IEEE GLOBECOM 2010 TECHNICAL PROGRAM

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Tuttle South

AHSN05: Routing V
Chair: Nei Kato, Tohoku University, Japan

Preserving Source-Location Privacy in Wireless Sensor Network using STaR Routing
Leron Lightfoot, Yun Li, Jian Ren (Michigan State University, USA)

Contour-Based Hole Avoiding Routing Protocol in Wireless Sensor Networks
Guey-Yun Chang, Jang-Ping Sheu (National Tsing Hua University, TW)

Using Reconfigurable Hardware Devices in WSNs for Reducing the Energy Consumption of Routing and Security Tasks
Georgios-Grigorios Mplemenos, Konstantinos Papadopoulos, Ioannis Papaefstathiou (Technical University of Crete, GR)

Adaptive Parametric Routing based on Dynamic Metrics
Nesrine Ouerfhat (University Paris, FR)
Abdelhamid Mellouk (UPEC, University Paris-Est Creteil Val de Marne, FR)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Tuttle Center

AHSN17: Performance Analysis and Modeling I
Chair: Long Le, NEC Laboratories Europe, Germany

Performance Analysis of Multi-Channel MAC Protocols in Multi-Hop Ad Hoc Networks
Long Le (NEC Laboratories Europe, DE)

Multicasting vs. Broadcasting: What Are the Trade-offs?
Bora Karaoglu, Wendi Heinzelman (University of Rochester, USA)

Maximum Throughput of IEEE 802.15.4 Enabled Wireless Sensor Networks
Xianghui Cao, Jiming Chen, Youxian Sun (Zhejiang University, CN)
Sherman Shen (University of Waterloo, CA)

Performance Analysis of Broadcast Messages in VANETs Safety Applications
Khalid Abdel Hafeez, Lian Zhao, Zaiyi Liao, Ngok-Wah Ma (Ryerson University, CA)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Jasmine

AHSN29: Resource Management
Chair: Fei Ye, University of Washington, USA

Outage Probability Based Resource Allocation in Wireless Mesh Networks
Xuning Shao, Cunqing Hua, Aiping Huang (Zhejiang University, CN)

Towards Efficient Use of Radio Resources in Single Channel Wireless Mesh Networks
Rami Langar, Salsabil Njima (UPMC - University of Paris 6, FR)
Nizar Bouabdallah (INRIA, FR)
Raouf Boutaba (University of Waterloo, CA)
Guy Pujolle (University of Paris 6, FR)

Protocol-Agnostic Compression for Resource-Constrained Wireless Networks
Travis L. Massey, Ankur Mehta, Thomas Watteyne, Kristofer Pister (UC Berkeley, USA)

LQR Formulation of Sensor Deployment for Decision Fusion Based Detection
Ahmad Ababnah, Bala Natarajan (Kansas State University, USA)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Riverfront North Hall

AHSN5P: Topics in Ad Hoc, Sensor, and Mesh Networks V (Poster)
Chair: Weixiao Meng, Harbin Institute of Technology, China

COSMO: CO-Simulation with MATLAB and OMNeT++ for Indoor Wireless Networks
Zhi Zhang, Zhonghai Lu, Li-Rong Zheng, (Royal Institute of Technology, SE)
Xiaolang Yan (Zhejiang University, CN)
Qiang Chen (Royal Institute of Technology, SE)

Q-HWMP: improving end-to-end QoS for 802.11s mesh networks based
Mohamed Ould Cheikh (Laboratoire Lamsade, FR)
Lynda Mokdad (Université de Paris 12, FR)

Feasibility and Benefits of Passive RFID Wake-up Radios for Wireless Sensor Networks
He Ba, Ilker Demirkol, Wendi Heinzelman (University of Rochester, USA)

FLIMS: A Fuzzy-Logic based Mobility management Scheme in Mobile Ad Hoc Network
Hailun Tan (University of New South Wales, AU)

Compact Wakeup Scheduling in Wireless Sensor Networks
Junchao Ma, Wei Lou (Hong Kong Polytechnic University, CN)

Favorable Peer Supported Throughput Optimization in Wireless Mesh Network
Mohammad Zulhasnine, Changcheng Huang, Anand Srinivasan (Carleton University, CA)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Pearson I

CIS08 Anomaly Detection
Chair: Mina Guirguis, Texas State University, USA

SKWeak Attacks on Path Splicing: Vulnerability Assessment and Defense Mechanisms
Emad Guirgui, Mina Guirguis, Christopher Page (Texas State University, USA)

Networking Anomaly Detection using DSNS and Particle Swarm Optimization with Re-Clustering
Moisés Fernando Lima, Lucas Dias Sampaio (State University of Londrina, BR)
Bruno Zarpelão (University of Campinas, BR)
Joel Rodrigues (University of Beira Interior, PT)
Taufik Abrão, Mario Lemes Proença Jr. (State University of Londrina, BR)

Fast String Matching with Overlapped Substring Classifier in Deep Packet Inspection Systems
Zhikai Zhang, Youjian Zhao (Tsinghua University, CN)
An Evaluation of Anomaly Detection Based on Sketch and PCA
Yoshiki Kanda (Waseda University, JP)
Kensuke Fukuda (National Institute of Informatics, JP)
Toshiharu Sugawara (Waseda University, JP)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Merrick II

CSSMA05: Peer-to-Peer Technologies for Communication Services
Chair: Abdelhamid Mellouk, University Paris-Est Creteil Val de Marne, France

Extending the DLNA-based Multimedia Sharing System to P2P Network on OSGi Frameworks
Chin-Feng Lai (National Cheng Kung University, TW)
Min Chen (Seoul National University, KR)
Athanasios Vasilakos (University of Western Macedonia, GR)
Yueh-Min Huang (National Cheng Kung University, TW)

Enhancing Content Distribution Performance of Locality-aware BitTorrent Systems
Zhenyu Li, Gao-Gang Xie (Chinese Academy of Sciences, CN)

Core Tree Optimization in Hybrid Peer to Peer Real Time Broadcasting System
Sanghwan Lee (Kookmin University, KR)
Sambit Sahu (IBM Research, USA)

Multiparty Seamless Transport
Nuno Coutinho, Tiago Silvestre Condeixa, Rui Valbom, Susana Isabel Barreto de Miranda Sargento (Instituto de Telecomunicações, Universidade de Aveiro, Portugal, PT)
Augusto Neto (Universidade Federal de Goiás, Brazil, BR)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Hibiscus B

CT05: Interference Alignment I
Chair: Biao Chen, Syracuse University, USA

Two-Cell Downlink Noncoherent Cooperation without Transmitter Phase Alignment
Mingguang Xu, Dongning Guo, Michael Honig (Northwestern University, USA)

Exploiting Channel Correlations - Simple Interference Alignment Schemes with no CSIT
Syed Ali Jafar (University of California, Irvine, USA)

Mobility and Fading: Two Sides of the Same Coin
Zhenhua Gong, Martin Haenggi (University of Notre Dame, USA)

New Observations on Interference Channels under Strong and Very Strong Interference
Jin Xu, Hao Chen, Biao Chen (Syracuse University, USA)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Riverfront North Hall

CT1P: Analysis II (Poster)
On Wireless Channels with M-Antenna Eavesdroppers: Characterization of the outage probability and outage Secrecy Capacity
Vinay Uday Prabhu, Miguel Rodrigues (University of Porto, PT)

Outage and Diversity-Multiplexing Trade-off Analysis of Closed and Open-Access Femtocells
Tariq Elkourdi, Osvaldo Simeone (New Jersey Institute of Technology, USA)

Analytical Performance of Rayleigh-Product MIMO Channels with Arbitrary-Power Co-channel Interference and Noise
Yongpeng Wu, Shi Jin, Xiqi Gao (Southeast University, CN)

Novel Simple Forms for Multivariate Rayleigh and Rician Distributions With Generalized Correlation
Norman C. Beaulieu, Kasun T. Hemachandr (University of Alberta, CA)

Tightened Upper Bounds for TPC coded Free Space Optical Links over Atmospheric Turbulence Channels
Yongxiong Ren, Anhong Dang, Hong Guo (Peking University, CN)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Hibiscus A

CT10: Wireless Networks I
Chair: Mohammad A Matin, University of Kebangsaan, Malaysia

Outage Performance of Cognitive-Radio Relay System based on the Spectrum-Sharing Environment
Yanyan Guo (Beijing University of Posts and Telecommunications, CN)

Relay Network Beamforming and Power Control Using Maximization of Mutual Information
Javier M. Paredes, Alex Gershman (Darmstadt University of Technology, DE)

On the Degrees of Freedom of Parallel Relay Networks
Chao Wang, Hamed Farhadi, Mikael Skoglund (Royal Institute of Technology, SE)

A Relay Region Based Routing for Multihop Wireless Networks with Directional Antennas
Di Li, Changchuan Yin, Changhai Chen (Beijing University of Posts and Telecommunications, CN)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Orchard AB

CQRM05: Routing II
Chair: Tutomu Murase, NEC Corp., Japan

Fast Heuristics for the QoS Multicast Routing Problem
Bellabas Alia (INSA Rennes, FR)
Samer Lahoud, Miklos Molnar (INSA Rennes / IRISA, FR)

QoS Routing in Smart Grid
Husheng Li (University of Tennessee, USA)
Weiyi (Max) Zhang (North Dakota State University, USA)
Time Lagged Location-based Routing in Vehicular Ad Hoc Networks
Zhi Li, Yanmin Zhu, Minglu Li (Shanghai Jiao Tong University, CN)
Bo Li (Hong Kong University of Science and Technology, HK)

Efficient Mobile Content Delivery Based on Co-route Prediction in Urban Transport
Le Shu, Hongbo Jiang, Xiaqiang Ma, Lanchao Liu, Kai Peng, Bo Liu, Jie Cheng, Yanbo Xu
(Huazhong University of Science and Technology, CN)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Flamingo

NGN05: Load Balancing in Mobile Networks
Chair: Parmesh Ramanathan, University of Wisconsin, Madison, USA

Load Balancing via Store-Carry and Forward Relaying in Cellular Networks
Panayiotis Kolios, Vasilis Friderikos (King's College London, UK)
Katerina Papadaki (London School of Economics, UK)

Evaluation of Call Dropping Probability for a Heterogeneous Wireless Network with Uniformly Distributed Handoff Failure Rates
Valentine Aalo (Florida Atlantic University, USA)
George Efthymoglou (University of Piraeus, GR)

Conflict Avoidance between Mobility Robustness Optimization and Mobility Load Balancing
Zhiqiang Liu, Peilin Hong, Kaiping Xue, Min Peng (University of Science and Technology of China, CN)

Congestion Games for Distributed Radio Access Selection in Broadband Networks
Marc Ibrahim (Saint Joseph University, LB)
Kinda Khawam, Samir Tohme (Université de Versailles, FR)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Riverfront North Hall

ONS1P: Optical Switching I (Poster)
Chair: Vinod M. Vokkarane, University of Massachusetts Dartmouth, USA

Crosstalk limiting schedulers in AWG based optical switches
Andrea Bianco (Politecnico di Torino, IT)
Francisco Castano (Universidad de Vigo, ES)
Davide Cuda, Guido Alejandro Gavilanes Castillo (Politecnico di Torino, IT)
Cristina Lopez-Bravo (Universidad de Vigo, ES)
Fabio Neri (Politecnico di Torino, IT)
Miguel Rodelgo-Lacruz (Gradiant, ES)
Maria Salvat (Universitat Politècnica de Catalunya, ES)

Fair bandwidth allocation with distance fairness provisioning in optical burst switching networks
Tananun Orawiwattanakul, Yusheng Ji, Noboru Sonohara
(National Institute of Informatics, JP)

Fast Scheduling for Optical Flow Switching
Lei Zhang, Vincent Chan (Massachusetts Institute of Technology, USA)
Performance Evaluation of TCP over Optical Burst Switched (OBS) Networks using Coordinated Burst Cloning and Forward-Segment Redundancy
Julie Sullivan, Neal Charbonneau, Vinod M. Vokkarane (University of Massachusetts, Dartmouth, USA)

Continuous and Parallel Optimization of Dynamic Bandwidth Scheduling for WDM Networks
Pragatheeswaran Angu, Byrav Ramamurthy (University of Nebraska-Lincoln, USA)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Tuttle North

ONS05: Optical Access
Chair: Nasir Ghani, University of New Mexico, USA

Unbundling in WDM-PON Based on All-optical Switching
Antonella Bogoni, Paolo Ghelfi (CNIT, IT)
Nicola Andriolli (Scuola Superiore Sant'Anna, IT)
Antonio D'Errico (Ericsson, IT)
Giorgio Grasso (Pirelli, IT)

GATE-driven Dynamic Bandwidth Allocation for WDM EPONs
Nelson Antunes (University of Algarve, PT)
Christine Fricker, Philippe Robert, James Roberts (INRIA, FR)

