**Call for papers**

**2017 International Graduate Workshop on Fifth Generation Communications (IGW5G)**

**The workshop:**

The IGW5G was firstly initiated by Prof. Xuefeng Yin from Tongji University, and it is jointly organized by graduate students from multiple institutions annually. The first workshop will take place at the **Technical University of Madrid, Madrid, Spain** from **20th to 21st July, 2017.** The workshop in 2017 aims at promoting academic exchanges among graduate students from universities both in China and Spain, and provides an overview of the current research advances on channel modelling for 5G communications, covering (but not limited to) topics such as high frequency systems, massive-MIMO communications, full-duplex schemes, vehicle communications, ground-to-air scenarios as well as other related research topics, e.g. 5G coding, network optimization, etc.

**Format of the workshop**

**Oral Sessions:**

The workshop collects papers submitted by graduate students. Review processes are undergone before acceptation. The workshop is constituted with several oral sessions in which accepted papers should be presented by the author.

**Short Courses:**

Experts are invited to give short courses in the workshop on topics related to 5G communications.

The detailed calendar will be sent to the authors through emails.

**Schedule:**

**Submission Deadline:** April 1, 2017

**Acceptance Notification:** May 31, 2017

**Final Manuscript Due:** June 31, 2017

**Technical Committee Members:**

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**Topics of interest include but are not limit to, the following:**

*Measurement-based propagation channel modelling:*

* Millimeter wave (mm-wave) communications
* Massive Multiple-Input-Multiple-Output (MIMO) communications
* Vehicle-to-X (V2X) communications (X includes vehicle, infrastructure, pedestrians, and etc.)
* D2D communications
* Radar systems
* Communications in very high speed scenarios
* Ground-to-air communications
* Air-to-air communications
* Human body communications
* Measurement techniques for new generation communication systems
* Advances in MIMO and OTA testing
* Experimental evaluation of new modulation techniques and waveforms for 5G systems
* Wireless sensors networks

*Simulation-based channel modelling:*

Simulation strategies for channel modelling (e.g. Ray-tracing, Propagation graph, and etc.)

*Other topics related to propagation channels:*

* Coding for fifth generation communications
* Network optimization for fifth generation communications
* Heterogeneous networks and ultra-dense networks
* Cognitive radio schemes
* Cooperative transmit/receive techniques
* User location and tracking in 5G networks

**Submission guideline**

Papers should be submitted to caixuesong@tongji.edu.cn in the “.pdf” (preferred) or “.docx” file format integrated with 1) a cover page including paper title, author affiliation, acknowledgement and any other information related with the authors’ identification and 2) the main document written in IEEE conference paper templates, with paper title, abstract, key words, and full text.