Convened Session / Antennas	18 Mar 2020	B2	08:30	08:50	Small New Wearable Metamaterials Antennas for IOT, Medical and 5G Applications	Albert Sabban (Kinneret and ORT BRAUDE COLLEGE, Israel)
Small Antenna in a Human Body Environment	CS62	T04 IoT and M2M / Convened Session / Antennas	18 Mar 2020	B2	08:50	09:10	Design and Optimization of a Flexible CPW-Fed Slotted Planar Monopole for WLAN/WBAN and 5G	Bashar Bahaa Qas Elias (Universiti Malaysia Perlis (UniMAP), Malaysia); Ping Jack Soh (Universiti Malaysia Perlis (UniMAP) & Katholieke Universiteit Leuven, Malaysia); Azemi Abdullah Al-Hadi (University Malaysia Perlis, Malaysia); Hadi Alakbarian (University of Tehran, Iran); Sen Yan (Xi'an Jiaotong University, China)
Small Antenna in a Human Body Environment	CS62	T04 IoT and M2M / Convened Session / Antennas	18 Mar 2020	B2	09:10	09:30	User Body Effects on Mobile Antennas and Wireless Systems of 5G Communication	Kun Zhao (Sony Research Center Lund & Aalborg University, Sweden); Zhinong Ying (Sony Coporation, Sweden); Shuai Zhang (Aalborg University, Denmark); Gert Pedersen (Aalborg University, Denmark)
Small Antenna in a Human Body Environment	CS62	T04 IoT and M2M / Convened Session / Antennas	18 Mar 2020	B2	09:30	09:50	An Ultrawideband Conformal Antenna for Implantable Drug Delivery Device	Ahsan Noor Khan (Queen Mary University of London, United Kingdom (Great Britain)); Dingliang Wen (Queen Mary University of London, United Kingdom (Great Britain)); Yujie Liu (Queen Mary University of London & Antenna Group, United Kingdom (Great Britain)); Gleb Sukhorukov (Queen Mary University of London, United Kingdom (Great Britain)); Yang Hao (Queen Mary University, United Kingdom (Great Britain))
Small Antenna in a Human Body Environment	CS62	T04 IoT and M2M / Convened Session / Antennas	18 Mar 2020	B2	09:50	10:10	A Multi-Functional Compact Button Antenna for Wearable Applications	Jiahao Zhang (KU Leuven, Belgium); Sen Yan (Xi'an Jiaotong University, China); Xiaomu Hu (KU Leuven, Belgium); Tomislav Marinovic (Katholieke Universiteit Leuven & Chalmers University of Technology, Belgium); Guy Vandenbosch (Katholieke Universiteit Leuven (KU Leuven), Belgium)
Small Antenna in a Human Body Environment	CS62	T04 IoT and M2M / Convened Session / Antennas	18 Mar 2020	B2	10:40	11:00	Small Implanted Antennas for Wireless Communication and Energy Harvesting	Stavros Koulouridis (University of Patras, Greece)
Small Antenna in a Human Body Environment	CS62	T04 IoT and M2M / Convened Session / Antennas	18 Mar 2020	B2	11:00	11:20	Removable Finger Nail Antenna	Peter Njogu (University of Kent, United Kingdom (Great Britain)); Benito Sanz-Izquierdo (University of Kent, United Kingdom (Great Britain))
Small Antenna in a Human Body Environment	CS62	T04 IoT and M2M / Convened Session / Antennas	18 Mar 2020	B2	11:20	11:40	Antenna for a Cranial Implant: Simulation Issues and Design Strategies	Alberto Jose Moreno Montes (EPFL Switzerland); Ismael Vico Trivino (EPFL Switzerland); Marko Bosiljevac (University of Zagreb, Croatia); Miroslav J. Vellovic (EPFL Switzerland); Zvonimir Sipus (University of Zagreb, Croatia); Anja K. Skrivervik (EPFL, Switzerland)
Small Antenna in a Human Body Environment	CS62	T04 IoT and M2M / Convened Session / Antennas	18 Mar 2020	B2	11:40	12:00	Evaluation of Surface Equivalence for On-Body Propagation Modelling of Hearing Aid Antennas	Lukas Berkelmann (Leibniz University Hannover, Germany); Dirk Manteuffel (University of Hannover, Germany)
Small Antenna in a Human Body Environment	CS62	T04 IoT and M2M / Convened Session / Antennas	18 Mar 2020	B2	12:00	12:20	Penta-band Dual-fed Smart Glasses IoT Antenna	Bing Xiao (The University of Hong Kong, Hong Kong); Hang Wong (City University of Hong Kong, Hong Kong); Kwan L. Yeung (The University of Hong Kong, Hong Kong)
