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Chair: Mohamed-Ali Belabbas, *University of Illinois*

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ThB1 – Wireless Communication - An Industry R&D Perspective — *Library*

Chair: Pramod Viswanath, *University of Illinois*
Organizer(s): Pramod Viswanath, *University of Illinois*

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Wireless Communications: An Industrial View ..... n/a
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Li, Junyi — *Qualcomm Inc.*

ThB2 – Consensus I — *Solarium*

Chair: Angelia Nedich, *University of Illinois*
Organizer(s): Angelia Nedich, *University of Illinois*
Nitin Vaidya, *University of Illinois*
Venugopal Veeravalli, *University of Illinois*

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ThB3 – Iterative Algorithms and Codes — *Butternut*

Chair: Ramji Venkataramanan, *Yale University*

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A Computational Approach for Determining Rate Regions and Codes Using Entropic Vector Bounds 1580
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ThB4 – Verification of Cyberphysical Systems: Tools and Algorithms — *Pine*

Chair: Sayan Mitra, *University of Illinois*
Organizer(s): Sayan Mitra, *University of Illinois*
Mahesh Viswanathan, *University of Illinois*

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Ravanbakhsh, Hadi — *University of Colorado, Boulder*
Fainekos, Georgios — *Arizona State University*

Verification and Synthesis for Cyber-Physical Properties ..... n/a
Seshia, Sanjit — *University of California, Berkely*

Co-Designing Control Laws and Their Software Implementations ..... n/a
Majumdar, Rupak — *Max-Planck Institute for Software Systems*

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ThB5 – Network Algorithms, Analysis, and Games III — *Lower Level*

Chair: Srinivas Shakkotai, *Texas A&M University*
Organizer(s): Bruce Hajek, *University of Illinois*
R. Srikant, *University of Illinois*

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Asymptotic Results for Random Polynomials on the Unit Circle ..... n/a
Whiting, Philip — *Technologies*
Tucci, Gabriel — *Alcatel Lucent Bell Labs*

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Zhang, Li — *IBM T.J. Watson Research*

ThB6 – Relay Channels — *Visitor Center*

Chair: Ravi Tandon, *Virginia Tech.*

Achieving Socially Optimal Solution through Payments in a Dynamic Game for the Relay Channel 1640
Vasal, Deepanshu — *University of Michigan*
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Outer Bounds for the Capacity Region of a Gaussian Two-Way Relay Channel 1645
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Xiong, Wenhao — *Wichita State Univeristy*
Kim, Hyunggi — *Wichita State University*
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Park, Hyuncheol — *KAIST*
Lee, Yong H. — *KAIST*

Max-Flow Min-Cut Outage Characterization of Dual-Hop Relay Channels 1659
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ThC1 – Wireless Communication — *Library*

Chair: Pramod Viswanath, *University of Illinois*
Organizer(s): Pramod Viswanath, *University of Illinois*

Properties of Complex Information Systems ..... n/a
Bonneau, Robert — *USAF AFMC AFOSR/RSL*

SLIC Equalizer for ISI 1666
Khayrallah, Ali — *Ericsson Research*

Interference Cancellation: Theory to Practice ..... n/a
Subrahmanya, Parvathanathan — *Qualcomm, Inc.*

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Tian, Zhi — *National Science Foundation*

CSI Dissemination for MU-MIMO Schemes based on Outdated CSI 1672
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Piantinada, Pablo — *SUPELEC*
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Caire, Giuseppe — *University of Southern California*

Achieving High Capacity with Small Cells in LTE-A 1680
Blankenship, Yufei W. *Research In Motion*

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Chair: Tara Javidi, *University of California, San Diego*
Organizer(s): Bruce Hajek, *University of Illinois*
R. Srikant, *University of Illinois*

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Spotting Trendsetters: Inference for Network Games 1697
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ThC3 – Consensus II — *Butternut*

Chair: Nitin Vaidya, *University of Illinois*
Organizer(s): Angelia Nedich, *University of Illinois*
Nitin Vaidya, *University of Illinois*
Venugopal Veeravalli, *University of Illinois*

Coordinated Randomness in Sparse Graphs 1729
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A Simple Median-Based Resilient Consensus Algorithm 1734
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Resilient Asymptotic Consensus in Asynchronous Robust Networks 1742
LeBlanc, Heath J. *Ohio Northern University*
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Linear Bandits in High Dimension and Recommendation Systems 1750
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Montanari, Andrea *Stanford University*