Design of the Hybrid PON System for GPON Reach Extension on the Basis of Colorless DWDM-PON and 3R Regenerator
Kwang-ok Kim, Kyeong Hwan Doo, Sang Soo Lee (ETRI, KR)

Performance Analysis of QoS-Aware Layer-2 VPNs over Fiber-Wireless (FiWi) Networks
Ahmad R. Dhaini, Pin-Han Ho (University of Waterloo, CA)
Abdallah Shami (University of Western Ontario, CA)
Xiaohong Jiang (Future University-Hakodate, JP)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Gardenia

SAC05: Coding for Satellite Communications
Chair: Muriel Medard, Massachusetts Institute of Technology, USA

Short Erasure Correcting LDPC IRA Codes over GF(q)
Giuliano Garrammone, Balazs Matuz (German Aerospace Center, DE)

Multidimensional Multilevel Coding for Satellite Broadcasting with Highly Flexible QoS
Aharon Vargas (Fraunhofer Institute for Integrated Circuits (IIS), DE)
Wolfgang Gerstacker (University of Erlangen-Nuernberg, DE)
Marco Breiling (Fraunhofer IIS, DE)
Gökhan Gül (TR)

An efficient LDGM coding scheme for optical satellite-to-ground link based on a new channel model
Yoshitoshi Yamashita, Eiji Okamoto, Yasunori Iwanami (Nagoya Institute of Technology, JP)
Yozo Shoji, Morio Toyoshima, Yoshihisa Takayama (National Institute of Information and Communications Technology, JP)

Online Network Coding for Time-Division Duplexing
Robust downlink beamforming for cognitive radio networks
Imran Wajid, Marius Pesavento (Darmstadt University of Technology, DE)
Yonina C. Eldar (Technion-Israel Institute of Technology, IL)
Alex Gershman (Darmstadt University of Technology, DE)

Minimum-Delay Spectrum Sensing for Multi-Band Cognitive Radios
Seung-Jun Kim (University of Minnesota, USA)
Guobing Li (Xi'an Jiaotong University, CN)
Georgios B. Giannakis (University of Minnesota, USA)

Nonsmooth Optimization for Beamforming in Cognitive Multicast Transmission
Anh Phan, Hoang D. Tuan, Kha Ha (University of New South Wales, AU)
Duy T. Ngo (McGill University, CA)

Sensing Time and Power Allocation Optimization in Wideband Cognitive Radio Networks
Stergios Stotas, Nallanathan Arumugam (King's College London, UK)

MIMO Maximum Likelihood Soft Demodulation Based on Dimension Reduction
Jungwon Lee, Jiwon Choi, Hui-Ling Lou (Marvell Semiconductor, Inc., USA)

Decoding for MIMO systems with imperfect channel state information
Boon Sim Thian, Andrea Goldsmith (Stanford University, USA)

An Equal Gain Transmission in MIMO Wireless Communications
Shang-Ho Tsai (National Chiao Tung University, TW)

Orthogonal Pulse Compression Codes for MIMO Radar System
Lei Xu, Qilian Liang (University of Texas, Arlington, USA)

Dual-hop Amplify-and-Forward MIMO Relaying with Antenna Selection in Nakagami-m Fading
Nan Yang (University of New South Wales, AU)
Maged Elkashlan (CSIRO, ICT Centre, AU)
Jinhong Yuan (University of New South Wales, AU)

 Degrees of Freedom on MIMO Multi-Link Two-Way Relay Channels
Kwangwon Lee, Seok-Hwan Park, Inkyu Lee (Korea University, KR)

 Low Complexity Joint User and Mode Selection Algorithm for Multiuser MIMO Downlink Systems
Jin-Sung Kim, Kyoung-Jae Lee, Inkyu Lee (Korea University, KR)

 Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Brickell Center

 WC17: Game Theory I
Chair: Marco Luise, University of Pisa, Italy

 Joint Optimization of Detection and Power Allocation for OFDM-based Cognitive Radios
Xiaoge Huang, Baltasar Beferull-Lozano (Universidad de Valencia, ES)

 A Spatial Game for Access Points Placement in Cognitive Radio Networks with Multi-Type Service
Dapeng Li, Youyun Xu, Jing Liu, Xining Wang (Shanghai Jiao Tong University, CN)
Mohsen Guizani (WMU, USA)

 Distributed Energy Efficient Spectrum Sharing Strategy Selection with Limited Feedback in MIMO Interference Channels
Wei Zhong (Shanghai Jiao Tong University, CN)
Youyun Xu (PLA University of Science & Technology, CN)

 Game-Theoretic Resource Allocation for Two-Hop Interference Channels
Yi SHI, Khaled Letaief (Hong Kong University of Science & Technology, CN)
R. K. Mallik (Indian Institute of Technology-Delhi, IN)

 Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Brickell South

 WC29: Cooperative Communications V
Chair: Ozgur Oyman, Intel, USA

 Relay-Induced Error Propagation Reduction for Decode-and-Forward Cooperative Communications
Dandan Liang, Soon Xin Ng, Lajos Hanzo (University of Southampton, UK)

 Optimal Sum Rate of the MIMO Relay Communication System
Peter He, Lian Zhao, Zaiyi Liao (Ryerson University, CA)

 Average Spectral Efficiency for Opportunistic QRD-based Cyclic Prefixed Single-Carrier Cooperative Diversity Systems with Power Allocation
Kyeong Jin Kim (USA)
Theodoros Tsiftsis (Technological Educational Institute of Lamia, GR)
George Karagiannidis (Aristotle University of Thessaloniki, GR)

 Convergence Property of Transmit Time Pre-Synchronization for Concurrent Cooperative Communication
Yong Jun Chang, Mary Ann Ingram (Georgia Tech, USA)
Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Orchard D

**WC41: Optimization I**
Chair: H. Mohsenian, University of Toronto, Canada

**Chemical Reaction Optimization for Cognitive Radio Spectrum Allocation**
Albert Lam, Victor Li (University of Hong Kong, CN)

**Throughput Optimization in Cognitive Random Wireless Ad hoc Networks**
Alireza Babaei (Auburn University, USA)
Bijan Jabbari (George Mason University, USA)

**Subchannel-Sharing Based Distributed Optimization of Ad-Hoc Cognitive Radio Network**
Yao Ma (Wright State University, USA)
Dong In Kim (Sungkyunkwan University, KR)

**On Amplify-and-Forward Relay Networks with Multiple Source-Destination Pairs**
Yupeng Liu, Athina Petropulu (Drexel University, USA)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Orchard C

**WC53: Fading Channels I**
Chair: Steve Hranilovic, McMaster University, Canada

**Performance of Power-Efficient Adaptive Interference Cancelation in Fading Channels**
Redha Radaydeh (KAUST, SA)
Mohamed-Slim Alouini (Texas A&M University, Qatar, QA)

**Iterative Primal-Dual Scaled Gradient Algorithm with Dynamic Scaling Matrices for Solving Distributive NUM over Time-Varying Fading Channels**
Yong Cheng, Vincent Lau (Hong Kong University of Science & Technology, CN)

**Adaptive M-QAM Systems with Diversity in Correlated Nakagami-m Fading and Shadowing**
George Alexandropoulos (University of Patras, GR)
Andrea Conti (ENIIF University of Ferrara, WiLAB University of Bologna, IT)
Mathiopoulos Panayiotis (Institute for Space Applications & Remote Sensing, GR)

**Cooperative Systems for the Fading Channel with Adaptive Modulation and Incremental Encoding**
Fulvio Babich (University of Trieste, IT)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Riverfront North Hall

**WC5P: Multi-Carrier Systems (Poster)**
Chair: Wei Chen, Tsinghua University, China

**A Novel TDS-FDMA Scheme for Multi-User Uplink Scenarios**
Linglong Dai, Zhaoceng Wang, Jun Wang, Yang Zhixing (Tsinghua University, CN)

**Distributed Adaptive Subchannel and Power Allocation for Downlink OFDMA with Inter-Cell Interference Coordination**
A New Partial Loading Scheme for Interference Management in OFDM Cellular Networks
Weiwei Chen, Chin Tau Lea (Hong Kong University of Science and Technology, CN)

Network Coverage in Multicarrier Broadcast System
Siqian Liu, Hongxiang Li, Benjamin Braaten (North Dakota State University, USA)

Robust Pilot Designs for Consistent Frequency Offset Estimation in OFDM systems
Kilbom Lee, Inkyu Lee (Korea University, KR)

Robust Synchronization for 3GPP LTE System
Wen Xu (Infineon Technologies, DE)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Pearson II

WN05: Cognitive Networking II
Chairs: Seshadri Mohan, University of Arkansas, Little Rock, USA
Liang Xiao, Xiamen University, China

Dynamic Interference Minimization Routing Game for On-Demand Cognitive Pilot Channel
Quanyan Zhu (University of Illinois, Urbana Champaign, USA)
Zhou Yuan (University of Houston, USA)
Ju Bin Song (Kyung Hee University, KR)
Zhu Han (University of Houston, USA)
Tamer Başar (University of Illinois, Urbana-Champaign, USA)

Spectrum Aware Opportunistic Routing in Cognitive Radio Networks
Shih Chun Lin, Kwang-Cheng Chen (National Taiwan University, TW)

Topology-incurred Delay for Information Dissemination in Large Multi-channel Cognitive Radio Networks
Lei Sun, Wenye Wang (NC State University, USA)

Modeling and Analysis for Reactive-Decision Spectrum Handoff in Cognitive Radio Networks
Chung-Wei Wang, Li-Chun Wang (National Chiao Tung University, TW)
Fumiyuki Adachi (Tohoku University, JP)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Gautier

WN17: 802.16 / WiMAX Networks II
Chair: Debarati Sen, Samsung Electronics, India

A Novel Adaptive Mapping Scheme for IEEE 802.16 Mobile Downlink Framing
Panagiotis Sarigiannidis (Aristotle University Thessaloniki, GR)
Georgios Papadimitriou, Petros Nicopolitis (Aristotle University, GR)
Mohammad S. Obaidat (Monmouth University, USA)
Andreas Pomportsis (Aristotle University, GR)

Multi-Carrier Admission Control and Carrier Assignment for IEEE 802.16m Wireless Networks
Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Merrick I

WN29: Wireless Sensor Network Design II
Chair: Honggang Wang, University of Massachusetts, Dartmouth, USA

Decentralized Sensor-Coordination Optimization for Mobile Multi-Target Tracking in Wireless Sensor Networks
Xi Zhang (Texas A&M University, USA)

Energy Consumption and Latency Analysis for Wireless Multimedia Sensor Networks
Alvaro Pinto, Zhe Zhang, Xin Dong, Senem Velipasalar, Mehmet Can Vuran, M. Cenk Gursoy (University of Nebraska-Lincoln, USA)

Vision Graph Construction in Wireless Multimedia Sensor Networks
Xin Dong, Mehmet Can Vuran (University of Nebraska-Lincoln, USA)

Distributed Inter-Network Interference Coordination for Wireless Body Area Networks
Gengfa Fang, Eryk Dutkiewicz, Kegen Yu, Rein Vesilo, Yiwei Yu (Macquarie University, AU)

Wednesday, 8 December 2010 • 10:00 – 11:10
Location: Riverfront North Hall

WN5P: Resource Management in Wireless Networks II (Poster)
Chair: Yi Song, University of North Carolina, Charlotte, USA

A dynamic framed ALOHA scheme for batch resolution in practical CSMA-based wireless networks
Andrea Zanella (University of Padova, IT)

Detecting Hidden Terminal Problems in Densely Deployed Wireless Networks
Koichi Nishide, Hiroyuki Kubo, Ryoichi Shinkuma, Tatsuro Takahashi (Kyoto University, JP)

Slow Start Backoff Algorithm for Ad Hoc Wireless Networks
Der-Jiunn Deng (National Changhua University of Education, TW)
Han-Chieh Chao (National Ilan University, TW)
Hsiao-Hwa Chen (National Cheng Kung University, TW)

On Hybrid Multiple Access and Its Reuse Partitioning
Feng Wang, Bingli Jiao, Yuping Zhao (Peking University, CN)
A Double-Loop Receiver-Initiated Medium Access Control Scheme for Data Dissemination Services with Packet Pre-Downloading
Hao Liang, Weihua Zhuang (University of Waterloo, CA)

Expanding Horizon and Capture Effect in RFID Singulation
Charles-Francois Natali, Nitin Vaidya, Victor K.Y. Wu
(University of Illinois, Urbana-Champaign, USA)

Wednesday, 8 December 2010 • 11:20 - 12:30
Location: Tuttle South

AHSN06: Routing VI
Chair: Floriano De Rango, University of Calabria, Italy

An Energy Efficient Channel Assignment and Routing Algorithm for Multi-Radio Wireless Mesh Networks
Stefano Avallone (University of Naples, IT)

