



IEEE International Conference on Communications  
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Empowering Intelligent Communications

## CALL FOR PAPERS

### COMMUNICATION THEORY SYMPOSIUM

#### Symposium Co-Chairs

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#### Scope and Topics of Interest

The Communication Theory Symposium will focus on the fundamentals of communication systems, with an emphasis on wireless and wireline communications. The symposium welcomes original and innovative research 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.

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 Networks and Cross-Layer Design
- Detection and Estimation Theory
- Diversity and Fading Countermeasures
- Feedback in Communication Systems
- 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
- Source Coding and Data Compression
- MIMO and Massive MIMO
- Multiple Access, Radio Resource Management, and Scheduling
- Network and Multiuser Information Theory
- Network Coding

- Orthogonal Frequency Division Multiplexing (OFDM) and Multi-Carrier Systems
- Physical Layer Security
- Space-time Coding and Processing
- Stochastic Geometry and its Application to System Analysis and Design
- 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
- Ultra-Wideband, Millimeter Wave, Sub-Terahertz, and Fiber/Free-space Optical Communication Theory
- Wireless Communications Powered by Energy Harvesting

### **Submission Guidelines**

The IEEE ICC 2019 website provides full instructions on how to submit papers and the paper format.

You will select the desired symposium when submitting papers.

**The paper submission deadline is October 14, 2018.**

Only PDF files will be accepted for the review process and all submissions must be done through EDAS at <http://edas.info/>