CALL FOR PAPERS

2012 IEEE Wireless Communications and Networking Conference (WCNC 2012)

IEEE WCNC is the premier 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 2012, Paris will become the wireless capital by hosting IEEE WCNC 2012. The conference will include technical sessions, tutorials, workshops, and technology and business panels. You are invited to submit papers in all areas of wireless communications, networks, services, and applications. The instructions for authors will be posted on the conference website www.ieee-wcnc.org/2012. Potential topics include, but are not limited to:

Track 1: PHY and Fundamentals

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

Track 2: MAC and Cross-Layer Design

• 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

Track 3: Mobile and Wireless Networks

• Localization for Wireless Networks
• Network Estimation and Processing Techniques
• Mesh, Relay, Sensor and Ad Hoc Networks
• Mobility, location, and handoff management
• Mobile and Wireless IP
• Wireless Multicasting, Routing
• Robust routing
• Multimedia QoS and Traffic Management
• Wireless Broadcast, Multicast and Streaming
• Congestion and Admission Control
• Proxies and Middleware for Wireless Networks
• Wireless Network Security and Privacy
• Performance of E2E Protocols over Wireless Networks
• Interworking Heterogeneous Wireless/Wireline Networks
• Capacity, Throughput, Outage, Coverage

Track 4:Services, Applications, and Business

• 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, P2P 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 and Workshops:	Call for Panels:
Proposals for tutorials and workshops are solicited on hot topics for future wireless communications systems and applications.	Panel proposals are also solicited on technical, business and policy-related issues and opportunities for the wireless communications industry.

Important dates:

Paper submission deadline: 12 September 2011	Tutorial proposals: 12 September 2011
Notification of acceptance: 9 December 2011	Workshop proposals: 10 June 2011
Final papers due: 16 January 2012	Panel proposals: 12 September 2011

General Chair: Hikmet Sari, SUPELEC, hikmet.sari@supelec.fr
Technical Program Co-Chairs: Pierre Duhamel, LSS/CNRS**,** pierre.duhamel@lss.supelec.fr
Pascal Lorenz, Université de Haute Alsace, lorenz@ieee.org