Lightweight Routing with QoS Support in Wireless Sensor and Actor Networks
Mustafa Akbas, Damla Turgut (University of Central Florida, USA)

A Cross-layer and Adaptive Scheme for Balancing Performance and Security on WMN Data Routing
Michele Nogueira (Federal University of Parana, BR)
Heiber W. da Silva, Raimir Holanda (University of Fortaleza, BR)
Aldri Santos (UFPR, BR)

Reducing Routing Loops under Dynamic Metrics in Wireless Mesh Networks
Takuya Yoshihiro (Wakayama University, JP)

Wednesday, 8 December 2010 • 11:20 - 12:30
Location: Tuttle Center

AHSN18: Performance Analysis and Modeling II
Chair: Weihua Zhuang, University of Waterloo, Canada

Performance of IEEE 802.11 RTS/CTS with Finite Buffer and Load in Imperfect Channels: Modeling and Analysis
Ahed M. Alshanyour, Anjali Agarwal (Concordia University, CA)

Delay Analysis for a Reliable Message Delivery in Sparse Vehicular Ad Hoc Networks
Atfe Abdrabou (UAE University, UAE)
Ben Liang (University of Toronto, CA)
Weihua Zhuang (University of Waterloo, CA)

Modeling and Throughput Analysis for X-MAC with a Finite Queue Capacity
Ou Yang, Wendi Heinzelman (University of Rochester, USA)

Joint UKF and MMSE Channel Estimation for Uplink 2-Dimensional Block Spread MC-CDMA with Cyclic Delay Transmit Diversity
Xi Chen, Weixiao Meng, Qiyue Yu, Zhongzhao Zhang (Harbin Institute of Technology, CN)
Wednesday, 8 December 2010 • 11:20 – 12:30
Location: Jasmine

AHSN30: VANET and Mobility
Chair: Mohamed Younis, University of Maryland, Baltimore County, USA

Design Guidelines for a Network Architecture Integrating VANET with 3G & Beyond Networks
Tarik Taleb (NEC Europe Ltd., DE)
Abderrahim Benslimane (University of Avignon, FR)

A Tolerant Context-Aware Driver Assistance System for VANETs-Based Smart Cars
Ihn-Han Bae (Catholic University of Daegu, KR)
Stephan Olariu (Old Dominion University, USA)

Impact of Mobility on VANETs Safety Applications
Khalid Abdel Hafeez, Lian Zhao, Zaiyi Liao, Ngok-Wah Ma (Ryerson University, CA);

An Anti-Detection Moving Strategy for Mobile Sink
Zhou Sha, Jia-Liang Lu (Shanghai Jiao Tong University, CN)
Xu Li (State University of New York, Buffalo, USA)
Min-You Wu (Shanghai JiaoTong University, CN)

Wednesday, 8 December 2010 • 11:20 - 12:30
Location: Riverfront North Hall

AHSN6P: Topics in Ad Hoc, Sensor, and Mesh Networks VI (Poster)
Chair: Claudio I Estevez, Georgia Institute of Technology, USA

Strategy for Desired Communication Reliability with Minimized Total Retransmission in Sensor Networks
SungKee Noh (ETRI, KR)
Euisin Lee, Seungmin Oh (Chungnam National University, KR)
Tae-Ho Lee (ETRI, KR)
Sang-Ha Kim (Chungnam National University, KR)

On the Coexistence of Uncoordinated Ad-hoc Networks
Junaid Ahmed, Khairi A. Hamdi (University of Manchester, UK)

CFP: Integration of Fountain Codes and Optimal Probabilistic Forwarding in DTNs
Ying Dai, Panlong Yang, Guihai Chen (Nanjing University, CN)
Jie Wu (Temple University, USA)

Compressive Data Persistence in Large-Scale Wireless Sensor Networks
Mu Lin (Beijing University, CN)
Chong Luo (Microsoft Research Asia, CN)
Feng Liu (Beijing University of Aeronautics and Astronautics, CN)
Feng Wu (Microsoft Research Asia, CN)

Empirical Modeling and Estimation of End-to-End VoIP Delay over Mobile Multi-hop Wireless Networks
Volkan Rodoplu, Snehal Vadvalkar, Amir Aminzadeh Gohari, John J. Shynk (University of California, Santa Barbara, USA)

Network Tomography via Compressed Sensing
Mohammad Hamed Firooz (University of Washington, USA)
Wednesday, 8 December 2010 • 11:20 – 12:30
Location: Pearson I

CIS09: Anonymity
Chair: Tirthankar Ghosh, St. Cloud State University, USA

Toward Improving Path Selection in Tor
Fallon Chen, Joseph Pasquale (University of California, San Diego, USA)

Anonymous Certification Services
Dijiang Huang (Arizona State University, USA)

Selective Cross Correlation in Passive Timing Analysis against Anonymity Systems
Titus Abraham, Matthew Wright (University of Texas, Arlington, USA)

Statistical Framework for Source Anonymity in Sensor Networks
Basel Alomair, Andrew Clark (University of Washington, USA)
Jorge Cuellar (Siemens, DE)
Radha Poovendran (University of Washington, USA)

Wednesday, 8 December 2010 • 11:20 – 12:30
Location: Merrick II

CSSMA06: Multimedia Applications
Chairs: Min Chen, Seoul National University, Korea
Lei Shu, Osaka University, Japan

A New Hybrid Network Traffic Prediction Method
Lin Xiang, Xiaohu Ge, Chuang Liu (Huazhong University of Science and Technology, CN)
Lei Shu (Osaka University, JP)
Chengxiang Wang (Heriot-Watt University, UK)

A Channel Switching Scheme for IPTV Systems
Daniel A. G. Manzato, Nelson L. S. da Fonseca (State University of Campinas, BR)

QoS Bandwidth Optimization in an Inductive Routing System for Multimedia Real-Time Applications
Abdelhamid Mellouk, Said Hoceini (University Paris-Est Creteil Val de Marne, FR)

Multiple Description Coding with Feedback Based Network Compression
Jesper H Sørensen, Jan Østergaard, Petar Popovski (Aalborg University, DK)
Jacob Chakareski (EPFL, CH)

Wednesday, 8 December 2010 • 11:20 – 12:30
Location: Hibiscus B

CT06: Interference Alignment II
Chair: Syed Jafar, University of California, Irvine, USA

Large System Performance of Interference Alignment in Single-Beam MIMO Networks
David A. Schmidt, Wolfgang Utschick (Technische Universität München, DE)
Michael Honig (Northwestern University, USA)
Downlink Interference Alignment  
Changho Suh, David Tse (University of California, Berkeley, USA)  
Minnie Ho (Intel Labs, Intel Corporation, USA)

A General Closed-Form Solution to Achieve Interference Alignment Along Spatial Domain  
Yinggang Du, Sheng Liu (Huawei Technologies Co. Ltd., CN)

Interference Alignment as a Rank Constrained Rank Minimization  
Dimitris Papailiopoulos, Alex Dimakis (University of Southern California, USA)

Wednesday, 8 December 2010 • 11:20 - 12:30  
Location: Hibiscus A

CT11: Wireless Networks II  
Chair: Muriel Medard, Massachusetts Institute of Technology, USA

Protocol Coding for Two-Way Communications with Half-Duplex Constraints  
Petar Popovski (Aalborg University, DK)  
Osvaldo Simeone (New Jersey Institute of Technology, USA)

Contention Resolution Diversity Slotted ALOHA with Variable Rate Burst Repetitions  
Gianluigi Liva (DLR (German Aerospace Center), DE)

Javier Matamoros, Carles Anton-Haro (Telecommunications Technological Center of Catalonia, ES)

The Impact of Limited Information on Proportional Fair Scheduling in Wireless Networks  
Hui Zhou, Pingyi Fan (Tsinghua University, CN)  
Dongning Guo (Northwestern University, USA)

Wednesday, 8 December 2010 • 11:20 - 12:30  
Location: Riverfront North Hall

CT2P: Transmission Techniques II (Poster)  
Chair: Dimitris A. Pados, State University of New York, Buffalo, USA

Iterative Polite Water-Filling for Weighted Sum Rate Maximization in iTree Networks  
Liu An (Peking University, CN)  
Youjian Eugene Liu (University of Colorado, Boulder, USA)  
Haige Xiang, Wu Luo (Peking University, CN)

On Greedy Based Methods for EXIT Chart Based Transmission Power Allocation  
Juha Karjalainen, Marian Codreanu, Antti Tolli, Markku Juntti, Tadashi Matsumoto (University of Oulu, FI)

An Energy-Efficient Bit Allocation Scheme in Wireless Sensor Networks  
Xiaoxia Zhang, Liang-Liang Xie, Sherman Shen (University of Waterloo, CA)

Dynamic Spectrum Management for Upstream Mixtures of Vectored & Non-vectored DSL  
Aakanksha Chowdhery, John Cioffi (Stanford University, USA)

Coordinated Packet Transmission in Random Wireless Networks
**Sundaram Vanka, Martin Haenggi (University of Notre Dame, USA)**

**When does the Wyner Model Accurately Describe an Uplink Cellular Network?**
Jiaming Xu (University of Texas, Austin, USA)
Jun Zhang (Hong Kong University of Science and Technology, CN)
Jeffrey Andrews (University of Texas, Austin, USA)

*Wednesday, 8 December 2010 • 11:20 – 12:30*
*Location: Orchard AB*

**CQRM06: Scheduling I**
Chair: Christos Verikoukis, CTTC, Spain

**A Trading System for Fairly Scheduling Fixed-Sized Delay Tolerant Jobs at a Shared Link**
Jorge Londono, Azer Bestavros (Boston University, USA)
Nikolaos Laoutaris (Telefonica Research, ES)

**Broadcast Traffic Queueing in OFDMA Systems for Spectrum Efficiency and Improved QoS Provisioning**
Maduranga Liyanage, Iwao Sasase (Keio University, JP)

**Distributed Interference Management and Scheduling in LTE-A Femto Networks**
Ritesh Madan, Ashwin Sampath, Aamod Khandekar, Mohammad Jaber Borran, Naga Bhushan (Qualcomm, USA)

**Performance Bounds of Opportunistic Scheduling in Wireless Networks**
Yanhui Geng, Albert Lam, Victor Li (University of Hong Kong, CN)

*Wednesday, 8 December 2010 • 11:20 – 12:30*
*Location: Flamingo*

**NGN06: Spectrum Allocation**
Chair: Yong Li, Tsinghua University, China

**A New Bandwidth Allocation Algorithm for EPON-WiMAX Hybrid Access Networks**
Abdou R. Ahmad, Abdallah Shami (University of Western Ontario, CA)
(University of Western Ontario, CA)

**Resource Allocation and Performance Study for LTE Networks Integrated with Femtocells**
Latha Kant, Kaustubh Sinkar, Kenneth Kerpez (Telcordia Technologies, USA)
Tian Lan (Princeton University, USA)

**Energy Efficient Spectrum Allocation for Green Radio in Two-tier Cellular Networks**
Wenchi Cheng, Hailin Zhang, Liqiang Zhao (Xidian University, CN)

**Joint Rate Control and Spectrum Allocation under Packet Collision Constraint in Cognitive Radio Networks**
Nguyen H. Tran, Choong Seon Hong (Kyung Hee University, KR)

*Wednesday, 8 December 2010 • 11:20 – 12:30*
*Location: Tuttle North*

**ONS06: Optical Communications I**
Chair: Marco Secondini, Scuola Superiore Sant'Anna, Italy

**OCDMA code design for BER and data rate differentiation in Beat Noise Corrupted Systems**  
Stéphanie Sahuguède, Anne Julien-Vergonjanne, Jean Pierre Cances (University of Limoges, FR)

**Channel Capacity of OFDM Systems with Timing Jitter**  
Yang Lei, Kusha Panta, Jean Armstrong (Monash University, AU)

**Routing and Spectrum Allocation in OFDM-based Optical Networks with Elastic Bandwidth Allocation**  
Kostas Christodouloupolous (University of Patras, GR)  
Ioannis Tomkos (AIT, GR)  
Emmanouel Varvarigos (University of Patras, GR)

**OCDMA Code Utilization Increase: Capacity and Spectral Efficiency Enrichment**  
Massoud Karbassian, Franko Küppers (University of Arizona, USA)

Wednesday, 8 December 2010 • 11:20 – 12:30  
Location: Riverfront North Hall

**ONS2P: Network Design & Operation (Poster)**  
Eiji Oki, University of Electro-Communications, Japan

**Cloud Computing over Metropolitan Area WDM Networks: The Light-trails Approach**  
Ashwin A. Gumaste (Indian Institute of Technology, Bombay/Massachusetts Institute of Technology, IN)  
Tamal Dinesh Das, Prasad Gokhale (Indian Institute of Technology, Bombay, IN)

**Load Balancing for Holding-Time-Aware Dynamic Traffic Grooming**  
Juliana De Santi, André C. Drummond, Nelson L. S. da Fonseca (State University of Campinas, BR)  
Admela Jukan (Technische Universität Carolo-Wilhelmina zu Braunschweig, DE)

