

Call for Papers

# 2<sup>nd</sup> International Workshop on Smart Spectrum (IWSS) in conjunction with IEEE WCNC 2016

Smart Spectrum Utilization Based on  
Spectrum Measurement and Statistical Modeling  
April 3, 2016, Doha, Qatar



**Scope:** An essential feature of future wireless communications is efficient, flexible and dynamic spectrum utilization. A wireless network taking advantage of spectrum measurements is a new, promising approach among conventional dynamic spectrum access techniques capable of delivering such smart spectrum utilization. By analyzing real world spectrum utilization, it is possible to obtain information on the actual spectrum usage statistics which can be used to develop spectrum usage models that can enhance the performance of estimating and predicting the spectrum status, as well as improving spectrum resource management, sharing and allocation.

IEEE WCNC 2016 International Workshop on Smart Spectrum aims to bring together researchers, industry practitioners as well as members of standardization bodies and government to meet and exchange ideas on recent research and future directions for smart spectrum utilization. The technical discussion will be focused on wireless network technology based on spectrum measurements, spectrum utilization modeling, and their applications for dynamic spectrum access. The topics of the workshop include, but are not limited to:

- Spectrum measurement techniques (wideband, long term, and wide area measurements)
- Spectrum measurement campaigns and system prototyping
- Sensor networks for spectrum measurement
- Spectrum utilization database techniques
- Multidimensional spectrum utilization models
- Statistical modeling of radio environment
- Radio propagation modeling for spectrum sharing
- Cognitive radio networks and dynamic spectrum access
- Spectrum sensing techniques based on statistical modeling
- MAC layer access protocol design based on statistical modeling

Best papers will be included (in extended version) in a journal special issue to be published by Hindawi in the Mobile Information Systems journal ("Special Issue on Smart Spectrum Technologies for Mobile Information Systems") in July 2016 (tentative).

## General co-chairs:

Dr. Takeo Fujii,  
University of Electro-  
Communications, Japan  
Dr. Brian L. Mark,  
George Mason University,  
USA

## Keynote co-chairs:

Dr. Onur Altintas,  
Toyota Infotechnology  
Center, Japan  
Dr. Eylem Ekici, The Ohio  
State University, USA  
Dr. Kentaro Ishizu,  
NICT, Japan

## Technical program co-chairs:

Dr. Yue Gao, Queen Mary  
University of London, UK  
Dr. Janne Lehtomäki,  
University of Oulu, Finland  
Dr. Kenta Umehayashi,  
Tokyo University of  
Agriculture and Technology,  
Japan

## Publicity co-chairs:

Dr. Miguel López-Benítez,  
University of Liverpool, UK  
Dr. Michael R. Souryal, NIST,  
USA  
Dr. Osamu Takyu,  
Shinshu University, Japan

## Poster session co-chairs:

Dr. Marja Matinmikko,  
VTT, Finland  
Dr. Mai Ohta,  
Fukuoka University, Japan

## Web chair:

Dr. Samuli Tiiri,  
Tokyo University of  
Agriculture and Technology,  
Japan

## Author guidelines:

Authors should follow the WCNC submission guidelines available at <http://wcnc2016.ieee-wcnc.org/authors> when preparing their contributions (maximum paper length: 6 pages including figures). Papers are submitted via EDAS conference management system: <https://edas.info/newPaper.php?c=21591>

## Important dates:

Paper submission: **November 23, 2015 (extended)**  
Notification of acceptance: December 28, 2015 (extended)  
Camera ready papers: January 12, 2016

## Contact information:

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