ThC4 – Interference Channels

Pine

Chair: Steven Weber, *Drexel University*

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Stotz, David — *ETH Zürich*
Bölcskei, Helmut — *ETH Zürich*

Cyclic Interference Alignment by Propagation Delay 1761
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Schmitz, Johannes — *RWTH Aachen University*
Mathar, Rudolf — *RWTH Aachen University*

The Capacity of Less Noisy Cognitive Interference Channels 1769
Vaezi, Mojtaba — *McGill University*

Symmetric *K*-User Gaussian Interference Channels: Approximate Sum-Capacity via Deterministic Modeling 1775
Saha, Suvarup — *Northwestern University*
Berry, Randall A. — *Northwestern University*

On Constant Gaps for the Two-Way Gaussian Interference Channel 1783
Cheng, Zhiyu — *University of Illinois, Chicago*
Devroye, Natasha — *University of Illinois, Chicago*

The Nash Equilibrium Region of the Linear Deterministic Interference Channel with Feedback 1790
Perlaza, Samir M. — *Princeton University*
Tandon, Ravi — *Virginia Tech*
Poor, H. Vincent — *Princeton University*
Han, Zhu — *University of Houston*

ThC5 – Control and Security

Lower Level

Chair: Linda Bushnell, *University of Washington*
Organizer(s): Tamer Başar, *University of Illinois*
Linda Bushnell, *University of Washington*
Radha Poovendran, *University of Washington*

Pricing in Linear-Quadratic Dynamic Games 1798
Ratliff, Lillian J. — *University of California, Berkeley*
Coogan, Samuel — *University of California, Berkeley*
Calderone, Daniel — *University of California, Berkeley*
Sastry, S. Shankar — *University of California, Berkeley*

Revealing Stealthy Attacks in Control Systems 1806
Teixeira, André — *KTH Royal Institute of Technology*
Shames, Iman — *University of Melbourne*
Sandberg, Henrik — *KTH Royal Institute of Technology*
Johansson, Karl H. — *KTH Royal Institute of Technology*

A Passivity-Based Framework for Composing Attacks on Networked Control Systems 1814
Clark, Andrew — *University of Washington*
Bushnell, Linda — *University of Washington*
Poovendran, Radha — *University of Washington*

Game Theory for Security: Key Algorithmic Principles, Deployed Systems, Lessons Learned 1822
Tambe, Milind — *University of Southern California*
Jain, Manish — *University of Southern California*
Pita, James Adam — *University of Southern California*
Jiang, Albert Xin — *University of Southern California*

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Cárdenas, Alvaro A. — *University of Texas, Dallas*
Amin, Saurabh — *Massachusetts Institute of Technology*
Schwartz, Galina — *University of Califonia, Berkeley*
Dong, Roy — *University of Califonia, Berkeley*
Sastry, Shankar — *University of Califonia, Berkeley*

ThC6 – Feedback — *Visitor Center*

Chair: Hyuck M. Kwon, *Wichita State University*

The Zero-Undetected-Error Capacity of Discrete Memoryless Channels with Feedback 1838
Bunte, Christoph — *ETH Zürich*
Lapidoth, Amos — *ETH Zürich*

A Lower Bound on Feedback Capacity of Colored Gaussian Relay Channels 1843
Agrawal, Mayur — *Purdue University*
Love, David J. — *Purdue University*
Balakrishnan, Venkataramanan — *Purdue University*

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Wang, I-Hsiang — *École Polytechnique Fédérale de Lausanne*
Suh, Changho — *KAIST*

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Li, Chong — *Iowa State University*
Elia, Nicola — *Iowa State University*

The Capacity Region of the Symmetric Linear Deterministic Interference Channel with Partial Feedback 1864
Le, Sy-Quoc — *National University of Singapore*
Tandon, Ravi — *Virginia Tech*
Motani, Mehul — *National University of Singapore*
Poor, H. Vincent — *Princeton University*

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Karamad, Ehsan — *University of Toronto*
Adve, Raviraj S. — *University of Toronto*

FrPP – Plenary Talk — *Library*

Chair: Bruce Hajek, *University of Illinois*

The Science of Information: From Communication to DNA Sequencing ..... n/a
Tse, David — *University of California, Berkely*