**Performance Evaluation of Node Architectures with Color and Direction Constraints in WDM Networks**  
Konstantinos Manousakis, Panagiotis Kokkinos, Emmanouel Varvarigos (University of Patras, GR)

**A Hybrid Protection/Restoration Scheme for Two-Link Failure in WDM Mesh Networks**  
Lu Ruan, Taiming Feng (Iowa State University, USA)

**Column Generation for Dimensioning Resilient Optical Grid Networks with Relocation**  
Brigitte Jaumard (Concordia University, CN)  
Jens Buysse (Ghent University, BE)  
Ali Shaikh (Concordia University, CA)  
Chris Develder, Marc De Leenheer (Ghent University, BE)

**Routing and Scheduling in Distributed Advance Reservation Networks**  
Chongyang Xie (University of New Mexico, USA)  
Hamed M. K. Alazemi (Kuwait University, KW)  
Nasir Ghani (University of New Mexico, USA)

Wednesday, 8 December 2010 • 11:20 – 12:30  
Location: Gardenia

**SAC06: Sharing and Admission Control**
Chair: R. Venkatesha Prasad, TU-Delft, Netherlands

Admission Control and Channel Allocation for Supporting Real-time Applications in Cognitive Radio Networks
Feng Wang (Peking University, CN)
Junhua Zhu (Huawei Technologies, Co., Ltd., CN)
Jianwei Huang (Chinese University of Hong Kong, CN)
Yuping Zhao (Peking University, CN)

Admission Control and Packet Scheduling in a Cognitive Radio Network with Spectrum Underlay
Bin Wang, Dongmei Zhao (McMaster University, CA)
Jun Cai (University of Manitoba, CA)

Opportunistic Spectrum Sharing based on Exploiting ARQ Retransmission in Cognitive Radio Networks
James Li, Wei Zhang (University of New South Wales, AU)
Aria Nosratinia (University of Texas, Dallas, USA)
Jinhong Yuan (University of New South Wales, AU)

Phase Transition Diagram for Underlay Heterogeneous Cognitive Radio Networks
Weng Chon Ao, Shin-Ming Cheng, Kwang-Cheng Chen (National Taiwan University, TW)

Wednesday, 8 December 2010 • 11:20 - 12:30
Location: Tequesta

SPC06: Cooperative Networks
Chair: Shigeru Shimamoto, Waseda University, Japan

A Dual-hop Amplify-and-forward MIMO Cooperative Beamformer in Distributed Wireless Sensor Networks
Hassan Aghaei Baradaran, Keyvan Zarifi, Sofiene Affes (University of Quebec, INRS-EMT, CA)
Ali Ghrayeb (Concordia University, CA)

A New Synchronization Scheme for OFDM-Based Cooperative Relay Systems
Gang Yang (University of Electronic Science and Technology of China, CN)
Chin-Liang Wang, Hung-Chin Wang (National Tsing Hua University, TW)
Shaqian Li (University of Electronic Science and Technology of China, CN)

Cooperative Spectrum Sensing and Locationing: A Sparse Bayesian Learning Approach
Din Hwa Huang, Sau-Hsuan Wu (National Chiao Tung University, TW)
Peng-Hua Wang (National Taipei University, TW)

Iterative Approach to the Indirect Learning Architecture for Baseband Digital Predistortion
Jakob Harmon, Stephen G. Wilson (University of Virginia, USA)

Wednesday, 8 December 2010 • 11:20 - 12:30
Location: Ibis

SPC12: SIMO, MISO and MIMO Systems II
Chair: James Hicks, The Aerospace Corporation, USA

Statistical Analysis of MIMO Beamforming with Co-Channel MIMO Interferers under Rayleigh Fading
Yongzhao Li (Xidian University, CN)
Len Cimini (University of Delaware, USA)
Nageen Himayat (Intel Corporation, USA)

Joint Channel Estimation and Data Detection for MIMO-OFDM Two-Way Relay Networks
The Hanh Pham (National University of Singapore, SG)
Ying-Chang Liang (Institute for Infocomm Research, SG)
Hari Krishna Garg (National University of Singapore, SG)
Nallanathan Arumugam (King's College London, UK)

Getting Closer to MIMO Capacity with Non-Binary Codes and Spatial Multiplexing
Stephan F. Pfletschinger (Centre Tecnològic de Telecomunicacions de Catalunya, ES)
David Declercq (ETIS lab. ENSEA/Cergy University, FR)

Transmit Antenna Selection with Linear Precoding in MIMO Multiuser Systems
Pu-Hsuan Lin, Shang-Ho Tsai (National Chiao Tung University, TW)
Gene C.H. Chuang (Industrial Technology Research Institute, TW)

Wednesday, 8 December 2010 • 11:20 – 12:30
Location: Brickell North

WC06: MIMO VI
Chair: Tarik Ait-Idir, INPT/Telecom Bretagne, France
Deng Pan, Telecom & IT Institute, USA

Fractional Reuse Partitioning for MIMO Networks
Andreas Dotzler, Wolfgang Utschick (Technische Universität München, DE)
Guido Dietl (DOCOMO Euro-Labs, DE)

A Tabu Search Scheduling Algorithm for MIMO CDMA Systems
Elmahdi Driouch, Wessam Ajib (Université du Québec à Montréal, CA)
Mohamed Gaha (École Polytechnique de Montréal, CA)

Field Trial Results on Different Uplink Coordinated Multi-Point (CoMP) Concepts in Cellular Systems
Patrick Marsch, Michael Grieger, Gerhard Fettweis (Technische Universität Dresden, GE)

Distribution of the Demmel Condition Number of Complex Wishart Matrices
Caijun Zhong (Queen's University Belfast, UK)
Matthew McKay (Hong Kong University of Science and Technology, CN)
Tharmalingam Ratnarajah (Queens University of Belfast, UK)
Kai Kit Wong (University College London, UK)

Wednesday, 8 December 2010 • 11:20 – 12:30
Location: Brickell Center

WC18: Game Theory II
Chair: Marco Luise, University of Pisa, Italy

Performance Comparison of Energy-Efficient Power Control for CDMA Code Acquisition and Detection
Giacomo Bacci, Marco Luise (University of Pisa, IT)

Cross-Polarization Discrimination in Vehicle-to-vehicle channels: Geometry-based Statistical Modeling
Seok-Chul Kwon, Gordon Stuber (Georgia Institute of Technology, USA)

**Non-NCO Periodical-Pilot-Assisted Tracking Method for Practical High-Rate DS-UWB Systems**
Zhenyu Xiao, Jiaqi Zhang, Depeng Jin, Ning Ge, Lieguang Zeng (Tsinghua University, CN)

**Towards Efficient, Stable, and Fair Random Access Networks: A Conjectural Equilibrium Approach**
Yi Su, Mihaela van der Schaar (University of California, Los Angeles, USA)

**Wednesday, 8 December 2010 • 11:20 – 12:30**
Location: Brickell South

**WC30: Network Coding I**
**Chair:** Seshadri Mohan, University of Arkansas, Little Rock, USA

**Relay Selection with Physical-layer Network Coding**
MinChul Ju, Il-Min Kim (Queen's University, CA)

**Secret Key Agreement Based on Radio Propagation Characteristics in Two-Way Relaying Systems**
Takayuki Shimizu, Hisato Iwai, Hideichi Sasaoka (Doshisha University, JP)
Arogyaswami Paulraj (Stanford University, USA)

**Detection of Misbehaving Relays in Network Coded Multiple Access Relay Networks**
Sang Wu Kim (Iowa State University, USA)

**Rotating Decode-and-Forward for Two Pairs of Two-Way Communications**
Yiwei Pu, Cen Lin, Meixia Tao (Shanghai Jiao Tong University, CN)

**Wednesday, 8 December 2010 • 11:20 – 12:30**
Location: Orchard D

**WC42: Optimization II**
**Chair:** Bala Natarajan, Kansas State University, USA

**Multiple Description Coding-Based Optimal Resource Allocation for OFDMA Multicast Service**
Yao Ma (Wright State University, USA)
Khaled Letaief (Hong Kong University of Science & Technology, CN)
Zhengdao Wang (Iowa State University, USA)
Ross Murch (HKUST, CN)
Zhiqiang Wu (Wright State University, USA)

**Rank Constrained Schur-Convex Optimization with Multiple Trace/Log-Det Constraints**
Hao Yu, Vincent Lau (Hong Kong University of Science and Technology, CN)

**Passively Controllable Smart Antennas**
Javad Lavaei, Aydin Babakhani, Ali Hajimiri, John Doyle (California Institute of Technology, USA)

**Throughput-Efficient Rateless Coding with Packet Length Optimization for Practical Wireless Communication Systems**
Xijun Wang, Wei Chen, Zhigang Cao (Tsinghua University, CN)

**Wednesday, 8 December 2010 • 11:20 – 12:30**
Location: Orchard C
WC54: Fading Channels II
Chair: George Efthymoglou, University of Piraeus, Greece

Approximation of Log-Likelihood Ratio for Wireless Channels Based on Taylor Series
Reza Asvadi (K. N. Toosi University of Technology, IR)
Amir Banihashemi (Carleton University, CA)
Mahmoud Ahmadian (K.N. Toosi University of Technology, IR)

Secrecy Capacity With Leakage Constraints in Fading Channels
Chen Zhi, Pingyi Fan (Tsinghua University, CN)
Dapeng Oliver Wu (University of Florida, USA)
Khaled Letaief (Hong Kong University of Science & Technology, CN)

Second-Order Properties for Wireless Cooperative Systems with Rayleigh Fading
Yuanqian Luo, Ruonan Zhang, Lin Cai (University of Victoria, CA)

Novel Switching Schemes for Dual S+N Selection Diversity Combining
Norman Beaulieu, Ramin Babaee (University of Alberta, CA)

Wednesday, 8 December 2010 • 11:20 – 12:30
Location: Riverfront North Hall

WC6P: Relay Networks (Poster)
Chair: Wei Zhang, University of New South Wales, Australia

Cooperative Relaying using OFDM in the Presence of Frequency Offsets
Satya Prakash Ponnaluri, Babak Azimi-Sadjadi (Intelligent Automation Inc, USA)
Daniel McCathy, Paul Oleski (AFRL, USA)

Filter-And-Forward Distributed Beamforming for Two-Way Relay Networks With Frequency Selective Channels
Haihua Chen, Alex Gershman (Darmstadt University of Technology, DE)
Shahram Shahbazpanahi (University of Ontario Institute of Technology, CA)

Transmission Schemes for Two User Linear Multi-Access Relay Networks
Liangbin Li (University of California, Irvine, USA)
Yindi Jing (University of Alberta, CA)
Hamid Jafarkhani (University of California, Irvine, USA)

Outage Priority Based Relay Fairness in Opportunistic Cooperation
Yubo Li, Qinye Yin, Junsong Wang, Bin Li (Xi’an Jiaotong University, CN)

Uplink Cell Selection for Cooperative Multi-Cell Networks with Hybrid ARQ
Davide Zennaro, Stefano Tomasin, Lorenzo Vangelista (University of Padova, IT)

Cooperative Multi-Antenna Multicasting for Wireless Networks
Hua Zhang, Xiaohu You (Southeast University, CN)
Gang Wu, Haifeng Wang (Nokia, FI)

Wednesday, 8 December 2010 • 11:20 – 12:30
Location: Pearson II

WN06: Dynamic Spectrum Access II
Strategyproof Wireless Spectrum Auctions with Interference  
Ajay Gopinathan, Zongpeng Li (University of Calgary, CA)

Spectrum Trading in Cognitive Radio Network: An Agent-based Model under Demand Uncertainty  
Tian Chu, Peng Cheng, Lin Gao, Xinbing Wang, Hui Yu, Xiaoying Gan  
(Shanghai Jiao Tong University, CN)

Backward-Compatible Dynamic Spectrum Leasing for 802.11-Based Wireless Networks  
Robert Murawski, Eylem Ekici (Ohio State University, USA)

Reward and Risk for Opportunistic Spectrum Accessing in Cognitive Radio Networks  
Miao Pan, Yang Song (University of Florida, USA)  
Pan Li (Mississippi State University, USA)  
Yuguang Fang (University of Florida, USA)

Wednesday, 8 December 2010 • 11:20 – 12:30  
Location: Gautier

WN18: 802.11 Wireless Networks II  
Chair: Janise McNair, University of Florida, USA

A Novel Power Saving Strategy for Greening IEEE 802.11 based Wireless Networks  
Bharathan Balaji, Bheemarjuna Reddy Tamma, Manoj Bs  
(University of California, San Diego, USA)