State of the Art in Antenna Research in Russia	CS63	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	16:40	17:00	Circular-Polarized Antennas Far-Field Enhancement Using Round Reflectors with Curved Sidewall	Vladimir Litun (Bauman Moscow State Technical University & National Research Nuclear University MEPhI, Russia); Daniel Semernya (Bauman Moscow State Technical University, Russia); Elena Komissarova (Bauman Moscow State Technical University, Russia)
State of the Art in Antenna Research in Russia	CS63	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	17:00	17:20	A 220-300 GHz Offset Dual-Reflector Antenna for Point-to-Point Radio	Alexey Kosogor (Rostov-on-Don Research Institute of Radio Communication, Russia); Yuri Tikhov (Rostov-on-Don Research Institute of Radio Communication, Russia)
State of the Art in Antenna Research in Russia	CS63	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	17:20	17:40	Design of Wideband Reflectarray Antennas	Yury Antonov (Saint Petersburg Electrotechnical University LETI, Russia); Mikhail Sugak (Saint Petersburg Electrotechnical University LETI, Russia); Svyatoslav Ballandovich (Saint Petersburg Electrotechnical University LETI, Russia); Grigory Kostikov (Saint Petersburg Electrotechnical University LETI, Russia); Liubov Liubina (Saint Petersburg Electrotechnical University LETI, Russia)
State of the Art in Antenna Research in Russia	CS63	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	17:40	18:00	Computer Simulations of Multiband Waveguide Filter on Modulated Metasurface	Andrey Albertovich Yelizarov (Moscow Institute of Electronics and Mathematics, NRU Higher School of Economics, Russia); Igor Vasilievich Nazarov (Moscow Institute of Electronics and Mathematics, NRU Higher School of Economics, Russia); Andrey Andreevich Skuridin (Moscow Institute of Electronics&Mathematics, NRU Higher School of Economics, Russia)
State of the Art in Antenna Research in Russia	CS63	T11 Fundamental research and emerging technologies / Convened Session / Antennas	19 Mar 2020	B4	18:00	18:20	A 3D Printed Luneburg Lens Fabricated by Fused Deposition Modelling	Roman Orehov (Joint-Stock Company NII"Vektor", Russia); Nikolai Pavlov (Joint-Stock Company NII Vector, Russia); Yury Salomatov (Siberian Federal University, Russia); Mikhail Sugak (Saint Petersburg Electrotechnical University LETI, Russia)
Terminal antennas and interactions with surroundings	T01-A02	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	19 Mar 2020	A2	10:40	11:00	Isolation Enhancement of Closely Spaced MIMO System Using Inverted Fork Shaped Decoupling Structure	Jogesh Chandra Dash (Indian Institute of Technology Bombay, India); Nagalakshmaiah Kalva (Indian Institute of Technology Bombay, India); Shilpa Kharce (Indian Institute of Technology, Bombay, India); Jayanta Mukherjee (Indian Institute of Technology Bombay, India)
Terminal antennas and interactions with surroundings	T01-A02	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	19 Mar 2020	A2	11:00	11:20	Improvements of Multi-Antenna Specific Absorption Rate Using a Two-Stage Technique	Yuan-Hung Lin (National Taipei University of Technology, Taiwan); Yen-Sheng Chen (National Taipei University of Technology, Taiwan)

Terminal antennas and interactions with surroundings	T01-A02	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	19 Mar 2020	A2	11:20	11:40	Effect of Dielectric Properties of Human Hand Tissue on Mobile Terminal Antenna Performance	Stanislav Stefanov Zhekov (Aalborg University, Denmark); Gert Pedersen (Aalborg University, Denmark)
Terminal antennas and interactions with surroundings	T01-A02	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	19 Mar 2020	A2	11:40	12:00	A Single Port Orthogonally Polarized Antenna for Handsets, IoT Terminals and Vehicles	Mohamed Sanad (Amant Antennas, Egypt); Noha Hassan (Faculty of Engineering, Cairo University, Egypt)
