



Call for Papers for ICC'17 Workshop on 5G Ultra Dense Networks

Mobile data traffic grows exponentially in the current mobile communication systems driven by the development of mobile Internet and smart phones. Initial estimations indicate that, different from the evolutionary path of previous cellular generations that was based on spectral efficiency improvements; the most substantial amount of future system performance gains will be obtained by means of network infrastructure densification. The opportunities and challenges of fifth-generation (5G) rapidly gain great attention from academics, industries, and governments. Ultra dense network (UDN) is a promising technique to meet the requirements of explosive data traffic in 5G mobile communications. Moreover, when overlaid on top of the macrocells, low power small cells (such as femtocell and picocell) can improve the coverage and capacity of cellular networks by exploiting spatial reuse of the spectrum. Dense small cells can also offload the wireless data traffic of user equipments (UEs) from macrocells, especially for an indoor environment where more than 80% of the data traffic occurs.

This workshop will bring together academic and industrial researchers to identify and discuss technical challenges and recent results related to the future mobile networks using 5G Ultra Dense Networks.

- Non-orthogonal multiple access techniques in 5G Ultra Dense Networks
- Channel modeling in 5G Ultra Dense Networks
- Performance analysis in 5G Ultra Dense Networks
- Small Cells in 5G Ultra Dense Networks
- Software defined networks in 5G Ultra Dense Networks
- Self organizing Networks in 5G Ultra Dense Networks
- Backhaul/fronthaul in 5G Ultra Dense Networks
- Big data in 5G Ultra Dense Networks
- Massive MIMO in 5G Ultra Dense Networks
- Energy Harvesting in 5G Ultra Dense Networks
- Caching in 5G Ultra Dense Networks
- Network slicing in 5G Ultra Dense Networks
- MmWave techniques in 5G Ultra Dense Networks
- Cognitive radio in 5G Ultra Dense Networks
- D2D in 5G Ultra Dense Networks
- Cloud/CRAN-based 5G Ultra Dense Networks
- Game theory in 5G Ultra Dense Networks
- Heterogeneous Networks in 5G Ultra Dense Networks
- Network Function Virtualization in 5G Ultra Dense Networks
- Resource allocation in 5G Ultra Dense Networks
- Vehicular networks in 5G Ultra Dense Networks
- IoT in 5G Ultra Dense Networks
- Radio Resource Management in 5G Ultra Dense Networks
- Unlicensed Spectrum (LTE-U) in 5G Ultra Dense Networks
- Full duplex techniques in 5G Ultra Dense Networks
- Other topics (PHY layer, MAC layer, Network layer) in 5G Ultra Dense Networks

Important Dates:

Paper Submission: 18 November 2016
Notification Date: 17 February 2017
Final Paper: 10 March 2017

Organizing Committee:

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