Trade Off Issues for CCH/SCH duty cycle for IEEE 802.11p single channel devices  
Jelena Misic, Ghada Badawy (Ryerson University, CA)  
Saeed Rashwand (University of Manitoba, CA)  
Vojislav B. Misic (Ryerson University, CA)

gama-TBSC: Time-Bound Signaling Control with gama-Percent Soft Guarantee in IEEE 802.11 Wireless LANs  
Ju-Lin Shih, Maria C. Huang, Shih-Hsuan Lin (National Chiao Tung University, TW)

802.11 User Anonymization  
Dingbang Xu (Governors State University, USA)  
Yu Wang (University of North Carolina, Charlotte, USA)  
Xinghua Shi (Harvard University, USA)  
Xiaohang Yin (Governors State University, USA)

Wednesday, 8 December 2010 • 11:20 – 12:30  
Location: Merrick I

WN30: Delay Tolerant Networks II  
Chairs: Mehmet Can Vuran, University of Nebraska-Lincoln, USA  
Xiaoyan Hong, University of Alabama, USA

Cost-Efficient Topology Design Problem in Time-Evolving Delay-Tolerant Networks  
Minsu Huang, Siyuan Chen, Ying Zhu, Yu Wang (University of North Carolina, Charlotte, USA)

Latency Analysis for Thrown Box Based Message Dissemination
Coalition Formation Games for Improving Data Delivery in Delay Tolerant Networks
Dusit Niyato, Ping Wang (Nanyang Technological University, SG)
Walid Saad, Are Hjørungnes (University of Oslo, UniK, NO)

Multicasting in Delay Tolerant Networks: Delegation Forwarding
Yunsheng Wang, Xiaoguang Li, Jie Wu (Temple University, USA)

Wednesday, 8 December 2010 • 11:20 - 12:30
Location: Riverfront North Hall

WN6P: Network Performance Optimization II (Poster)
Chair: Dmitry Akhmetov, Intel Corporation, USA
Weiyi Zhao, University North Caroline, Charlotte, USA

Improving Channel Utilization by Exploiting Partially Overlapping Channels in Wireless Ad Hoc Networks
Kuei-Ping Shih, Chau-Chieh Chang (Tamkang University, TW)
Der-Jiunn Deng, Hsiao-Hwa Chen (National Changhua University of Education, TW)

A Cross-Layer Analytical Model of End-to-End Delay Performance for Wireless Multi-hop Environments
Yu Chen (University College London, UK)
Yang Yang (Shanghai Research Center for Wireless Communications, CN)
Izzat Darwazeh (University College London, UK)

Cross-layer Optimization of Wireless Networks with Extended Transmission Rights
Francois Luus, Bodhaswar TJ Maharaj (University of Pretoria, ZA)

Optimizing the WiMedia Frame Structure for Home Networking Applications
Raghuram S Sudhaakar, Vel Pratheesh Sankar, Chunming Qiao
(State University of New York, Buffalo, USA)

A Cross-layer Optimization for a LP-based Multi-Reader Coordination in RFID Systems
Jin-Chul Choi, Chae-Woo Lee (Ajou University, KR)

RF Concurrency vs. Performance Study for Integrated WiFi Radio
Xue Yang, Dmitriy Akhmetov, York Liu (Intel Corporation, USA)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Tuttle South

AHSN07: Routing VII
Chair: Xiaoyan Hong, University of Alabama, USA

Improving the Energy Balance of Field-based Routing in Wireless Sensor Networks
Goce Trajcevski, Oliviu Constantin Ghica (Northwestern University, USA)
Marco Antonio Zuniga, Rene Schubotz (National University of Ireland, Galway, IE)
Peter Scheuemann (Northwestern University, USA)
Manfred Hauswirth (DERI Galway, IE)

Cognitive Approaches to Routing in Wireless Sensor Networks
Amr El Mougy, Zouheir El-Jabi, Mohamed Ibnkahla, Elyes Bdira (Queen's University, CA)

**BusySiMOn - a New Protocol for IEEE 802.11 EDCA-Based Ad Hoc Networks with Hidden Nodes**
Katarzyna Kosek-Szott, Marek Natkaniec, Andrzej R. Pach
(AGH University of Science and Technology, PL)

**A Novel Reliable Transmission Protocol for Urgent Information in Wireless Sensor Networks**
Lulu Liang, Deyun Gao, Zhang Hongke (Beijing Jiaotong University, CN)
Victor CM Leung (University of British Columbia, CA)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Tuttle Center

**AHSN19: Performance Analysis and Modeling III**
Chair: Daniele Tarchi, University of Florence, Italy

**Performance Analysis of PCF based WLANs with Imperfect Channel and Failure Retries**
Md. Atiur Rahman Siddique, Joarder Kamruzzaman (Monash University, AU)

**Cognitive Relaying in Wireless Sensor Networks: Performance Analysis and Optimization**
Mahmoud Elsaadany (Cairo University, EG)
Tamer Khattab (Qatar University, QA)
Mohamed M. Abdallah (Texas A&M University, Qatar, QA)
Mazen Omar Hasna (Qatar University, QA)
Mohamed Khairy (Cairo University, EG)

**Understanding periodicity and regularity of nodal encounters in mobile networks: A spectral analysis**
Sungwook Moon, Ahmed Helmy (University of Florida, USA)

**Information Epidemics in Complex Networks with Opportunistic Links and Dynamic Topology**
Pin-Yu Chen, Kwang-Cheng Chen (National Taiwan University, TW)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Jasmine

**AHSN31: MAC I**
Chair: Farid Naït-Abdesselam, University of Paris Descartes, France

**QoS-Centric Collision Window Shaping for CSMA-CA MAC Protocol**
Miraz Mamun, Gour Chandra Karmakar, Joarder Kamruzzaman
(Monash University, AU)

**An Experimental Comparison of Burst Packet Transmission Schemes in IEEE 802.11-based Wireless Mesh Networks**
Peter Dely, Andreas J. Kassler (Karlstad University, SE)
Nico Bayer, Dmitry Sivchenko (Deutsche Telekom Laboratories, DE)

**An Enhanced Reservation-based Medium Access Control with Scheduling and Admission Control for Voice over Wireless Mesh Networks**
Racha Ben Ali (École Polytechnique de Montréal, CA)
Abdel Hafid, Jihene Rezgui (University of Montreal, CA)

**Contention-limited Access Strategies in IEEE 802.15.4 Beacon-Enabled Networks**
Collision-load Balancing Topology Control with Rate Adaptation for Wireless Mesh Networks
Xiaohua Jia, Kunxiao Zhou (City University of Hong Kong, CN)

Load-Aware Channel Assignment Using Partially Overlapping Channels for Wireless Mesh Networks
Cheng Li, Ramachandran Venkatesan, Yuting Liu (Memorial University, CA)

An Indoor Positioning Algorithm with Kernel Direct Discriminant Analysis
Yubin Xu, Zhian Deng, Weixiao Meng (Harbin Institute of Technology, CN)

Analysis of k-Hop Connectivity Probability in 2-D Wireless Networks with Infrastructure Support
Seh Chun Ng, Guoqiang Mao (University of Sydney, AU)

Enabling network-layer security on IPv6 Wireless Sensor Networks
Jorge Granjal, Edmundo Monteiro, Jorge Silva (University of Coimbra, PT)

Optimizing upload time of data from mobile devices
Ying Zhu (University of Ontario Institute of Technology, CA)
Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Orchard AB

CQRM07: Traffic Measurement I
Chair: Chi-Ming Chen, AT&T Labs Research, USA

A2C: Anti-Attack Counters For Traffic Measurement
Keqiang He, Chengchen Hu, Junchen Jiang (Tsinghua University, CN)
Yachao Zhou (Dublin City University, IE)
Bin Liu (Tsinghua University, CN)

Efficient Data Collection with Sampling in WSNs: Making Use of Matrix Completion Techniques
Jie Cheng, Hongbo Jiang, Xiaqiang Ma, Lanchao Liu
(Huazhong University of Science and Technology, CN)
Lijun Qian (Prairie View A&M University, USA)
Chen Tian, Wenyu Liu (Huazhong University of Science and Technology, CN)

Know Your Enemy, Know Yourself: Block-Level Network Behavior Profiling and Tracking
Esam Sharafuddin, Nan Jiang, Yu Jin, Zhi-Li Zhang (University of Minnesota, USA)

Long-term Adaptation and Distributed Detection of Local Network Changes
Rebecca Steinert, Daniel Gillblad (Swedish Institute of Computer Science, SE)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Orchard C

CQRM17: Traffic Measurement II
Chair: Luigi Atzori, University of Cagliari, Italy

Neighbor-Cooperative Measurement of Network Path Quality
Rocky Chang, Waiting Fok, Weichao Li, Edmond W. W. Chan
(Hong Kong Polytechnic University, HK)
Xiapu Luo (Georgia Institute of Technology, USA)

Ternary-search-based Scheme to Measure Link Available-bandwidth in Wired Networks
Khondaker Salehin, Roberto Rojas-Cessa
(New Jersey Institute of Technology, USA)

TSprobe: a Two-Step Probe Method for End-to-End Available Bandwidth Estimation
Wang Huiming, Zhiliang Wang, Yin Xia (Tsinghua University, CN)

Error Modeling in Network Tomography by Sparse Code Shrinkage (SCS) Method
Muhammad Raza, Bill Robertson, William Phillips, Jacek Ilow (Dalhousie University, CA)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Merrick II

CSSMA07: Distributed Systems and Applications
Chair: Susana Sargento, Instituto de Telecomunicações, Universidade de Aveiro, PT

A Methodology Used to Optimize Probe Selection for Fault Localization
Yan Qiao, Lu Cheng, Qiu Xue-song, Luoming Meng
(Beijing University of Posts and Telecommunications, CN)
SLA-Based Resource Co-Allocation in Multi-Cluster Grid
Wei Wang, Luo Junzhou, Aibo Song, Fang Dong (Southeast University, CN)

Rendering Adaptation to Address Communication and Computation Constraints in Cloud Mobile Gaming
Shaoxuan Wang, Sujit Dey (University of California, San Diego, USA)

MMOPRG Traffic Modeling and Analysis over WiFi and WiMax
Wei Cai, Xiaofei Wang, Min Chen (Seoul National University, KR)
Yan Zhang (Simula Research Laboratory and University of Oslo, NO)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Hibiscus B

CT07: MIMO I
Chair: Andreas Molisch, University of Southern California, USA

On Training and Training Voids for Receive Antenna Subset Selection in Time-Varying Channels
Vinod Kristem, Neellesh B. Mehta (Indian Institute of Science, IN)
Andreas Molisch (University of Southern California, USA)

On the Effect of Feedback Delay on Limited-rate Beamforming Systems
Yiyue Wu (Princeton University, USA)
Andreas Achtzehn, Marina Petrova, Petri Mähönen (RWTH Aachen University, DE)
Robert Calderbank (Princeton University, USA)

Benefits of Transmit Antenna Selection in Ad Hoc Networks
Yueping Wu (Hong Kong University of Science and Technology, CN)
Raymond Hall Yip Louie (University of Sydney, AU)
Matthew R. McKay (Hong Kong University of Science and Technology, CN)
Iain B. Collings (CSIRO, AU)

On the Degrees of Freedom Regions of Two-User MIMO Z and Full Interference Channels with Reconfigurable Antennas
Lei Ke, Zhengdao Wang (Iowa State University, USA)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Hibiscus A

CT12: Wireless Networks III
Chair: Jeff Andrews, University of Texas, Austin, USA

Throughput and Energy Efficiency of Opportunistic Routing with type-I HARQ in Linear Multihop Networks
Davide Chiarotto (University of Padova, IT)
Osvaldo Simeone (New Jersey Institute of Technology, USA)
Michele Zorzi (Università degli Studi di Padova, IT)

On Optimizing Low SNR Wireless Networks using Network Coding
Mohit Thakur (Technische Universität München, DE)
Muriel Medard (MIT, USA)
Optimal Spatial Reuse in Poisson Multi-hop Networks  
Kostas Stamatiou, Martin Haenggi (University of Notre Dame, USA)

On Optimal Power Allocation for a Class of Interference Networks  
Nasreen Badruddin, Jamie Evans (University of Melbourne, AU)  
Stephen Hanly (National University of Singapore, SG)

Wednesday, 8 December 2010 • 16:00 – 17:10  
Location: Riverfront North Hall

CT3P: Detection Techniques (Poster)  
Chair: Leszek Szczecinski, INRS-EMT, Canada

Active Subchannel Detection for Non-Contiguous OFDM-Based Cognitive Radio Systems  
Jie Ding, Daiming Qu, Xiaojun Sun, Tao Jiang, Lu Liu  
(Huazhong University of Science and Technology, CN)

Lattice Sequential Decoding: Achievable Rates and Diversity-Multiplexing Tradeoff  
Walid Abedliseid, Mohamed Oussama Damen (University of Waterloo, CA)

Optimally Efficient Max-log APP Demodulation in MIMO Systems  
Narayan Prasad (NEC Labs America, Princeton, USA)  
Khalid Kalbat (University of Columbia, USA)  
Xiaodong Wang (Columbia University, USA)

