

IEEE Wireless Communications and Networking Conference 19-22 March 2017 San Francisco, CA, USA



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 2017, the city of San Francisco and the Silicon Valley will become the center of the wireless world by hosting IEEE WCNC'17. The conference will include technical sessions, tutorials, workshops, and technology/business panels. You are invited to submit papers in all areas of wireless communications and networks. Potential topics include, but not limited to:

Track 1: PHY and Fundamentals

- Channel modeling, characterization and estimation
- Modulation, coding, diversity, equalization, synchronization OFDM, multi-carrier modulation, waveform design
- · Interference modeling, management, cancellation and alignment
- PHY strategies for low-rate, sporadic and asynchronous communications
 MIMO, massive MIMO and cloud-RAN
 Cooperative, device-to-device and multi-hop communication

- Cognitive radio, spectrum sensing
- Content caching and storage in wireless networks
- PHY layer design for cellular, wireless LAN, ad hoc and sensor networks
- · Energy efficient and energy harvesting PHY layer design
- · Joint information and energy transmission
- PHY layer security and privacy, ultra-wideband, mmWave and sub-THz communication
- Information-theoretic aspects of wireless communications
- · Signal processing for wireless communications
- · Molecular and nano communications

Track 2: MAC and Cross-Layer Design

- · Wireless MAC protocols for 5G: design, analysis, and optimization
- · Cognitive and cooperative MAC
- MAC for mesh, ad hoc, relay and sensor networks
- Scheduling and radio resource management

- Cross-layer MAC design
 Software defined radio, RFID MAC
 QoS support and energy efficient MAC
- · MAC protocol for energy harvesting wireless networks
- · MAC design for multitier cellular/small cell networks
- · Multiple access in machine-to-machine communication
- · MAC for cloud-RAN
- · MAC protocols for molecular and nano networks
- · MAC protocols for mmWave networks
- · Full-duplex MAC design
- Cross-layer design for massive MIMO and multiuser MIMO networks

Track 3: Wireless Networks · Network Estimation and Processing Techniques

- Mesh, relay, sensor and ad hoc networks
- Mobility, location, and handoff management
- Wireless 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
- Software-defined wireless networks
- Cognitive radio networks
- Mobile social networks
- Mobile cloud and fog networking
- · Mobile big data and network data analytics

Track 4: Emerging Technologies, Architectures and Services

- · Adaptive content distribution in on-demand services
- Context and location-aware wireless services and applications
- User-centric networks and adaptive services
- Wireless body area networks and e-health services
- Intelligent transportation systems
- Dynamic sensor networks for urban applications
- Wireless emergency and security systems Ultra-reliable communication
- Enabling regulations, standards, spectrum management
- · Hybrid licensed/unlicensed spectrum access schemes (e. g. licensed-assisted access)
- Technologies, architectures and enabling business models for rural communications
- Satellite-based mobile access and backhaul
- · Full duplexing · Joint access and backhaul schemes
- · Testbed and prototype implementation of wireless services

Accepted and presented papers will be published in the IEEE WCNC 2017 Conference Proceedings and submitted to IEEE Xplore® Full details of submission procedures and requirements for authors of accepted papers are available at http://wcnc2017.ieee-wcnc.org

IMPORTANT DATES 30 September 2016 15 December 2016 Paper Submission Deadline: Notification of Acceptance: Camera-Ready Submission: 12 January 2017 Tutorial Proposals: 30 September 2016 Separate Call-for-Workshops Workshop Proposals: Panel Proposals: 30 September 2016

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Participation should be submitted to the suitable conference track on EDAS.

For more information about IEEE WCNC 2017, please visit http://wcnc2017.ieee-wcnc.org.