Terminal antennas and interactions with surroundings	T01-A02	T01 LTE and Sub-6GHz 5G / Regular Session / Antennas	19 Mar 2020	A2	12:00	12:20	Comparison of Different Antenna Cluster Weighting Methods	Jari-Matti Hannula (KTH Royal Institute of Technology, Sweden); Anu Lehtovuori (Aalto University, Finland); Ville Viikari (Aalto University & School of Electrical Engineering, Finland)
Trends and Advances in Machine Learning for Applied Electromagnetics	C564	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	16 Mar 2020	B9	13:30	13:50	Modelling Ray Tracing Propagation Data Using Different Machine Learning Algorithms	Sotirios Goudos (Aristotle University of Thessaloniki, Greece); Georgia E. Athanasiadou (University of Peloponnese, Greece); George Tsoulos (University of Peloponnese, Greece); Vasileios Rekkas (Aristotle University of Thessaloniki, Greece)
Trends and Advances in Machine Learning for Applied Electromagnetics	C564	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	16 Mar 2020	B9	13:50	14:10	A Comparison of Machine Learning Classifiers for Human Activity Recognition Using Magnetic Induction-based Motion Signals	Negar Golestani (University of Southern California, USA); Mahta Moghaddam (University of Southern California, USA)
Trends and Advances in Machine Learning for Applied Electromagnetics	C564	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	16 Mar 2020	B9	14:10	14:30	A Learning-by-Examples Method for Rapid Estimation of Surface Currents in Microstrip Antenna Arrays	Marco Salucci (ELEDIA Research Center, Italy); Giulia Mansutti (Università degli Studi di Padova, Italy); Alessandro Polo (ELEDIA Research Center, University of Trento, Italy); Paolo Rocca (University of Trento, Italy)
Trends and Advances in Machine Learning for Applied Electromagnetics	C564	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	16 Mar 2020	B9	14:30	14:50	Near-Field Multi-Focused Arrays Using Support Vector Regression	Rafael González Aystarán (Universidad de Oviedo, Spain); Fernando Las-Heras (University of Oviedo, Spain)
Trends and Advances in Machine Learning for Applied Electromagnetics	C564	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	16 Mar 2020	B9	14:50	15:10	SNO Optimization Technique Applied to Reflectarray Antennas Design	Michele Beccaria (Politecnico di Torino, Italy); Alessandro Nicolai (Politecnico di Milano, Italy); Andrea Massaccesi (Politecnico di Torino, Italy); Riccardo Enrico Zich (Politecnico di Milano, Italy); Paola Pirinoli (Politecnico di Torino, Italy)
Trends and Advances in Machine Learning for Applied Electromagnetics	C564	T10 EM modelling and simulation tools / Convened Session / Electromagnetics	16 Mar 2020	B9	15:10	15:30	Bayesian Active Learning for Electromagnetic Structure Design	Jixiang Qing (Ghent University, Belgium); Nicolas Knudde (Ghent University, Belgium); Ivo Couckuyt (Ghent University, Belgium); Domenico Spina (Ghent University, Belgium); Tom Daehne (Ghent University & IMEC, Belgium)
UAV-Based Antenna Measurements (AMTA)	T06-M10	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Measurements	18 Mar 2020	B11	10:40	11:00	Versatile Low-Cost and Light-Weight RF Equipment for Field Measurements	Jonas Kornprobst (Technical University of Munich, Germany); Raimund A. M. Maurermyer (Independent Researcher, Germany, Germany); Thomas F. Elbert (Technical University of Munich, Germany, Germany)
UAV-Based Antenna Measurements (AMTA)	T06-M10	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Measurements	18 Mar 2020	B11	11:00	11:20	RF-Signal Receiver for UAV-Based Characterisation of Aeronautical Navigation Systems	Alexander Weiß (Technische Universität Braunschweig, Germany); Robert Geise (Technische Universität Braunschweig, Germany); Björn Neubauer (Technische Universität Braunschweig, Germany); Fabian T. Faul (Technical University of Munich, Germany); Thomas F. Elbert (Technical University of Munich (TUM) & Chair of High-Frequency Engineering (HFT), Germany); Torsten Fritzel (Aerosses UG, Germany); Hans-Juergen Steiner (Aerosses UG, Germany); Rüdiger Strauß (Aerosses UG, Germany)
