



## IEEE Consumer Communications & Networking Conference (CCNC) Held in conjunction with the International Consumer Electronics Show, Las Vegas January 09-12, 2015

### **Call for Papers for *Wireless Communication Track***

#### **Scope and Motivation:**

The Wireless Communications Track covers 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.

#### **Main Topics of Interest:**

The Wireless Communications Track seeks original contributions in the following topical areas, plus others that are not explicitly listed but are closely related:

- Channel estimation
- Synchronization techniques
- Broadband wireless access techniques and systems
- Channel and network interference characterization and modeling
- Channel state information feedback techniques
- Shannon theory in wireless communication systems
- Coexistence in unlicensed spectra
- Cross-layer design and physical-layer based network issues
- Device-to-device and machine-to-machine communications
- Digital video broadcasting (DVB) and digital audio broadcasting (DAB) techniques
- Distributed multipoint, relay assisted, and cooperative communications
- Field tests and measurements
- Heterogeneous and femtocell networks
- Hybrid wireless communication systems (e.g. satellite/terrestrial hybrids)
- Interference management, alignment and cancellation, inter-cell interference coordination (ICIC), and coordinated multi-point transmission (CoMP)
- Localization techniques
- MIMO, multi-user MIMO, and massive MIMO
- Modulation, coding, and diversity techniques
- Multiple access techniques and air interfaces (CDMA, TDMA, FDMA, OFDMA)
- OFDM and multi-carrier systems
- Opportunistic and dynamic spectrum access
- Cognitive Radio
- Physical-layer aspects of cellular networks such as LTE, 5G and IMT
- Advanced, wireless local-area networks (LANs), personal area networks (PANs), and body area networks (BANs)
- Physical-layer and network coding
- Radio resource management and interference control
- RFID and its applications
- Signal design (waveform design, pilot design, preamble design, etc.)
- Smart antennas, Space-time coding and processing
- Standardization of wireless systems

- Security issues related to wireless communications
- Ultra-wideband (UWB) and millimeter wave communications
- Underwater wireless communications
- Wireless communications testbed development
- Wireless multimedia and quality of service (QoS)
- Wireless Sensors
- Visible Light Communications

The best papers of the track will be selected for a special issue on IEEE Transaction on Consumer Electronics and on Computer Communication that will be organized in the next months.

**Track Chairs:**

Can Emre Koksall, Electrical and Computer Engineering, The Ohio State University, USA.  
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