# 201 QUINTANA-ROO, MEXICO IEEE WCNC 28-31 MARCH 2011



# **CALL FOR PAPERS**

WWW.IEEE-WCNC.ORG/2011 IEEE WCNC is the premier wireless event for wireless communications researchers, industry professionals, and academics interested in

the latest development and design of wireless systems and networks. Sponsored by the IEEE Communications Society, IEEE WCNC has a long history of bringing together industry, academia, and regulatory bodies. In 2011, the paradisiacal city of Cancun, Quintana-Roo, Mexico will become the wireless capital by hosting **IEEE WCNC 2011**.

IEEE WCNC 2011 will include technical sessions, tutorials, exhibitions and technology and business panels. You are invited to submit papers in all areas of wireless communications, networks, services, and applications. Potential topics are solicited in, but are not limited to, the following categories:

## I. PHY TRACK

- Interference characterization
- Cognitive radio, ultra-wideband
- Multihop and cooperative communications
- Modulation, coding, diversity
- Equalization, synchronization
- Space-time, MIMO, adaptive antennas
- OFDM, CDMA, spread spectrum
- Channel modeling and characterization
- Interference cancellation and MUD
- Iterative techniques
- Information-theoretic aspects of wireless communications
- Signal processing for wireless communications
- Ultra-Wide Bandwidth communications
- Collaborative signal processing
- Propagation models for high frequency channels

#### **III. NETWORKS TRACK**

- Position location
- Topology control and establishment in mesh, relay, sensor, and ad hoc networks
- · Mobility, location, and handoff modeling and management
- Wireless routing
- Clustering in mesh, relay, sensor, and ad hoc networks
- Network coding in mesh, relay, sensor, and ad hoc networks
- Multimedia QoS and traffic management
- · Wireless broadcast, multicast, and streaming
- Congestion and admission control
- Wireless network security and privacy
- Interworking heterogeneous wireless/wireline networks
- Capacity, throughput, outage, coverage
- Vehicle-to-vehicle communication

## II. MAC TRACK

- Multiple access techniques
- Cognitive and cooperative MAC
- Collaborative algorithms
- MAC for mesh, ad hoc, relay, and sensor networks
- Network information theory
- Radio resource management and allocation, scheduling
- Cross-layer design, cross-layer security
- · Software defined radio, RFID
- Adaptability and reconfigurability
- Wireless MAC protocols: design and analysis
- B3G/4G Systems, WiMAX, WLAN, WPAN
- QoS provisioning in MAC

#### **IV. SERVICES & APPLICATIONS TRACK**

- Emerging wireless/mobile applications
- · Context and location-aware wireless services & applications
- Wireless telemedicine and e-health services
- Intelligent transportation systems
- Cognitive radio and sensor-based applications
- · Content distribution in wireless home environment
- · Wireless emergency and security systems
- · Service oriented architectures, service portability
- SIP based services, multimedia, QoS support, middleware
- Innovative user interfaces, peer-to-peer services for multimedia
- Dynamic services, autonomic services
- · Regulations, standards, spectrum management
- · Test-bed and prototype implementation of wireless services
- · Personalization, service discovery, profiles and profiling

# **CALL FOR TUTORIALS**

Proposals for half/full day tutorials are also solicited based on the topics listed above or others related to issues and opportunities for the future of wireless communications, systems, and applications.

#### **CALL FOR PANELS**

Proposals are solicited for Technology/Business Application Panels in the above mentioned topical areas or others related to business and policy-related issues and opportunities for the wireless communications industry.

#### **IMPORTANT DATES**

Full Paper Submittal: Tuesday 5 October 2010. Acceptance Notification: Monday 29 November 2010

#### Final Camera Ready Copy: Monday 10 January 2011 11:59 EST

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#### IEEE and IEEE COMMUNICATIONS SOCIETY POLICIES

Each accepted paper must have a FULL (member or non-member) non-refundable registration fee associated with it. If an author has multiple accepted papers, up to three papers may be covered by one registration fee. Registration fees must be publication-ready version of the accepted paper. Accepted papers will be publication-ready version of the accepted paper. Accepted papers will be publication the IEEE WCNC 2011 Conference Proceedings. Accepted and presented papers will be published in the IEEE WCNC 2011 Conference Proceedings and in IEEE Xplore®. Technical Papers must be submitted via the EDAS Paper Processing System.

Papers should be written in English with a maximum paper length of 6 printed pages (10-point font) including figures. Papers that are longer than 6 pages will not be reviewed. For your submission, you can use the standard IEEE templates for Microsoft Word or LaTeX formats found at http://www.ieee.org/go/conferencepublishing/templates