UAV-Based Antenna Measurements (AMTA)	T06-M10	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Measurements	18 Mar 2020	B11	11:20	11:40	Comparison Between Measured and Simulated Antenna Patterns for a LOFAR LBA Array	Paola Di Ninni (OAA - INAF, Italy); Pietro Bolli (INAF - Osservatorio Astrofisico di Arcetri, Italy); Fabio Paonessa (National Research Council of Italy (CNR - IEIT), Italy); Giuseppe Pupillo (IRA - INAF, Italy); Giuseppe Virone (Consiglio Nazionale delle Ricerche, Italy); Stefan J. Wijnholds (ASTRON, The Netherlands)
UAV-Based Antenna Measurements (AMTA)	T06-M10	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Measurements	18 Mar 2020	B11	11:40	12:00	A Drone-Mounted Q-Band Test-Source for the Validation of the Large Scale Polarization Explorer	Fabio Paonessa (National Research Council of Italy (CNR - IEIT), Italy); Giuseppe Virone (Consiglio Nazionale delle Ricerche, Italy); Lorenzo Ciorba (Institute of Electronics, Computer and Telecommunication Engineering (IEIT-CNR), Torino & Politecnico di Torino, Torino, Italy); Oscar A. Peverini (Istituto di Elett. e di Ingegneria dell'Inform. e delle Telecom. (IEIT-CNR), Italy); Giuseppe Addamo (Istituto di Elett. e di Ingegneria dell'Inform. e delle Telecom. (IEIT-CNR), Italy); Mauro Lumia (CNR, Italy); Marco Bersanelli (Università degli Studi di Milano, Italy); Aniello Mennella (Università degli Studi di Milano, Italy)
UAV-Based Antenna Measurements (AMTA)	T06-M10	T06 Aircraft (incl. UAV, UAS, RPAS) and automotive / Regular Session / Measurements	18 Mar 2020	B11	12:00	12:20	Advanced Remote-Controlled Airborne Sensor Systems	Thorsten Schrader (Physikalisch-Technische Bundesanstalt, Germany); Jochen Bredemeyer (FCS Flight Calibration Services GmbH, Germany); Thomas Kleine-Ostmann (Physikalisch-Technische Bundesanstalt, Germany); Marius Mihalachi (Physikalisch-Technische Bundesanstalt, Germany)
Unconventional Techniques and Applications for Inverse Scattering Problems	C566	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B9	08:30	08:50	Limited-view Prototype Design for Radar-based Fruit Imaging	Navid Ghavamli (King's College London, United Kingdom (Great Britain)); Ioannis Sotiriou (King's College London, United Kingdom (Great Britain)); Panagiotis Kosmas (King's College London, United Kingdom (Great Britain))
Unconventional Techniques and Applications for Inverse Scattering Problems	C566	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B9	08:50	09:10	Inverse Scattering in the Framework of Unconventional Lebesgue Spaces: A Case Study	Claudio Estatico (University of Genoa, Italy); Alessandro Fedeli (University of Genoa, Italy); Matteo Pastorino (University of Genoa, Italy); Andrea Randazzo (University of Genoa, Italy)
Unconventional Techniques and Applications for Inverse Scattering Problems	C566	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B9	09:10	09:30	A Phaseless Gauss-Newton Inversion Algorithm for Imaging and Design	Chaitanya Narendra (University of Manitoba, Canada); Puyan Mojabi (University of Manitoba, Canada)
Unconventional Techniques and Applications for Inverse Scattering Problems	C566	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B9	09:30	09:50	Recent Advances and Current Trends in Compressive Processing as Applied to Inverse Scattering	Lorenzo Poli (ELEDIA Research Center, University of Trento, Italy); Alessandro Polo (ELEDIA Research Center, University of Trento, Italy); Marco Salucci (ELEDIA Research Center, Italy); Nicola Anselmi (ELEDIA Research Center, Italy); Giacomo Oliveri (University of Trento & ELEDIA Research Center, Italy)
