



## Communications Theory Symposium

### Symposium Co-Chairs

Wei Yu – Electrical & Computer Engineering Department, University of Toronto (Canada)

Andrea Tonello – Institute of Networked and Embedded Systems, University of Klagenfurt (Austria)

Enrico Paolini – Department of Electrical, Electronic, and Information Engineering, University of Bologna (Italy)

### 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
- Fundamentals of Cache-Aided Communication
- Fundamentals of Heterogeneous and Small-Cell Networks
- Fundamentals of Low-Latency and Short-Packet Communications
- Fundamentals of Massive Connectivity
- Interference Management, Cancellation, Alignment, and Avoidance
- Information Theory and Channel Capacity
- Iterative Techniques, Detection and Decoding
- Joint Source/Channel Coding
- MIMO and Massive MIMO
- Orthogonal and Non-Orthogonal Multiple Access Techniques



## IEEE Global Communications Conference

9-13 December 2019 • Big Island, Hawaii, USA

*Revolutionizing Communications*

### CALL FOR PAPERS AND PROPOSALS

- Network and Multiuser Information Theory
- Network Coding
- Orthogonal Frequency Division Multiplexing (OFDM) and Multi-Carrier Systems
- Physical Layer Security
- Radio Resource Management and Scheduling
- Random Access Theory and Techniques
- Source Coding and Data Compression
- Space-time Coding and Processing
- Sparse Signal Processing Theory for Communications
- Theoretical Aspects of Machine Learning in Communications
- Theoretical Aspects of Cognitive Radio
- Theoretical Aspects of Cooperative Communications
- Theoretical Aspects of Device-to-Device and Machine-to-Machine communications
- Theoretical Aspects of Fiber Optical and Free-Space Optical Communications
- Theoretical Aspects of Powerline, Underwater, and Visible Light Communications
- Ultra-Wideband, Millimeter Wave, and Sub-Terahertz Communication Theory
- Theoretical Aspects of Wireless Communications Powered by Energy Harvesting

#### Important Dates

- Paper submission due: 15 April 2019
- Acceptance notification date: 15 July 2019
- Camera-ready paper due: 16 Aug 2019

#### Paper Submission:

- <https://edas.info/N25074>