



Call for Papers for *Communication Theory Symposium*

Scope and Motivation:

The mission of the Communication Theory Symposium is to explore the technical fundamentals of communication systems. The symposium features original and innovative research in technical areas focusing on the physical layer and its interactions with higher layers. Sample topics are listed below.

Topics of Interest

The Communication Theory Symposium seeks original contributions in the following topical areas, plus others that are not explicitly listed but are closely related:

- Adaptive Modulation and Coding
- CDMA and Spread Spectrum
- Channel Estimation and Synchronization
- Coding Theory and Practice
- Communication Theory Aspects of Ad Hoc and Sensor Networks
- Compressed Sensing
- Theoretical aspects of Cognitive Radio
- Cooperative Communications
- Theoretical aspects of Cross Layer Design
- Detection and Estimation Theory

- Distributed Coding and Processing
- Diversity and Fading Countermeasures
- Dynamic Spectrum Management
- Feedback in Communication Systems
- Fiber Optical Communications and Free-Space Optical Communications
- Fundamentals of Femtocell and Picocell-Enhanced Cellular Networks
- Information Theory and Channel Capacity
- Interference Management, Cancellation, Alignment, and Avoidance
- Iterative Techniques, Detection and Decoding
- Joint Source/Channel Coding
- Multiple Access Techniques
- Multiple-Input Multiple-Output (MIMO) Systems Design and Analysis
- Multiuser Diversity
- Network Coding
- Network and Multiuser Information Theory
- Orthogonal Frequency Division Multiplexing (OFDM) and Multi-Carrier Systems
- Powerline Communications
- Source Coding and Data Compression
- Space-time Coding and Processing
- Ultra-Wideband, 60GHz, and Sub-Terahertz Communication Theory