Unconventional Techniques and Applications for Inverse Scattering Problems	C566	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B9	09:50	10:10	Comparison Between MR, CT, and Quantitative Microwave Holography Images of a Compressed Breast Phantom	Daniel Tajik (McMaster University, Canada); Natalia Nikolova (McMaster University, Canada); Michael Noseworthy (McMaster University, Canada)
Unconventional Techniques and Applications for Inverse Scattering Problems	C566	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B9	10:40	11:00	Machine Learning for Microwave Imaging	Michele Ambrosiano (Università di Napoli Parthenope, Italy); Stefano Franceschini (University of Naples Parthenope, Italy); Fabio Basileci (Università degli Studi di Napoli Parthenope, Italy); Vito Pascasio (Università di Napoli Parthenope, Italy)
Unconventional Techniques and Applications for Inverse Scattering Problems	C566	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B9	11:00	11:20	Warping Method for Probe Location in near/far Field Transformation	Maria Antonia Maisto (Università degli studi della Campania Luigi Vanvitelli, Italy); Raffaele Solimene (Università degli studi della Campania Luigi Vanvitelli, Italy); Rocco Pierri (Università della Campania Luigi Vanvitelli, Italy)
Unconventional Techniques and Applications for Inverse Scattering Problems	C566	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B9	11:20	11:40	Microwave Imaging Device for In-Line Food Inspection	Marco Ricci (Politecnico di Torino, Italy); Lorenzo Crocco (CNR - National Research Council of Italy, Italy); Francesca Viplana (Politecnico di Torino, Italy)
Unconventional Techniques and Applications for Inverse Scattering Problems	C566	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B9	11:40	12:00	On the Use of Spherical Harmonics in Sparse Microwave Imaging	Nebojsa Vojnovic (University of Belgrade, Serbia); Marija Stevanovic (University of Belgrade, Serbia); Lorenzo Crocco (CNR - National Research Council of Italy, Italy)
Unconventional Techniques and Applications for Inverse Scattering Problems	C566	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	18 Mar 2020	B9	12:00	12:20	Microwave Imaging Profilometry for Plasma Diagnostics	Karunakaran Shruthi (SSN Institutions, India); Giuseppe Torrisi (INFN-LNS, Italy); David Mascali (INFN-LNS, Italy); Nagaradjane Prabagarane (SSNCE, India); Gino Sorbello (University of Catania, Italy); Loreto Di Donato (University of Catania, Italy)
Water-Based Microwave Devices	C567	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	17 Mar 2020	B4	16:40	17:00	Water-Based Microwave Absorber	Patrick Bradley (DCU, Ireland); Max Munoz (Queen Mary, University of London, United Kingdom (Great Britain)); Conor Brennan (Dublin City University, Ireland); Yang Hao (Queen Mary University, United Kingdom (Great Britain))
Water-Based Microwave Devices	C567	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	17 Mar 2020	B4	17:00	17:20	Water-Based Microwave Reflectarrays	Jonas Nielsen (Technical University of Denmark, Denmark); Rasmus Elkjaer Jacobsen (Technical University of Denmark, Denmark); Andrei Lavrinenko (Technical University of Denmark, Denmark); Samel Arslanagic (Technical University of Denmark, Denmark)

Water-Based Microwave Devices	CS67	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	17 Mar 2020	B4	17:20	17:40	Water-assisted Metasurface for Wireless Power Transfer	Polina Kapitanova (ITMO University, Russia); Mingzhao Song (ITMO University, Russia); Ksenia Rudneva (ITMO University, Russia); Aleksandr Markvart (ITMO University, Russia); Stanislav Glybovski (ITMO University, Russia); Constantin Simovski (Aalto University, Finland); Pavel Belov (ITMO University, Russia)