A Message Passing Approach to Pilot-assisted Multiuser Detection in MC-CDMA Systems  
Emre Aktas (Hacettepe University, TK)

DMT of Interference Channels with Full-Duplex Source Cooperation and Imperfect CSIT  
Qian Li, Kwok Hung Li, Teh Kah Chan (Nanyang Technological University, SG)

Wednesday, 8 December 2010 • 16:00 – 17:10  
Location: Flamingo

NGN07: Multicasting  
Chair: Andrea Bianco, Politecnico di Torino, Italy

A Fast-Join Mechanism for Inter-domain Multicasting  
Xiaohua Tian, Yu Cheng (Illinois Institute of Technology, USA)  
Bin Liu (Tsinghua University, CN)

An Approximation Algorithm for Constructing Multicast Trees with Degree-Dependent Node Costs  
Hwa-Chun Lin, Shiu-Ming Yang (National Tsing Hua University, TW)

Reliable Multicasting in Disruption Tolerant Networks  
Kamalavasan Srinivasan (Microsoft Corporation, USA)  
Parmesh Ramanathan (University of Wisconsin at Madison, USA)

Mapping Multicast Service-Oriented Virtual Network with Delay and Delay Variation Constraints  
Min Zhang, Chunming Wu (Zhejiang University, CN)  
Ming Jiang (Hangzhou Dianzi University, CN)  
Qiang Yang (Imperial College London, UK)
Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Tuttle North

ONS07: Optical Switching II
Chair: Xiaojun Cao, Georgia State University, USA

Programmable Multi-Granular Optical Router: Modular Architecture and Testing
Raul Cafini, Walter Cerroni, Carla Raffaelli, Michele Savi (Universita’ di Bologna, IT)

Sharing Simple Wavelength Converters in Optical Packet Switching: Performance and Power Consumption Evaluation
Carla Raffaelli, Michele Savi (University of Bologna, IT)

Optical Packet Switch based on Dynamic Pump Wavelength Selection
Nattapong Kitsuwan, Eiji Oki (The University of Electro-Communications, JP)

Modeling and Performance Evaluation of a Translucent OBS Network Architecture
Oscar Pedrola, Davide Careglio (Universitat Politècnica de Catalunya, ES)
Miroslaw Klinkowski (National Institute of Telecommunications, PL)
Josep Solé-Pareta (Universitat Politècnica de Catalunya, ES)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Riverfront North Hall

ONS3P: Optical Communications II (Poster)
Chair: Hassan Naser, Lakehead University, Canada

A Novel Multilevel Coded Modulation Scheme for Fiber Optical Channel with Nonlinear Phase Noise
Lotfollah Beygi, Erik Agrell, Pontus Johannisson, Magnus Karlsson (Chalmers University of Technology, SE)

Phase Noise Sensitivity and Compensation Techniques in Long-Haul Coherent Optical Links
Giulio Colavolpe (University of Parma, IT)
Tommaso Foggi (CNIT Research Unit, IT)
Enrico Forestieri, Marco Secondini (Scuola Superiore S. Anna, Pisa, IT)

Optical Wireless Communications with Adaptive Subcarrier PSK Intensity Modulation
Nestor Chatzidiamantis, Athanasios S. Lioumpas, George K. Karagiannidis (Aristotle University of Thessaloniki, GR)
Shlomi Arnon (Ben-Gurion University of the Negev, IL)

On the Clipping Noise in an ACO-OFDM Optical Wireless Communication System
Svilen Dimitrov, Harald Haas (University of Edinburgh, UK)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Gardenia

SAC07: Cognitive Radio Experimental and Other
Chair: Andrew Ge, Telecordia Technologies, USA
Software Radio-Based Decentralized Dynamic Spectrum Access Networks: A Prototype Design and Experimental Results
Feng Ge, Aravind Radhakrishnan, Mustafa El-Nainay (Virginia Tech, USA)
Qinqin Chen (Virginia Polytechnic Institute and State University, USA)

Backhauling in TV White Spaces
Cyrus Gerami, Narayan Mandayam, Larry Greenstein (Rutgers University, USA)

Performance Analysis of Communications & Radar Coexistence in a Covert UWB OSA System
Shrawan Surender, Ram Narayanan, Chita Das (Pennsylvania State University, USA),

Common Hopping based Proactive Spectrum Handoff in Cognitive Radio Ad Hoc Networks
Yi Song, Linda Jiang Xie (University of North Carolina, Charlotte, USA)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Tequesta

SPC07: Detection and Decoding
Chair: Luc Deneire, University of Nice, France

Fast Maximum-Likelihood Decoding of 4 x 4 Full-Diversity Quasi-Orthogonal STBCs with QAM signals
Sandipan Kundu, Weifeng Su, Dimitris A. Pados, Michael Medley
(State University of New York, Buffalo, USA)

List Sphere Decoding with a Probabilistic Radius Tightening
Jaeseok Lee, Byonghyo Shim (Korea University, KR)
Insung Kang (Qualcomm Inc., USA)

Robust Fixed Complexity Sphere Decoder
Yuehua Ding, Yide Wang, Jean Francois Diouris (École Polytechnique de l’Université de Nantes, FR)

An Improvement on the Soft Reliability-Based Iterative Majority-Logic Decoding Algorithm for LDPC Codes
Telex Magloire N. Ngatched, Attahiru S. Alfa, Jun Cai (University of Manitoba, CA)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Ibis

SPC13: SIMO, MISO and MIMO Systems III
Chair: Guido Dietl, DOCOMO Euro-Labs, Germany

Space-Time Shift Keying: A Unified MIMO Architecture
Shinya Sugiura, Sheng Chen, Lajos Hanzo (University of Southampton, UK)

Generalized Singular Value Decomposition for Coordinated Beamforming in MIMO Systems
Damith Senaratne, Chintha Tellambura (University of Alberta, CA)

Design of Amplify and Forward MIMO Relay Networks with QoS Constraint
Jafar Mohammadi, Feifei Gao (Jacobs University, Bremen, DE)
Yue Rong (Curtin University, AU)
Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Brickell North

WC07: Wireless Sensor Networks
Chairs: Maciej Zawodniok, Missouri S&T, USA
Wei Wang, South Dakota State University, USA

Energy Efficiency Analysis of Multistage Cooperation in Sensor Networks
Kanchan Vardhe, Chi Zhou (Illinois Institute of Technology, USA)
Daryl Reynolds (West Virginia University, USA)

Spatial Field Estimation Through Wireless Sensor Networks Under Bandwidth Constraints
Davide Dardari, Flavio Fabbri (University of Bologna, IT)

Region-Based Data Dissemination Scheme for Mobile Sink Groups in Wireless Sensor Networks
Hyungjoo Lee, Jeongcheol Lee, Seungmin Oh, Sang-Ha Kim
(Chungnam National University, KR)

Random On-Off Accumulative Transmission for Asynchronous Wireless Sensor Networks
Jingxian Wu (University of Arkansas, USA)
Geoffrey Li (Georgia Tech, USA)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Brickell Center

WC19: Interference Management
Chair: Youngchul Sung, KAIST, Korea

Total Intercarrier Interference Cancellation for MC-CDMA System in Mobile Environment
Xue Li, Ruolin Zhou (Wright State University, USA)
Steven Hong (Stanford University, USA)
Zhiqiang Wu (Wright State University, USA)

Aiming Perfectly in the Dark - Blind Interference Alignment through Staggered Antenna Switching
Tiangao Gou, Chenwei Wang, Syed Jafar (University of California Irvine, USA)

Interference Alignment with Asymmetric Complex Signaling and Multiuser Diversity
Hun-Young Shin, Seok-Hwan Park, Haewook Park, Inkyu Lee (Korea University, KR)

Minimum AP Placement for WLAN with Rate Adaptation using Physical Interference Model
Zhongming Zheng, Bo Zhang, Xiaohua Jia (City University of Hong Kong, CN)
Jun Zhang (Hong Kong Polytechnic University, CN)
Kan Yang (City University of Hong Kong, CN)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Brickell South

WC31: Network Coding II
Chair: Wolfgang Gerstacker, University of Erlangen-Nuremberg, Germany

Generalized Sum-Product Algorithm for Joint Channel Decoding and Physical-Layer Network Coding in Two-Way Relay Systems
Dirk Wübben, Yidong Lang (University of Bremen, DE)
Qimin You, Yonghui Li (University of Sydney, AU)
Zhuo Chen (CSIRO ICT Centre, AU)

Adaptive Network Coding in Two-Way Relaying MIMO Systems
Toshiaki Koike-Akino (Harvard University, USA)

Graph-Based Optimization for Relay-Assisted Bidirectional Cellular Networks
Yuan Liu, Meixia Tao (Shanghai Jiao Tong University, CN)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Orchard D

WC43: Power Control I
Chair: Onur Kaya, Isik University, Turkey

Power Control for Cognitive Radios in Nakagami Fading Channels with Outage Probability Requirement
Chin Choy Chai, Yong Huat Chew (Institute for Infocomm Research, SG)

Globally Optimal Resource Allocation for Achieving Maximum Weighted Sum Rate
Kristoffer Eriksson, Shuying Shi (Linköping University, SE)
Nikola Vucic (Fraunhofer HHI, DE)
Martin Schubert (Fraunhofer German-Sino Lab for Mobile Communications MCI, DE)
Erik G. Larsson (Linköping University, SE)

On the Sum-Rate of Peer-to-Peer MIMO Multiuser Gaussian Interference Channels
Harpreet Dhillon, Michael Buehrer (Virginia Tech, USA)

Optimal Subcarrier-Chunk Scheduling for OFDM Systems
Na Gao, Xin Wang (Florida Atlantic University, USA)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Riverfront North Hall

WC7P: Networking Topologies (Poster)
Chair: Xinbing Wang, Shanghai Jiaotong University, China

Throughput-Delay Scaling for Two Mobile Overlaid Networks
Wenjie Zhang, Chai Kiat Yeo (Nanyang Technological University, SG)

Temporal Spectrum Sensing in Packet-Based Network Using Double Thresholds
Yingxi Liu, Nikhil Kundargi, Ahmed Tewfik (University of Minnesota, USA)

Studying the Relationships between Spatial Structures of Wireless Networks and Population Densities
Maria Michalopoulou, Janne Riihijärvi, Petri Mähönen (RWTH Aachen University, DE)

Modeling of a Cooperative One-Dimensional Multi-Hop Network using Quasi-Stationary Markov Chains
Syed Ali Hassan, Mary Ann Ingram (Georgia Tech, USA)
On the Functional Relationship between Channel Holding Time and Cell Dwell Time in Mobile Cellular Networks
Anum Corral-Ruiz, Andres Rico-Paez, Felipe A. Cruz-Pérez (Cinvestav-IPN, Mexico)
Genaro Hernandez-Valdez (UAM-A, Mexico)

A QoS based Low-Complex Rate-Split Scheme in Heterogeneous Cellular Networks
Wonjong Noh (Samsung Advanced Institute of Technology, KR)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Pearson II

WN07: Handoff and Mobility Management II
Chair: Hazem Refai, University of Oklahoma, USA

Performance Analysis of Fast Handover for Proxy Mobile IPv6
SuKyoung Lee (Yonsei University, KR)

PMIPv6-HC: Handover Mechanism for Reducing Handover Delay and Packet Loss in NGWN
Linoh A. Magagula (University of Cape Town, ZA)
H. Anthony Chan (Huawei Technologies, USA)
Olabisi Emmanuel Falowo (University of Cape Town, ZA)

Performance Comparison between MIPv6 and SEMO6
Md Sazzadur Rahman, Mohammed Atiquzzaman (University of Oklahoma, USA)
Wesley M Eddy (MTI Systems, USA)
William D. Ivancic (NASA Glenn Research Center, USA)

Performance Evaluation of Network Mobility Handover over Future Aeronautical Data Links
Serkan Ayaz, Felix Hoffmann (German Aerospace Center, DE)
Christoph Sommer (Carnegie Mellon University, USA)
Reinhard German (Universitaet Erlangen-Nuernberg, DE)
Falko Dressler (University of Erlangen, DE)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Gautier

WN19: TCP and Congestion Control II
Chair: Humphrey Rutagema Communications Research Centre, Canada

Counteracting wireless congestion in data distribution with adaptive batching techniques
Mario Fanelli, Luca Foschini, Antonio Corradi (University of Bologna, IT)
Azzedine Boukerche (University of Ottawa, CA)

Hybrid Window and Rate Based Congestion Control for Delay Sensitive Applications
Sanjeev Mehrotra, Jin Li, Sudipta Sengupta (Microsoft Research, USA)
Manish Jain (Akamai, USA)
Sayandeep Sen (University of Wisconsin Madison, USA)

