Key Advantages of Combining Measurements and Simulations for Antenna Applications

Lucia Scialacqua received her BSc and MSc degrees in Telecommunication Engineering from University of Siena, Siena, Italy in 2006. In MVG, she worked initially as antenna engineer. Then she worked as project manager of different projects involving antenna testing and antenna measurement post-processing.
She is now working as scientific SW department engineer, being technical responsible of the MVG software INSIGHT for antenna measurement post-processing. She has authored or co-authored more than 80 journal and conference papers on antenna design and measurements, 2 whitepapers and she has contributed to one book. She was speaker for 4 webinars on antenna measurement post-processing.

Abstract

Electromagnetic analysis in complex scenarios require the decomposition technique. In all the applications the overall accuracy of the numerical simulation in highly dependent on the accuracy of the antenna representation. High fidelity results are reached if the EM antenna models are available but often it doesn't occur. Indeed, the antenna suppliers in order to protect their intellectual property are reluctant to share their EM models with companies that finally integrate antennas in devices. The link between measurement and simulation can overcome this problem.
In this workshop the benefits of Combining Measurements and Simulations will be shown for different antenna applications.

Workshop outline

The workshop consists mainly on oral presentations, based on power point slides.

Keynote speakers:
Lars Jacob Foged (MVG)
Lucia Scialacqua (MVG)
Francesco Saccardi (MVG)
Jordi Soler Castany (Altair)

All the speakers were teachers during courses organized by the European School of Antennas (ESoA).

Technical session I:

- Reconstruction of the equivalent currents.
- Preparations of the NF measured source.
- Combination of measurements and simulations for different antenna applications.

Technical session II:

- Practical demonstration.