





## **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
- Dvnamic 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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# 2011 IEEE Wireless Communications and Networking Conference

# IEEE WCNC 2011: 2011 IEEE Wireless Communications and Networking Conference

2011 IEEE Wireless Communications and Networking Conference took place March 28-31, 2011 in Cancun, Quintana Roo, Mexico.

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## **Program**

## Tuesday, March 29

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## On the Performance of Downstream Traffic Distribution Scheme in Fiber-Wireless Networks

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#### Balanced Slices in Wireless Sensor Networks

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#### A cross-layer framework to support real-time and elastic traffic in MANETs

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#### Quantifying Sensing Coverage and Data Delivery Delay in Mobile Sensor Networks

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## Scheduling Multiple Sinks in Wireless Sensor Networks: A Column Generation Based Approach

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#### Novel Time-Frequency Reservation Aloha Scheme for OFDMA Systems

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## Joint Optimization in Multi-User MIMO-OFDMA Relay-Enhanced Cellular Networks

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### Dynamic CQI Resource Allocation for OFDMA Systems

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D. T. Ho, J. Park and S. Shimamoto

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## Efficient Power Transmission System Using Phase-Conjugation of Multiple Inputs for 2D Communication

T. Matsuda, Y. Kado, T. Oota and B. Zhang pp. 2012-2017

## Designing Sustainable Wireless Sensor Networks with Efficient Energy Harvesting Systems

P. Glatz, L. Hörmann, C. Steger and R. Weiss pp. 2018-2023

## Impact of Packet Loss on Power Demand Estimation and Power Supply Cost in Smart Grid

D. Niyato, P. Wang, Z. Han and E. Hossain pp. 2024-2029

## COAL: Context Aware Localization for High Energy Efficiency in Wireless Networks

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