



28th Annual IEEE International Symposium on Personal, **Indoor and Mobile Radio Communications** 08-13 OCTOBER 2017 // MONTREAL, QUEBEC, CANADA







# SPECIAL CELEBRATION-YEAR EDITION!

## **CALL FOR PAPERS**

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IEEE PIMRC 2017 will be held at the Bonaventure Hotel, Montreal, Quebec, Canada, from October 8th to 13th, 2017, under the theme "Engaged Citizens and their New Smart Worlds". Montreal is a vibrant multicultural, multilingual and welcoming city that offers visitors a unique and well-blended taste of Europe in North America, "Autumn is a second spring when every leaf is a lower", said Albert Camus. And there is no better city and time to experience it than Montreal during its fall foliage season peak in early to mid-October. Leafs and flowers are iconic symbols of Montreal, Quebec, and Canada. And 2017, a milestone celebration year, marks the 675th anniversary of Montreal's founding, the 150th anniversary of Canada's confederation, and the 50th anniversary of the 1967 World's Fair. Expo 67 was held in Montreal under the theme "Man and His World", based on Saint-Exupéry's book "Terre des Hommes" so filled with dreams and hopes for the future. Fifty years later, inspired by the same phrase found by Saint- Exupéry to express the human need for lessening isolation and for solidarity, IEEE PIMRC 2017 invites all creators of new wireless techs & apps to reflect upon it to see how it could be given tangible form by properly connecting everything wirelessly and further empowering more engaged citizens and communities in their new smart worlds of sustainable economies and digital societies.

• Sofiène Affes, INRS, Canada

- Kaibin Huang, UHK, Hong Kong
  Geert Leus, TU Delft, Netherlands
  Shahrokh Valaee, Uoff, Canada

Abdelaziz Samet, INRS, Canada

- Tarek Djerafi, INRS, Canada
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- Wei Yu, UofT, Canada
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- Mustapha Benjillali, INPT, Morocco
   Daniel da Costa, UFC, Brazil
   Octavia Dobre, MUN, Canada
   Lutz Lampe, UBC, Canada
   Yffeng Zhou, CRC, Canada

- Slim Alouini, KAUST, Saudi Arabia (Middle East & Africa)
  Khaled Ben Letaief, HKUST, Hong Kong, and HBKU, Qatar (Asia & Pacific)
  Robert Heath, Univ. Texas Dallas, USA (Americas)
  Robert Schober, Erlangen-Nüremberg, Germany (Europe)

Prospective authors are invited to submit technical papers of their previously unpublished work. Topics of interest include, but are not limited to:

### Track 1: Fundamentals and PHY

- Advanced modulation schemes for 5G, IoT, ...
- Antennas and beamforming
- Channel estimation and equalization
- Channel modeling and simulation
- · Cognitive and green radio
- Cooperative/relayed communications
- · Energy harvesting, wireless power transfer
- Interference characterization & mitigation • Microwave/DSP circuits and devices
- Multi-antenna signal processing
- . PHY aspects of WLAN, WPAN, and WBAN
- PHY performance: capacity, outage, BER
- PHY network coding and security
- · Positioning, localization, and tracking
- Power-efficient communications
- Propagation: mmW. Terahertz, light-wave
- · Signal processing for wireless • Single and multi-user MIMO
- Source and channel coding
- Synchronization techniques
- Vehicular communications
- · Wireless broadband for 5G. IoT. ...

- Track 2: MAC & Cross-Laver Design
- Adaptive MACs
- Cognitive MACs
- Cross-laver designs involving MAC
- Delay-tolerant MAC designs
- Docitive MACs
- Implementation, test-beds & prototypes
- Information-theoretical approaches to **MAC designs**
- Joint access-backhaul scheduler designs
- Joint MAC and networking layer designs
- MAC for low-power embedded networks
- MAC for MANETs/VANETs
- QoS/QoE-enabling MAC & future mobile networks
- · Radio resource management, allocation, and scheduling
- Reconfigurable MACs
- · Scheduler for multi-tier cellular systems
- Scheduler for cooperative systems
- . Scheduler for relay systems
- · Security issues in MAC designs
- Time-critical MAC designs

- Track 3: Mobile/Wireless Networks · Ad hoc networks
- Body area networks
- · Cognitive radio networks
- · Congestion, load & admission control
- Delay-tolerant networks
- Dynamic spectrum management
- Future wireless Internet
- · Green wireless networks
- Location management
- Mobile and wireless IP
- Mobile computing Multi-hop networks
- Network architectures
- . Routing, QoS and scheduling
- Satellite communications
- Self-organizing networks • Smart cities, grids, etc.
- Transport layer
- Vehicular networks
- · Wireless multicasting, broadcasting, and geo-casting
- Wireless sensor networks

- Track 4: Services, Apps and Business
- Audio and video broadcast applications Authentication, authorization & accounting
- · Context/location-aware pervasive systems
- Cyber-physical system/real-world Internet
- Emerging wireless/mobile applications
- Intra-vehicle communications
- Mobile multimedia services
- · Link data and networked knowledge
- Next generation digital home networks P2P services for multimedia
- · Personalization, profiles and profiling
- Secure network and service access
- · Self-adaptation on the service laver Semantic technologies
- Service discovery
- · Cloud computing, virtualization, & serviceoriented architectures
- Service portability
- User interfaces, user-machine interactions
- · Wireless emergency and security systems
- · Wireless robotics, wearables, implants, and wireless for AR/VR and immersion, ...

Manuscripts shall not exceed five double column pages. Complete information about the electronic paper submission process will be made available in the conference website. All accepted and presented papers will be submitted for inclusion in IEEE Xplore®.