CALL FOR PAPERS -- IEEE GLOBECOM 2011
Communication Theory Symposium

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Scope and Motivation

The scope of the Communication Theory Symposium encompasses the fundamentals of communication systems, with emphasis on wireless and wire-line communications. The symposium welcomes original research in these general areas focusing on physical layer as well as interactions with higher layers. Topics of interest include, but are not limited to, modulation, channel coding, detection and estimation, source coding, joint source-channel coding, multiple-input multiple-output (MIMO) systems, cooperative communications, cognitive radio, communication theory in ad-hoc and sensor networks, optical communications, advanced multiple access strategies, network information theory, and network coding. Research on communication theory that relates to networking, genetics, bioinformatics, and quantum information processing is also encouraged.

Main Topics of Interest

- Adaptive Modulation and Coding
- CDMA and Spread Spectrum
- Channel Estimation
- Coding Theory and Practice
- Communication Theory in Ad-Hoc and Sensor Networks
- Theoretical aspects of Cognitive Radio
- Cooperative Communications
- Theoretical aspects of Cross Layer Design
- Detection and Estimation
- Distributed Coding and Processing
- Diversity and Fading Countermeasures
- Dynamic Spectrum Management
- Equalization
- Feedback Schemes in Communications
- Fiber Optical Communications and Free-Space Optical Communications
- Information Theory and Physical Layer Security
- Interference Management, Cancellation, Avoidance
- Iterative Techniques, Detection and Decoding
- Joint Source/Channel Coding
- Multi-Carrier Systems
- Multiple Access Techniques
- Multiple-Input Multiple-Output (MIMO) Systems Design and Analysis
- Multiuser Detection
- Multiuser Diversity
- Network Coding

- Network Information Theory
- Orthogonal Frequency Division Multiplexing (OFDM)
- Radio Resource Management
- Source Coding and Data Compression
- Space-time Coding and Processing
- Synchronization
- Turbo and LDPC Codes
- Ultra-Wideband Communications

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