Duration: 08:30 - 17:50
Room: Hongkong

WS-01
Microwave Photonics: An Enabling Technology for 5G?

Organiser:
Stavros Iezekiel, University of Cyprus

Abstract
5G technology will be especially demanding in several end-user requirements, such as latency, massive machine-to-machine communication, spectral efficiency, energy consumption, and data rates. In order to meet these requirements a number of key enabling technologies, such as mm-waves and MIMO will be required. The aim of this workshop is to demonstrate how microwave photonics can be used to realise supporting infrastructure such as mm-wave radio-over-fibre.

Programme

08:30 - 09:20 Introduction to Photonics in 5G
John Mitchell, UCL (University College London), UK

09:20 - 10:10 Photonics-Based Advanced Heterogeneous Wireless Network for Dense User Environments
Hiroshi Murata, Osaka University, Japan

10:10 - 10:50 Break

10:50 - 11:40 Advanced Photonics Infrastructure for 5G Hot Spot and Heterogeneous 3G/4G/5G Networks
Andreas Stöhr, University of Duisburg-Essen, Germany

11:40 - 12:30 Waveform Transport Technology for Millimeter-Wave Radio Communication Systems
Atsushi Kanno, NICT, Tokyo, Japan

12:30 - 13:50 Break

13:50 - 14:40 Integrated Microwave Photonics
Frederic van Dijk, III-V Lab, Palaiseau, France

14:40 - 15:30 Generic Photonic Integration Technologies for Light Engines Aiming to Seamless Convergence of Wired to Wireless
Guillermo Carpintero, UC3M (Universidad Carlos III de Madrid), Spain

15:30 - 16:10 Break

16:10 - 17:00 Future Prospects for Microwave Photonics in 5G
Idelfonso Tafur Monroy, DTU (Technical University of Denmark), Denmark

17:00 - 17:20 Round-table Discussion and Wrap-up