Water-Based Microwave Devices	CS67	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	17 Mar 2020	B4	17:40	18:00	Towards Efficient EM Wave Manipulation Using a Discrete Dielectric Huygens' Metasurface	Abhishek Sharma (City University of Hong Kong, Hong Kong); Alex Wong (City University of Hong Kong, Hong Kong)
Water-Based Microwave Devices	CS67	T11 Fundamental research and emerging technologies / Convened Session / Electromagnetics	17 Mar 2020	B4	18:00	18:20	Dynamically Reconfigurable Metamaterial-Based Scatterer	Dmitry A Dobrykh (ITMO University, Russia); Dmitry Filonov (Moscow Institute of Physics and Technology, Russia); Anna Mikhailovskaya (ITMO University, Russia); Pavel Ginzburg (Tel Aviv University, Israel)
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	13:30	13:50	Low-Profile and High-Gain Linear Polarized Loop Antenna	Ali Khaleghi (Norwegian University of Science and Technology (NTNU) & Oslo University Hospital, Norway); Ilanko Balasingham (Norwegian Institute of Science and Technology, Norway)
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	13:50	14:10	Multilayer Ultra-Miniature Loop Antenna for Insertable Pill Application	Amine Samoudi (Ghent University & IMEC, Belgium); Gunter Vermeeren (Ghent University, Belgium); Denys Nikolayev (École Polytechnique Fédérale de Lausanne, Switzerland); Mnyoung Song (Holt Centre/IMEC, The Netherlands); Yao-Hong Liu (Imec-nl, The Netherlands); Wout Joseph (Ghent University/IMEC, Belgium); Luc Martens (Ghent University, Belgium)
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	14:10	14:30	Body Matched Dipole-Loop Composite Antenna with Reconfigurable Focused Field for Non-Alcoholic Fatty Liver Disease Diagnosis Systems	Sasan Ahdi Rezaeieh (The University of Queensland, Australia); Amin Abbosh (The University of Queensland, Australia)
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	14:30	14:50	Robustness Analysis of the Polymer-Conductive-Mesh Composite for the Realization of Transparent and Flexible Wearable Antennas	Abu Sadat Md. Sayem (Macquarie University, Australia); Karu Esselle (University of Technology Sydney, Australia); Raheel Maqsood Hashmi (Macquarie University & IEEE, Australia)
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	14:50	15:10	Miniaturized CPW-fed Bowtie Slot Antenna for Wearable Biomedical Application	Amir Arayeshnia (Imam Khomeini International University, Iran); Alireza Madannejad (Research Assistant, University of Tehran, Iran); Javad Ebrahimi Zadeh (University of Uppsala, Sweden); Fatemeh Ravanbakhsh (Student, Islamic Azad University, Iran); Mauricio D Perez (Uppsala University & National Technological University, Sweden); Robin Augustine (Uppsala University, Sweden)
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	15:10	15:30	Frequency Reconfigurable Multi-Band Antenna Using 1-D EBG Structures with BST Chip Capacitors	Jae-Yeong Lee (Pohang University of Science and Technology (POSTECH), Korea (South)); Kyung-Bin Lee (Gwangju Institute of Science and Technology (GIST), Korea (South)); Celso Leite (Samsung Electronics, Korea (South)); Seung-Han Kim (Defense Agency for Technology and Quality, Korea (South)); Jae-Hyung Jang (Gwangju Institute of Science and Technology, Korea (South))
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	16:00	16:20	Rectenna at 2.45 GHz for Wearable Applications	Mónica Borgoños-García (Universidad Carlos III de Madrid, Spain); Ana Lopez-Yela (Universidad Carlos III de Madrid, Spain); Daniel Segovia-Vargas (Universidad Carlos III de Madrid, Spain)
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	16:20	16:40	A Wide-band Slot-based Frequency Agile Yagi-Like MIMO Antenna System	Rifaqat Hussain (KFUPM, Saudi Arabia); Syed Jehangir (United Arab Emirates University, United Arab Emirates); Muhammad Umar Khan (National University of Sciences and Technology & Research Institute for Microwave and Millimeter-Wave Studies, Pakistan); Mohammad S. Sharawi (Polytechnique Montreal, Canada)
