IEEE Global Communications Conference
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Gateway to a Connected World

Call for Papers

Communications Theory Symposium

Symposium Co-Chairs

Neelesh B. Mehta – Indian Institute of Science (India)
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Scope and Motivation

The Communication Theory Symposium will focus on the fundamentals of communication systems, with emphasis on wireless and wireline communications. The symposium welcomes original and innovative research work in these general areas, focusing on the physical layer and its interactions with higher layers. High quality papers reporting on applications of communications theory from both industry and academia are encouraged.

Main Topics of Interest

To ensure complete coverage of the advances in this field, the Communication Theory Symposium cordially invites original contributions in, but not limited to, the following topical areas:

- Adaptive Modulation and Coding
- Channel Estimation and Synchronization
- Coding Theory
- Communication Theory Aspects of Ad Hoc and Sensor Networks
- Communication Theory for Cross-Layer Design
- Detection and Estimation Theory
- Distributed Coding and Processing
- Diversity and Fading Countermeasures
- Feedback in Communication Systems
- Fiber Optical Communications and Free-Space Optical Communications

- Fundamentals of Cache-Aided Communication
- Fundamentals of Heterogeneous and Small-Cell Networks
- Interference Management, Cancellation, Alignment, and Avoidance
- Information Theory and Channel Capacity
- Iterative Techniques, Detection and Decoding
- Joint Source/Channel Coding
- MIMO and Massive MIMO
- Multiple Access Techniques
- Network and Multiuser Information Theory
- Network Coding
- Orthogonal Frequency Division Multiplexing (OFDM) and Multi-Carrier Systems
- Physical Layer Security
- Radio Resource Management and Scheduling
- Source Coding and Data Compression
- Space-time Coding and Processing
- Theoretical Aspects of Cognitive Radio
- Theoretical Aspects of Cooperative Communications
- Theoretical Aspects of Device-to-Device and Machine-to-Machine communications
- Theoretical Aspects of Machine Learning in Communications
- Theoretical Aspects of Powerline Communication
- Ultra-Wideband, Millimeter Wave, and Sub-Terahertz Communication Theory
- Wireless Communications Powered by Energy Harvesting