## **Call For Papers**

## Wireless Communications Symposium – IEEE GLOBECOM 2012

## **Symposium Co-Chairs**

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## **Symposium Scope and Topics of Interest**

The Wireless Communications Symposium will cover all aspects related to wireless communications and its applications, with a focus on topics related to Physical layer (PHY), MAC layer, Cross-layer, and Physical layer-related network analysis and design. High quality papers reporting on novel and practical solutions to PHY, MAC and cross-layer design in wireless communication systems are encouraged. In addition, papers on field tests and measurements, field trials and applications from both industries and academia are of special interest. To ensure complete coverage of the advances in wireless communications technologies for current and future wireless systems, the Wireless Communications Symposium cordially invites original contributions in, but not limited to, the following topical areas:

- Modulation, coding, and diversity techniques
- Cognitive radio and software defined radio
- Ultra-wideband communications (UWB)
- MIMO and multi-antenna communications
- Multi-user MIMO
- Space-time coding and processing
- OFDM and multi-carrier systems
- Advanced equalization for single carrier systems
- Smart antennas
- Wireless air interface and link control
- CDMA, TDMA, FDMA, OFDMA air interfaces
- Detection and estimation
- Cross-layer design and physical layer based network Issues
- Security issues related to wireless communications
- Localization techniques
- Distributed multipoint, relay assisted, and cooperative communications
- Wireless communications testbed development
- Field tests and measurements
- Network coding

- Opportunistic spectrum access
- Wireless multicasting
- Hybrid wireless communication systems
- Broadband wireless access techniques
- Physical-layer aspects of wireless LANs and PANs
- Body area networks (BAN) and its applications
- Advances in millimeter wave wireless LANs and PANs
- RFID and its applications
- Physical-layer aspects of cellular networks such as IMT2000, UMTS, LTE, and IMT-Advanced
- DVB and DAB techniques
- Dynamic spectrum access
- Standardizations on wireless systems
- Coexistence in unlicensed spectra
- Radio resource management and interference control
- Fixed wireless broadband access systems
- WPAN applications
- Spectrum efficiency and issues
- Wireless multimedia and QoS
- Multiple access techniques
- Integration between satellite and terrestrial wireless networks
- Interference alignment and cancellation techniques
- Femtocell networks
- Heterogeneous networks