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	16:40	17:00	Applications of Mixed Powder Dielectrics in Prototype 2.45GHz Pendant Antenna Design and Manufacture	John Brister (Loughborough University, United Kingdom (Great Britain)); Robert Michael Edwards (Loughborough University, United Kingdom (Great Britain)); Jacky Brister (Loughborough University, United Kingdom (Great Britain))
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	17:00	17:20	A Biodegradable Implant Antenna Detecting Post-Surgical Infection	Kivanc Ararat (Bogazici University, Turkey); Omer Altan (Bogazici University, Turkey); Sanberk Serbest (Bogazici University, Turkey); Oguzhan Baser (Bogazici University, Turkey); Sema Dumanli (Bogazici University, Turkey)
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	17:20	17:40	Protective Coating Methods for Glove-Integrated RFID Tags - A Preliminary Study	Zahangir Khan (Tampere University, Finland); Han He (Tampere University, Finland); Xiaochen Chen (Tampere University, Finland); Leena Ukkonen (Tampere University, Finland); Johanna Virkki (Tampere University, Finland)
Wearable and implantable antennas	T05-A12/1	T05 Biomedical and health / Regular Session / Antennas	16 Mar 2020	B6	17:40	18:00	A Low Profile Button Antenna with Back Radiation Reduced by FSS	Bappaditya Mandal (Uppsala University, Uppsala, Sweden); Ayan Chatterjee (National Institute of Technology Sikkim, India); Pramod K B Rangaiah (Researcher & Uppsala University, Sweden); Mauricio D Perez (Uppsala University & National Technological University, Sweden); Robin Augustine (Uppsala University, Sweden)
Wireless power transfer and inductive coupling	T04-A20	T04 IoT and M2M / Regular Session / Antennas	17 Mar 2020	A2	16:40	17:00	Efficient Two-layer Loop Array for Selective Magnetic Resonance Wireless Power Transfer	Yonghyun Nam (Hongik University, Korea (South)); Jeong Hae Lee (Hongik University, Korea (South))
Wireless power transfer and inductive coupling	T04-A20	T04 IoT and M2M / Regular Session / Antennas	17 Mar 2020	A2	17:00	17:20	Wireless Power Transfer System Design in Reactive Near-Field for Implantable Devices	Tarakeswar Shaw (Indian Institute of Engineering Science and Technology, Shibpur, Howrah, West Bengal, India); Bappaditya Mandal (Uppsala University, Uppsala, Sweden); Debasis Mitra (Indian Institute of Engineering Science & Technology, Shibpur, India); Robin Augustine (Uppsala University, Sweden)
Wireless power transfer and inductive coupling	T04-A20	T04 IoT and M2M / Regular Session / Antennas	17 Mar 2020	A2	17:20	17:40	Headband Antenna for Wireless Power Transfer to Millimeter-Sized Neural Implants with Minimal Misalignment Effects	Shahbaz Ahmed (Tampere University, Finland); Lauri Sydänheimo (Tampere University, Finland); Leena Ukkonen (Tampere University of Technology, Finland); Toni Björninen (Tampere University, Finland)
Wireless power transfer and inductive coupling	T04-A20	T04 IoT and M2M / Regular Session / Antennas	17 Mar 2020	A2	17:40	18:00	Sub-1 GHz Flexible Concealed Rectenna Yarn for High-Efficiency Wireless-Powered Electronic Textiles	Mahmoud Wagih (University of Southampton, United Kingdom (Great Britain)); Alex S Weddell (University of Southampton, United Kingdom (Great Britain)); Stephen Beeby (University of Southampton, United Kingdom (Great Britain))
Wireless power transfer and inductive coupling	T04-A20	T04 IoT and M2M / Regular Session / Antennas	17 Mar 2020	A2	18:00	18:20	A Dual-Polarized Rectenna with High Efficiency at Low Input Power Density	Jun-Hui Ou (South China University of Technology, China); Junyu Pan (South China University of Technology, China); Shi-Wei Dong (National Key Laboratory of Space Microwave Technology, China); Xuyin Zhang (South China University of Technology, China)