FrA1 – Pricing and Control in Power Systems and Markets III — *Library*

Chair: Alejandro Dominguez-Garcia, *University of Illinois*
Organizer(s): Alejandro Dominguez-Garcia, *University of Illinois*
Uday Shanbhag, *University of Illinois*

Optimal Pricing for Residential Demand Response: A Stochastic Optimization Approach 1879
Jia, Liyan — *Cornell University*
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Shames, Iman — *KTH Royal Institute of Technology*
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Rajagopal, Ram — *Stanford University*
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Rajagopal, Ram — *Stanford University*
Zhang, Baosen — *University of California, Berkely*
Tse, David — *University of California, Berkely*

Network Effects on Volatility of Power Grids ..... n/a
Roozbehani, Mardavij — *Massachusetts Institute of Technology*

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Hao, He — *University of Florida*
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Barooah, Prabir — *University of Florida*
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FrA2 – Information Theory — *Solarium*

Chair: Sae-Young Chung, *KAIST*
Organizer(s): Venugopal Veeravalli, *University of Illinois*
Pramod Viswanath, *University of Illinois*

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Saligrama, Venkatesh — *Boston University*
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Sengupta, Ayan — *École Polytechnique Fédérale de Lausanne*
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Fragouli, Christina — *École Polytechnique Fédérale de Lausanne*

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FrA3 – Multi-Terminal Information Theory — *Butternut*

Chair: Urbashi Mitra, *University of Southern California*

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FrA4 – Sparse Graphical Models — *Pine*

Chair: Shreyas Sundaram, *University of Waterloo*

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Chi, Yuejie — *Ohio State University*
Calderbank, Robert — *Duke University*

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Howard, Stephen D. — *Defence Science and Technology Organisation*

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Fotouhi, Babak — *McGill University*
Rabbat, Michael G. — *McGill University*

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Ray, Avik — *University of Texas, Austin*
Sanghavi, Sujay — *University of Texas, Austin*
Shakkottai, Sanjay — *University of Texas, Austin*

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Negahban, Sahand — *Massachusetts Institute of Technology*
Shah, Devavrat — *Massachusetts Institute of Technology*

FrA5 – Source Coding — *Lower Level*

Chair: Christoph Bunte, *ETH Zürich*

Real-Time Coding of Gauss-Markov Sources Over Burst Erasure Channels 2037
Etezadi, Farrokh — *University of Toronto*
Khisti, Ashish — *University of Toronto*

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Sun, John Z. — *Massachusetts Institute of Technology*
Goyal, Vivek K — *Massachusetts Institute of Technology*

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Beirami, Ahmad — *Georgia Institute of Technology*
Fekri, Faramarz — *Georgia Institute of Technology*

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Torbatian, Mehdi — *University of Waterloo*
Yang, En-hui — *University of Waterloo*

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Sahebi, Aria G. — *University of Michigan*
Pradhan, S. Sandeep — *University of Michigan*

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Mazumdar, Arya — *Massachusetts Institute of Technology*
Wang, Ligong — *Massachusetts Institute of Technology*

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Ur-Rehman, Obaid — *University of Siegen*
Zivic, Natasa — *University of Siegen*

FrA6 – Relay Channels and Networks — *Visitor Center*

Chair: Suvarup Saha, *Northwestern University*

On the Energy-Throughput Tradeoffs for Relay Networks with Transmit Power Control 2088
Kim, Sanghoon — *University of Michigan*
Stark, Wayne E. — *University of Michigan*

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Bühler, Jörg — *Technische Universität Berlin*
Stańczak, Sławomir — *Technische Universität Berlin*

Relay Computation: Managing Interference with Structure and Cooperation 2104
Nokleby, Matthew — *Rice University*
Nazer, Bobak — *Boston University*
Aazhang, Behnaam — *Rice University*

A Decoding Procedure for Compress-and-Forward and Quantize-and-Forward Relaying 2112
Luo, Kevin — *Carleton University*
Gohary, Ramy H. — *Carleton University*
Yanikomeroglu, Halim — *Carleton University*

An Auction-Based Mechanism for Dynamic Spectrum Allocation in Participatory Cognitive Radio Networks 2120
Nadendla, V. Sriram Siddhardh (Sid) — *Syracuse University*
Brahma, Swastik — *Syracuse University*
Varshney, Pramod K. — *Syracuse University*