



The cm-wave and mm-wave based communications for 5G Networks (CmMmW5G) workshop at WCNC 2018, Barcelona, Spain 15.04.2018

Call for papers:

Future 5G systems are envisioned to support multiple sets of KPIs for multiple vertical applications, occupy varied spectrum bands from sub-6GHz to higher mm-wave bands and deliver un-paralleled quality of experience (QoE) in all these facets. These requirements bring about significant challenges in design and implementation 5G radio aspects, both in the unicast and multicast/broadcast contexts. While these challenges and possible solutions have been discussed in the 5G research community for a few years, now there is a real impetus to crystallise this initial work as the 3GPP NR standardisation on 5G is moving forward.

Organized by two flagship 5GPPP European projects [ONE5G](#) and [5G-Xcast](#), this workshop will bring together the leading names in industry, academia and research institutes to discuss and debate the latest developments in this area. It offers a unique opportunity for researchers in this field to disseminate their results in all radio related aspects of 5G communications to a diverse audience. The workshop invites authors to submit original and previously un-published research papers in the following and related topics. They could cover traditional mobile broadband or any other new 5G vertical applications.

- 5G channel modelling and measurements
- Novel channel estimation techniques
- 5G antenna design and prototyping
- Multiple antenna techniques, incl. MIMO, Massive MIMO and Beamforming
- Control and implementation aspects for Massive MIMO and Beamforming
- Non-orthogonal Multiple Access (NOMA) schemes, code design.
- Efficient Transceiver architectures and design
- 5G air interface/ waveform design and optimizations
- Advanced radio link management, incl. efficient signalling and control
- Hardware impairments – modelling and impact analysis
- 5G co-ordinated cells incl. NR-CoMP
- Heterogeneous networks
- Advanced Channel coding, waveform and Non-Uniform modulation
- Layered-Division Multiplexing
- Next generation of broadcasting systems
- Convergence of broadcasting and broadband wireless
- 5G system prototyping, PoC efforts

Paper submission: Papers should be submitted to the workshop track at EDAS on [this link](#) by **02 November 2017**.

Key dates: Paper Submission Deadline: 02 November 2017
Notification of Acceptance: 15 December, 2017
Camera-Ready Submission: 12 January, 2018