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## Call for Papers

### Track 4 – Wireless Communications: Fundamentals and PHY

#### Track Chairs:

Bang Chul Jung, Chungnam National University, South Korea  
TBD

#### Scope and Motivation:

The track on Wireless Communications: Fundamentals and PHY covers all aspects on theory and practice of wireless communications. In particular, topics related to current and future wireless communication systems are encouraged. In addition, papers on physical layer (PHY) techniques, PHY-related network analysis and design, cross-layer optimization techniques, field trials and applications, fundamental analysis for wireless communication systems are of special interest.

#### Main Topics of Interest:

This track seeks original contributions in the following areas, as well as others that are not explicitly listed but are closely related:

- Artificial intelligence for wireless communication systems
- Beyond 5G mobile communications
- 5G mobile communications/WLAN/WPAN systems
- Drone/UAV communications
- Wireless power transfer and simultaneous wireless information and power transfer (SWIPT)
- Energy harvesting techniques for wireless communications
- Green communications & energy efficiency in wireless communications
- Advanced modulation techniques (OFDM, multi-carrier modulation, and waveform design)
- Antennas and beamforming & massive MIMO
- mmWave/terahertz communications, hybrid beamforming techniques
- Information theoretic aspects of wireless communications
- Channel modeling, estimation, and equalization
- Fog networks, contents caching, and edge computing techniques
- Cognitive radio & spectrum sharing techniques
- Non-orthogonal multiple access (NOMA) & various multiple access techniques
- Cooperative and relay communications, D2D/M2M communications
- Massive IoT and wireless sensor networks
- Interference management (coordination, cancellation, and alignment) techniques
- Full-duplex communications
- Physical-layer security & anti-jamming techniques
- Positioning and localization techniques
- Signal processing for wireless communications

Please visit <http://ccnc2020.ieee-ccnc.org/authors> for information on Paper Submission Guidelines and Author Requirements.