

## 5G antenna array design and integration simulation.

Date: see programme

Time: see programme

Room: see programme

### Organizer



*David Prestaux* started to work at Framatome Connector USA. He was at the origin of Ansoft France in 1998 then part of Ansys in 2008.

David Prestaux supported researchers and engineers in various electronic departments involved in the design of advanced connectors, filters, antennas or PCB.

Based in France and part of the Ansys European electronic team, he is lead engineer and provides expertise in Electromagnetic simulation and guidelines for best practices and better design flow.

### Abstract

5G is as much an opportunity as a design challenge for equipment provider. Ansys state of the art simulation software includes the best techniques for accuracy and speed within a seamless design flow.

This presentation describes a pervasive modelling and design approach, including full-wave electromagnetics simulations to help design the backbone of the 5G networks. This will include modelling massive MIMO antenna arrays (for the base station), user equipment (UE) hardware, characterization of channel state information (CSI), and environment effect on the 5G system performance. The presentation also discuss integration challenge, thermal modelling and robust design analysis.

### Programme outline

Workshop goal is to provide state of the art methodology combining accuracy and speed for antenna designer or integrator. Large electromagnetics simulation Methods, circuit and thermal co-simulation are used and set up to accomplish physical optimisation are illustrated with examples and real life demos.