

Scientific Workshop

Title: Metrology for 5G and beyond in support of standard developments (IET workshop)

Abstract: With new wireless communication technologies and standards come the challenges of developing accurate, fast, low-cost, and traceable metrology methods, such that manufacturers can demonstrate that their products both meet international regulations and customer specifications. This workshop aims at sharing and discussing the latest advancements in terms of practical and efficient measurement methods for enabling normative standards to better match rapidly emerging radio technologies, for over-the-air testing, for wireless channels up to sub-THz modelling, and for radio frequency exposure assessment, in 5G and beyond.

Workshop outlines:

Date: Monday 18th March				
Start Time	Duration	Title	Presenter(s)	Institute
13:30	5 mins	Opening presentation by organizers	Anil SHUKLA	QinitiQ, UK
13:35	20 mins	Needs and measurements challenges over integrating adaptive antenna with emerging wireless systems	Anil SHUKLA	QinitiQ, UK
13:55	20 mins	Array Calibration for Massive MIMO Antenna System: Challenges and Solutions	Wei FAN	Aalborg University
14:15	20 mins	Plane wave generator for OTA testing	Lars FOGED	Microwave Vision Group
14:35	20 mins	Traceability of 5G Measurements	Emrah TAS	Federal institute of Metrology METAS
14:55	20 mins	A Metrological Full-Connected Hybrid Beamformer Testbed with a Large Antenna Array for Millimetre-Wave RF-EMF Testing	Tian Hong LOH	National Physical Laboratory, UK
Break from 15:30 to 16:00				
16:00	20 mins	5G OTA Testbed of Full-Sized Vehicles in Reverberation Chamber	Kristian KARLSSON	Research Institute of Sweden
16:20	20 mins	Scattering model on rough surfaces in the THz band	Ke GUAN	Beijing Jiaotong University
16:40	20 mins	Characterisation of frequency selective reflections off indoor surfaces for sub-THz band	Mohsen KHALILY	University of Surrey
17:00	25 mins	Panel discussion		