Sliding Mode Based Joint Congestion Control and Scheduling in Multi-hop Ad Hoc Networks with Multi-class Services
Zongrui Ding, Dapeng Oliver Wu (University of Florida, USA)
TCP Convergence Layer (TCPCL)-based DTN over Cislunar Channels in Presence of Long Link Disruption
Ruhai Wang, Xuan Wu (Lamar University, USA)
Zhou Liu Lei, Jia Hou (Soochow University, CN)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Merrick I

WN31: Vehicular Networks II
Chair: Liang Xiao, Xiamen University, China

A QoS-aware Dynamic Bandwidth Allocation Algorithm for Base Stations in IEEE 802.16j-based Vehicular Networks
Ridong Fei, Kun Yang (University of Essex, UK)
Shumao Ou (Oxford Brookes University, UK)

Mobility-Aware Call Admission Control Algorithm in Vehicular WiFi Networks
Younghyun Kim, Sangheon Pack, Wonjun Lee (Korea University, Korea, KR)

An Efficient Hybrid HIP-PMIPv6 Scheme for Seamless Internet Access in Urban Vehicular Scenarios
Sandra Cespedes U., Sherman Shen (University of Waterloo, CA)

A Novel Network Mobility Management Scheme for Vehicular Networks
Azzedine Boukerche, Zhenxia Zhang (University of Ottawa, CA)

Wednesday, 8 December 2010 • 16:00 – 17:10
Location: Riverfront North Hall

WN7P: Topics in Wireless Networking III (Poster)
Chair: Abderrahmane Lakas, UAE University, UAE

Performance Analysis of Channel Contention in Wireless Ad Hoc Networks: A Stochastic Game Nets Approach
Xiong Wan (University of Science and Technology Beijing, CN)
Chuang Lin (Tsinghua University, CN)
Xin Chen, Kun Meng Yuanzhuo Wang (Chinese Academy of Sciences, CN)

Estimating the Number of Nodes in a Mobile Wireless Network
Shiping Chen (University of Shanghai for Science and Technology, CN)

Robust and Secure Secret Sharing in Wireless Networks with Convolutional Network Coding
Joyce Liang, C.-C. Jay Kuo (University of Southern California, USA)

The Performance Analysis of Doppler Diversity Based on Sectorised Antenna in High-Speed Railway Communication
Liu Liu, Cheng Tao, Jiahui Qiu, Huajing Zhang (Beijing Jiaotong University, CN)

Wireless Data Center with Millimeter Wave Network
Hars Vardhan, Navine Thomas, Seong-Ryong Ryu, Banerjee Bhaskar, Ravi Prakash (University of Texas, Dallas, USA)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Tuttle South

AHSN08: Localization I
Chair: Moustafa Youssef, Nile University, Egypt

A Two-phase Algorithm for Locating Sensors in Irregular Areas
Wenbo Shi, Vincent Wong (University of British Columbia, CA)

RELMA: A Range free Localization Approach using Mobile Anchor Node for Wireless Sensor Networks
Lutfur Karim, Nidal Nasser, Tarek El Salti (University of Guelph, CA)

Distributed Angle Estimation for Wireless Sensor Network Localization
Weile Zhang, Qinye Yin, Wenjie Wang (Xi'an Jiaotong University, CN)

Optimal KNN Positioning Algorithm via Theoretical Accuracy Criterion in WLAN Indoor Environment
Yubin Xu, Mu Zhou, Weixiao Meng, Lin Ma (Harbin Institute of Technology, CN)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Tuttle Center

AHSN20: Distributed Algorithms I
Chair: Tirthankar Ghosh, St. Cloud State University, USA

Sensor Placement for Minimum Exposure in Distributed Active Sensing Networks
Na Xia (Hefei University of Technology, CN)
Khuong Vu, Rong Zheng (University of Houston, USA)

Adaptive Distributed Power Management Algorithm for Interference-aware Topology Control in Mobile Ad Hoc Networks
Nuraj Pradhan, Tarek Saadawi (City University of New York/The City College, USA)

A Novel Distributed Mobility Protocol for Dynamic Coverage in Sensor Networks
Thakshila Wimalajeewa, Sudharman K Jayaweera (University of New Mexico, USA)

Design of a Distributed Protocol for Proportional Fairness in Wireless Body Area Networks
Roberto Pagliari (Cornell University, USA)
Anna Scaglione, Ramy Abdallah Tannious (University of California Davis, USA)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Jasmine

AHSN32: MAC II
Chair: Soufiene Djahel, University of Lille, France

Analytical Modelling of IEEE 802.15.4 for Multi-hop Networks with Heterogeneous Traffic and Hidden Terminals
Piergiuseppe Di Marco, Pangun Park, Carlo Fischione, Karl Henrik Johansson (Royal Institute of Technology, SE)

Fast Channel Establishment for IEEE 802.16 Wireless Mesh Networks
Kanthaiah Sivapragasam Vijayalayan, Aaron Harwood, Shanika Karunasekera (University of Melbourne, Australia)
A Methodology for Optimal MAC Protocol Generation: Case Study of a Synchronous MAC Channel
Jian Zhen, Forrest Brewer, Volkan Rodoplu (University of California, Santa Barbara, USA)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Pearson I

CIS11: Traffic Classification and Analysis
Chair: Guanglu Sun, Tsinghua University, China

HMC: A Novel Mechanism for Identifying Encrypted P2P Thunder Traffic
Chenglong Li, Yibo Xue (Tsinghua University, CN)
Yingfei Dong (University of Hawaii, USA)

A Graph Similarity-based Approach to Security Event Analysis Using Correlation Techniques
Qishi Wu, Yu Gu (University of Memphis, USA)
Xiaohui Cui (Oak Ridge National Laboratory, USA)
Praneeth Moka, Yunyue Lin (University of Memphis, USA)

A Novel Hybrid Method for Effectively Classifying Encrypted Traffic
Guanglu Sun, Yibo Xue (Tsinghua University, CN)
Yingfei Dong (University of Hawaii, USA)
Chenglong Li, Dongsheng Wang (Tsinghua University, CN)

A Distributed Public Key Caching Scheme in Large Wireless Networks
Yuan Kong, Jing Deng (University of North Carolina Greensboro, USA)
Stephen Tate (University of North Texas, USA)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Orchard AB

CQRM08: Wireless Performance I
Chair: Csaba Kiraly, University of Trento, Italy

Adaptive Multi-Code Chaos-Based CDMA with Unequal Error Protection using Reduced Support Machine
Johnny Kao, Stevan Berber, Vojislav Kecman (University of Auckland, NZ)

An Analytical Model to Study the Packet Loss Burstiness over Wireless Channels
Fangqin Liu (Tsinghua University, CN)
Yanfei Fan (University of Waterloo, CA)
Sherman Shen (University of Waterloo, CA)
Chuang Lin (Tsinghua University, CN)

An Exponential Model for Evaluating Error Performance of Turbo codes
Qingchun Chen, Jiaxiang Li, Pingzhi Fan (Southwest Jiaotong University, CN)
Vahid Tarokh (Harvard University, USA)

Application Profile based MIMO Link Adaptation in LTE Networks
Vishwanath Ramamurthi (University of California, Davis, USA)
Wei-Peng Chen (Fujitsu Laboratories, USA)
Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Orchard C

CQRM18: Wireless Performance II
Chair: Kyungtae Kim, NEC Laboratories America, USA

Enhancing Handoff Performance by Introducing Ad hoc Mode into Cellular Networks
Rongsheng Huang (University of Florida, USA)
Chi Zhang (University of Florida, USA)
Hongxia Zhao (Huawei Technologies Co. Ltd., CN)
Yuguang Fang (University of Florida, USA)

Optimization of the use of Radio Resource of Radio-Over-Fiber Access Networks
Pedro Henrique Gomes, Nelson L. S. da Fonseca (State University of Campinas, BR)
Omar Branquinho (Catholic University Campinas, BR)

Traffic-Aware Connection Admission Control Scheme for Broadband Mobile Systems
Angelos Antonopoulos (Telecommunications Technological Centre of Catalonia, ES)
Harry Skianis (University of the Aegean, GR)
Christos Verikoukis (Telecommunications Technological Centre of Catalonia, ES)

Reconsider Broadcast Packet Reception Rates in One-Dimensional MANETs
Xiaomin Ma (Oral Roberts University, USA)
Jinsong Zhang, Tong Wu (University of Tulsa, USA)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Merrick II

CSSMA08: Coding Techniques
Chair: Luigi Atzzori, University of Cagliari, Italy

Incremental Rate Control for H.264 Scalable Video Coding
Yang Jin (University of Electronic Science and Technology of China, CN)
Yu Sun (University of Central Arkansas, USA)
Yimin Zhou, Shixin Sun (University of Electronic Science and Engineering Technology of China, CN)

The Benefits of Network Coding in Distributed Caching in Large-scale P2P-VoD Systems
Wang Hui, Zhang Yubao, Pei Li, Zhihong Jiang (National University of Defence Technology, CN)

Priority Linear Coding Based Opportunistic Routing for Video Streaming in Ad Hoc Networks
Zhi Li, Limin Sun, Xinyun Zhou (Chinese Academy of Sciences, CN)

Joint Unequal Loss Protection and LT Coding for Layer-Coded Media Delivery
Haifeng Lu, Jianfei Cai, Chuan Heng Foh (Nanyang Technological University, SG)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Hibiscus B

CT08: MIMO II
Chair: Xiang-Gen Xia, University of Delaware, USA

Analytic Framework for the Mutual Information Cumulants of Different MIMO Fading Channels
Paul de Kerret (RWTH Aachen University, DE)
Michail Matthaiou (Chalmers University of Technology, SE)
Rudolf Mathar (RWTH Aachen University, DE)
Josef A. Nossek (Munich University of Technology, DE)

**Mutual Information of MIMO Transmission over Correlated Channels with Finite Symbol Alphabets and Link Adaptation**
Eckhard Ohlmer (Technische Universität Dresden, DE)
Udo Wachsmann (Ericsson, DE)
Gerhard Fettweis (Technische Universität Dresden, DE)

**Explicit vs. Implicit Feedback for SU and MU-MIMO**
Bruno Clerckx (Samsung Advanced Institute of Technology, KR)
Gil Kim (Seoul National University, KR)
Junil Choi, Young-Jun Hong (Samsung Electronics, KR)

**Variational Message-Passing for Joint Channel Estimation and Decoding in MIMO-OFDM**
Gunvor E. Kirkelund, Carles Navarro Manchon (Aalborg University, DK)
Lars Christensen (Nokia, DK)
Erwin Riegler (Vienna University of Technology, AT)
Bernard Fleury (Aalborg University, DK)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Hibiscus A

**Compress-and-Forward Rates for the Gaussian Relay with ISI and Colored Noise**
Chiranjib Choudhuri, Urbashi Mitra (University of Southern California, USA)

**Opportunistic Relay Selection with a Direct Link**
Mohamed Abouelseoud, Aria Nosratinia (University of Texas, Dallas, USA)

**Transmission Strategies for Gaussian Relay Networks Obtained from Deterministic Models**
Nicolas Schrammar, Mikael Skoglund (Royal Institute of Technology, SE)

**Adaptive Power Allocation for Bidirectional Amplify-and-Forward Multiple-Relay Multiple-User Networks**
Ted C.-K. Liu (University of Victoria, CA)
Wei Xu (Southeast University, CN)
Xiaodai Dong, Wu-Sheng Lu (University of Victoria, CA)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Riverfront North Hall

**CT4P: Advanced Topics (Poster)**
Chair: Marco Chiani, University of Bologna, Italy

**A Compressive Sensing Approach to NBI Cancellation in Mobile OFDM Systems**
Ahmad Abdulrahman Gomaa, Naofal Al-Dhahir (University of Texas, Dallas, USA)

**Cross-tier Interference Mitigation for Two-tier OFDMA Femtocell Networks with Limited Macrocell Information**
Min-Sung Kim, Hui Won Je, Fouad Tobagi (Stanford University, USA)

Space-Time Network Codes utilizing Transform-based Coding
Hung-Quoc Lai (US Army RDECOM CERDEC, USA)
Zhenzhen Gao, K. J. Ray Liu (University of Maryland, USA)

A Duality Study for Fading Multiple Access / Broadcast Channels Without Channel State Information at the Transmitter
Jörg Bühler (TU Berlin, DE)
Gerhard Wunder (Heinrich-Hertz-Institut, DE)

Channel-Matched Coding for Coarsely Quantized Coherent Optical Communication Systems
Thomas Daniel Oliver Lang, Amine Mezghani (Technische Universität München, DE)
Maxim Kuschnerov, Berthold Lankl (Munich University of the German Armed Forces, DE)
Josef A. Nossek (Technische Universität München, DE)

A Novel Construction of 2-group Decodable 4x4 Space-Time Block Codes
Amr Ismail, Jocelyn Fiorina, Hikmet Sari (Ecole supérieure d'électricité, FR)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Flamingo

