

Call for Papers

Massive MIMO and Millimeter-waves for 5G Networks Workshop (mmW5G-WS)

Scope and objectives:

Massive MIMO and millimetre-waves (mmW) are seen as key technology enablers for future 5G wireless mobile networks. In fact, only taking advantages of multiple radio access technologies will allow achieving higher capacities and bandwidths, reduced system power consumption and lower electromagnetic field exposure. The lack of un-fragmented available spectrum resources below 6 GHz and the considerable progress of mmW radio technologies over the last few years have triggered a strong interest for the exploitation of mmW bands in future wireless cellular networks for both backhauling and access. Massive MIMO is also considered among the most promising technologies to achieve the challenging 5G system KPI and to take full advantage of those in such new scenarios. This workshop will bring together academic researchers and industrial professionals to identify and discuss technical challenges and recent results related to mmW and massive MIMO in the context of future 5G mobile wireless networks.

Topics of interest include but are not limited to the following:

- Millimeter-wave communications architectures
- Millimeter-wave Heterogeneous and Small cell Networks (HetSNets)
- Millimeter-wave access networks
- Control plane – Data plane splitting
- Radio Resource Management for dense populated areas
- Standardisation of millimeter-wave communications
- Security and privacy for millimeter-wave communications
- Massive MIMO base station and terminal antennas
- Experiments and measurements for massive MIMO
- Mobile back/front haul using millimeter-wave technologies
- Single-carrier vs. multi-carrier in the millimeter-wave bands
- Interference management techniques for millimeter-waves
- Millimeter-wave propagation measurement and channel modeling
- Beamforming millimeter-wave algorithm and antenna array
- Multi-UE and moving cells millimeter-wave tracking technique
- Millimeter-wave EMF exposure and human being effects
- Millimeter-waves communication systems demonstration
- Measurement techniques and test equipment for millimeter-waves

Organising Committee:

General Chairs

Emilio Calvanese Strinati, CEA-LETI, France
Valerio Frascolla, Intel Mobile Communications, Germany
Thomas Haustein, Fraunhofer HHI, Germany
Zhinong Ying, Sony Mobile Communications, Sweden

TPC Chairs

Laurent Dussopt, CEA-LETI, France
Kei Sakaguchi, Osaka University, Japan
Yue Frank Gao, Queen Mary University of London, UK

Publicity Chairs

Thorsten Dräger, National Instrument, Germany
Jessica Oueis, CEA-LETI, France

Technical Program Committee:

Peter Rost, NEC Laboratories Europe, Germany
Loreto Pescosolido, Univ. La Sapienza, Roma, Italy
Antonio Capone, Univ. Politecnica di Milano, Italy
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Ronan Sauleau, University of Rennes, France
Isabelle Siaud, Orange Labs, France
Valerio Palestini, Telecom Italia, Italy
Jyri Putkonen, Nokia, Finland
Michael Faerber, Intel Mobile Communications, Germany
Vincent Kotzsch, National Instrument, Germany
Jouko Aurinsalo, VTT, Finland
Mehrdad Dianati, University of Surrey, UK
Frédéric Ganesello, STMicroelectronics, France
Steffen Watzek, Technical University of Dresden, Germany
Javier Valino, TST, Spain
Igone Vélez, CEIT, Spain
Cédric Dehos, CEA-LETI, France
Cyril Luxey, University of Nice-Sophia Antipolis, France
Fredrik Tufvesson, Lund University, Sweden
Fredrik Harrysson, Ericsson Research, Sweden
Tayeb A. Denidni, INRS, Canada
Steven Gao, University of Kent, UK

Important Dates:

Paper submission: 17 December 2014
Acceptance Notification: 26 January 2015
Camera-Ready: 16 February 2015
Workshop: 11 May 2015

Submission Guidelines:

Submission of 2-page abstracts (with results) or 5-page full papers will be considered. Papers should be uploaded to the TrackChair pages, should be in English, and follow standard IEEE conference template. Both accepted 2-page abstracts (with results) and 5-page full papers will be presented either orally or by means of a poster. Only accepted 5-page full papers will be published in IEEE Xplore.