NGN08: Routing
Chair: Stefano Secci, University of Paris VI, France

Establishing Secure Virtual Trust Routing and Provisioning Domains for Future Internet
Dijiang Huang (Arizona State University, USA)
Shingo Ata (Osaka City University, JP)
Deep Medhi (University of Missouri-Kansas City, USA)

Evaluation and Analysis of the Inter-domain Routing System toward a New Architecture for the Future Internet
Jianli Pan, Raj Jain, Subharthi Paul (Washington University, St. Louis, USA)

An implementation of optimal dynamic load balancing based on multipath IP routing
Juan Pablo Saibene, Richard Lempert, Fernando Paganini (Universidad ORT, UY)

A Proposal for an XOR-based Flat Routing Mechanism in Internet-like Topologies
Rafael Pasquini (University of Campinas, BR)
Fábio Verdi (Federal University of São Carlos, BR)
Rodolfo Oliveira (Universidade Nova de Lisboa/Uninova, PT)
Mauricio Ferreira Magalhães (State University of Campinas, BR)
Annikki Welin (Ericsson, SE)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Tuttle North

ONS08: Optical Wireless
Chair: Abdallah Shami, University of Western Ontario, Canada

Optical Communication over Atmospheric Turbulence with Limited Channel State Information at the Transmitter
Andrew Puryear, Vincent Chan (Massachusetts Institute of Technology, USA)
Spectral-Efficient 60-GHz xy-MIMO Data Transport over a Radio-over-Fiber System for Gigabit Wireless Local Area Networks
Shu-Hao Fan, Hung-Chang Chien, Arshad Chowdhury, Gee-Kung Chang
(Georgia Institute of Technology, USA)

Performance of Coherent BPSK Systems using Phase Compensation and Diversity Techniques
Linzi Zuo, Yongxiong Ren, Anhong Dang, Hong Guo
(Peking University, CN)

Mobile Multi-gigabit Spot-Diffusing Optical Wireless System Employing Beam Angle and Power Adaptation and Imaging Reception
Fuad E. Alsaadi, Jaafar Elmirghani (University of Leeds, UK)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Gardenia

SAC08: Cognitive Radio & Routing
Chair: Charles Clancy, Hume Center for National Security and Technology, USA

On-Demand Multicast Routing in Cognitive Radio Mesh Networks
Hisham Almasaeid, Tasneem Jawadwala, Ahmed Kamal (Iowa State University, USA)

Routing in Hybrid Mesh Networks of Cognitive and IEEE 802.11 Radios
Marcel Silva, Jose F. de Rezende (Federal University of Rio de Janeiro, BR)

Cognitive Multipath Multi-Channel Routing Protocol for Mobile Ad-Hoc Networks
Suyang Ju, Joseph Evans (University of Kansas, USA)

Scalable Cognitive Routing Protocol for Mobile Ad-Hoc Networks
Suyang Ju, Joseph Evans (University of Kansas, USA)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Tequesta

SPC08: Sensor Networks
Chair: Hongyang Chen, University of Tokyo, Japan

Localization of Wireless Sensors via Nuclear Norm for Rank Minimization
Feng Chen, Shahrokh Valaee, Wain Sy Anthea Au (University of Toronto, CA)
Zhenhui Tan (Beijing JiaoTong University, CN)

Estimation Feedback and Bandwidth Allocation with the Type-based Multiple-access in Wireless Sensor Networks
Xin Wang, Chenyang Yang (Beijing University, CN)

Topology-Assisted Techniques to Relay Selection for Homogeneously Distributed Wireless Sensor Networks
Farrokh Etezadi (Concordia University, CA)
Keyvan Zarifi (University of Quebec, INRS-EMT, CA)
Ali Ghrayeb (Concordia University, CA)
Sofiene Affes (INRS-EMT, CA)

A Hybrid Framework for Radio Localization in Broadband Wireless Systems
Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Ibis

SPC14: SIMO, MISO and MIMO Systems IV
Chair: Jiangzhou Wang, University of Kent, United Kingdom

A Hybrid Codebook Design Algorithm for MIMO Amplify-and-Forward Relaying System with Power Allocation and Precoding
Yuan Lu, Lihua Li (Beijing University of Posts and Telecommunications, CN)
Zhixin Liu (Chinese University of Hong Kong, CN)

Maximum Sum-Rate Interference Alignment Algorithms for MIMO channels
Ignacio Santamaria, Oscar Gonzalez (University of Cantabria, Spain)
Robert Heath, Steven W. Peters (University of Texas at Austin, USA)

Non-Regenerative Multi-Hop MIMO Relays Using MMSE-DFE Technique
Yue Rong (Curtin University, AU)

Asymptotic Capacity and Precoding Designs for Correlated Multi-Hop MIMO Channels
Nam Tran Nguyen, Song Ci (University of Nebraska-Lincoln, USA)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Brickell North

WC08: Position and Localization
Chairs: Davide Dardari, University of Bologna, Italy
Maciej Zawodniok, Missouri S&T, USA

Geometry and Motion Based Positioning Algorithms for Mobile Tracking in NLOS Environments
Kegen Yu, Eryk Dutkiewicz (Macquarie University, Australia)

Hybrid GNSS-terrestrial Cooperative Positioning via Distributed Belief Propagation
Mauricio Caceres, Federico Penna (Politecnico di Torino, IT)
Henk Wymeersch (Chalmers University of Technology, SE)
Roberto Garello (Politecnico di Torino, IT)

Surface Based Underwater Communications
Lloyd Emokpae, Mohamed Younis (University of Maryland, Baltimore County, USA)

Analysis of Localization Accuracy in Wireless Networks in Presence of Uncertain Beacon Positions
Nikhil Bhagwat, Bijan Jabbari (George Mason University, USA)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Brickell Center

WC20: Modulation and Coding
Chair: Philippa Martin, University of Canterbury, New Zealand

Capacity achieving modulations for the peak-power limited Gaussian channel
Alberto Perotti, Sergio Benedetto (Politecnico di Torino, IT)
Layered Adaptive Modulation and Coding for 4G Wireless Networks
James She (University of Cambridge, UK)
James Ho (University of Waterloo, CA)
Jinqing Mei (Beijing University of Posts and Telecommunications, CN)
Pin-Han Ho (University of Waterloo, CA)
Hong Ji (Beijing University of Posts and Telecommunications, CN)

Robust Multiuser Precoder for Base Station Cooperative Transmission with Non-ideal Channel Reciprocity
Shengqian Han, Liyan Su, Chenyang Yang (Beijing University, CN)
Gang Wang, Ming Lei (NEC Laboratories, CN)

An EXIT-Chart Aided Design Procedure for Near-Capacity N-Component Parallel Concatenated Codes
Hong Chen, Robert Maunder, Lajos Hanzo (University of Southampton, UK)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Brickell South

WC32: Network Coding III
Chair: Chunxuan Ye, InterDigital, USA

Opportunistic Subchannel Scheduling for OFDMA Networks with Network Coding at Relay Stations
Byung-Gook Kim, Jang-Won Lee (Yonsei University, KR)

On Performance of Cooperative Multicast System with Wireless Network Coding
Yang Liu, Wenbo Wang, Mugen Peng, Dongyan Wei
(Beijing University of Posts and Telecommunications, China)

Minimum Broadcast Decoding Delay for Generalized Instantly Decodable Network Coding
Sameh Sorour, Shahrokh Valaee (University of Toronto, CA)

Outage Performance of DF Network Coded (DFNC) Multi-User Cooperative Diversity in Orthogonal Uplink Channels
Bin Guo, Kanchan Vardhe, Yu Liu, Chi Zhou, Yu Cheng (Illinois Institute of Technology, USA)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Orchard D

WC44: Power Control II
Chair: Khairi A Hamdi, Manchester University, United Kingdom

Coordinated User Scheduling and Power Control for Weighted Sum Throughput Maximization of Multicell Network
Lu Liu, Daiming Qu, Tao Jiang, Jie Ding (Huazhong University of Science and Technology, CN)

Integrated Power Controlled Adaptive Rate Link Scheduling in Wireless Mesh Networks
Kian Hedayati, Izhak Rubin (University of California, Los Angeles, USA)

On the Performance of Cooperative Diversity with Arbitrary Power Allocation
Khairi Hamdi (University of Manchester, UK)
Energy-Efficient Multi-Carrier Link Adaptation with Sum Rate-Dependent Circuit Power
Christian Isheden, Gerhard Fettweis (Technische Universität Dresden, DE)

Wednesday, 8 December 2010 • 17:20 – 18:30
Location: Riverfront North Hall

WC8P: Transmission Technologies (Poster)
Chair: Fen Hou, Chinese University of Hong Kong, CN

Blind Channel Equalization for Fast Moving Terminals in Prioritized Spatial Multiplexing MIMO Systems
Qian Liu, Chang Wen Chen
(State University of New York, Buffalo, USA)

Parallel-Filtering Based Equalization of OFDM over Doubly Selective Channels
Guanghui Liu, Hongliang Li, Wei Chen, Mingzhen Wang
(University of Electronic Science and Technology of China, CN)
Lin Wang (Xiamen University, CN)

Analog Equalization for Low Power 60 GHz Receivers in Realistic Multipath Channels
Khursheed Hassan, Theodore Rappaport, Jeffrey Andrews (University of Texas, Austin, USA)

An Information-Guided Channel-Hopping Scheme for Block-Fading Channels with Estimation Errors
Yuli Yang, Nicholas Bonello (King Abdullah University of Science and Technology, SA)
Sonia Aissa (University of Quebec, CA)

Pulse Shapes That Outperform Traditional UWB Antenna/Waveform Combinations
Mehrdad Mirshafiei, Mohammad Abtahi, Patrick Larochelle, Leslie Rusch (Laval University, CA)

Performance Enhancement of Single Frequency Networks Using Randomized Transmit Phases
Kiran Rege, Krishna Balachandran, Joseph Kang, Mehmet Kemal Karakayali
(Bell Labs, Alcatel-Lucent, USA)

WN08: Wireless Mesh Network Design II
Chair: Seshadri Mohan, University of Arkansas, Little Rock, USA

Partially Overlapped Channel Assignment on Wireless Mesh Network Backbone
Pedro B. F. Duarte, Zubair Md. Fadlullah, Kazuo Hashimoto, Nei Kato (Tohoku University, Japan)

Interference-aware Robust Wireless Mesh Network Design
Farah Kandah, Weiyi (Max) Zhang, Yashaswi Singh, Juan Li (North Dakota State University, USA)

Cost-Efficient Wireless Mobile Backhaul Topologies: An Analytical Study
Fang-Chun Kuo, Johannes Lessmann, Frank A. Zdarsky, Stefan Schmid (NEC Europe Ltd., DE)

Scalable Publish/Subscribe Service in Wireless Mesh Networks
Juan Li, Weiyi (Max) Zhang, Xiaojun Xia (North Dakota State University, USA)

Wednesday, 8 December 2010 • 17:20 – 18:30
WN20: Power Control and Energy Efficiency  
Chair: Ehssan Sakhaee, Osaka University, Japan

Queue-Stability-Based Transmission Power Control in Wireless Multihop Networks  
Gustavo Vejarano, Janise McNair (University of Florida, USA)

"Locking" Dynamics and Mitigation Schemes in Distributed Power Control for Wireless Networks  
Jeffrey Mounzer, Nicholas Bambos (Stanford University, USA)

Globally Optimal Distributed Power Control for Nonconcave Utility Maximization  
Liping Qian, Ying Jun (Angela) Zhang (Chinese University of Hong Kong, CN)  
Mung Chiang (Princeton University, USA)

Energy Savings through Dynamic Base Station Switching in Cellular Wireless Access Networks  
Eunsung Oh, Bhaskar Krishnamachari (University of Southern California, USA)

Wednesday, 8 December 2010 • 17:20 – 18:30  
Location: Merrick I

WN32: Wireless Relay Networks II  
Chair: Hassan Moradi, University of Oklahoma, USA

Mixed Time-scale Generalized Fair Scheduling for Amplify-and-Forward Relay Networks  
Alireza Sharifian, Petar Djukic, Halim Yanikomeroglu (Carleton University, CA)  
Jietao Zhang (Huawei Technologies Co., Ltd., CN)

Cooperative Relay in Cognitive Radio Networks: Decode-and-Forward or Amplify-and-Forward?  
Donglin Hu, Shiwen Mao (Auburn University, USA)

Energy Saving Performance Comparison of Coordinated Multi-Point Transmission and Wireless Relaying  
Dongxu Cao, Sheng Zhou, Chao Zhang, Zhisheng Niu (Tsinghua University, CN)

Stability and Performance Issues of a Relay Assisted Multiple Access Scheme  
Nikolaos Pappas (ICS-FORTH / University of Crete, GR)  
Apostolos Traganitis (ICS-FORTH, GR)  
Anthony Ephremides (University of Maryland, College Park, USA)