

IEEE GLOBECOM 2009 Symposiums Program

Tuesday, 1 December 2009

10:15 - 12:15

Location: Honolulu Suite #1

AHSN-01: Routing Protocols in WSNs

Chair: Satyajayant Misra (New Mexico State University, USA)

Joint Base Station Placement and Fault-Tolerant Routing in Wireless Sensor Networks

Dejun Yang (Arizona State University, USA)

Satyajayant Misra (New Mexico State University, USA)

Guoliang Xue (Arizona State University, USA)

Realization of Greedy Anti-Void Routing Protocol for Wireless Sensor Networks

Wen-Jiunn Liu, Kai-Ten Feng (National Chiao Tung University, Taiwan)

Dynamic Election-Based Sensing and Routing in Wireless Sensor Networks

Sharief Oteafy (Queen's University, Canada)

Hosam Aboelfotoh (Kuwait University, Kuwait)

Hossam Hassanein (Queen's University, Canada)

REER: Robust and Energy Efficient Multipath Routing Protocol for Wireless Sensor Networks

Bashir Yahya, Jalel Ben-Othman (University of Versailles, France)

ROME: Routing Over Mobile Elements in WSNs

Stefano Basagni (Northeastern University, USA)

Michele Nati, Chiara Petrioli, Roberto Pietroccia (University of Rome "La Sapienza", Italy)

Implementation of Gradient Routing in Wireless Sensor Networks

Thomas Watteyne, Kristofer Pister (University of California Berkeley, USA)

Dominique Barthel (Orange Labs, France)

Mischa Dohler (Centro Tecnológico Telecomunicaciones Cataluña, Spain)

Isabelle Augé-Blum (INRIA, France)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Honolulu Suite #2

AHSN-02: Mobility in Sensor Networks

Chair: Boleslaw Szymanski (Rensselaer Polytechnic Institute, USA)

Multiple-Symbol Differential Decision Fusion for Mobile Wireless Sensor Networks

Andre Lei, Robert Schober (University of British Columbia, Canada)

Networked Ultrasonic Sensors for Target Tracking: An Experimental Study

Hongbin Li, Di Miao, Jiming Chen, Youxian Sun (Zhejiang University, China)

Xuemin (Sherman) Shen (University of Waterloo, Canada)

Packet Transmission Scheduling Algorithm for Dense Wireless Sensor Networks with Mobile Sink

Ali Sharifkhani, Norman Beaulieu (University of Alberta, Canada)

Spatial Correlation and Mobility Aware Traffic Modeling for Wireless Sensor Networks

Pu Wang, Ian Akyildiz (Georgia Institute of Technology, USA)

A Motion Tendency-based Adaptive Data Delivery Scheme for Delay Tolerant Mobile Sensor Networks

Fulong Xu, Ming Liu (University of Electronic Science and Technology of China, China)

Jiannong Cao (Hong Kong Polytechnic University, Hong Kong)

Guihai Chen (Nanjing University, China)

Haigang Gong, Jinqi Zhu (University of Electronic Science and Technology of China, China)

Distributed Target Tracking with Directional Binary Sensor Networks

Zijian Wang, Eyuphan Bulut, Boleslaw K. Szymanski (Rensselaer Polytechnic Institute, USA)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Honolulu Suite #3

AHSN-03: Cross-Layer Protocols in WSNs

Chair: Mohamed Ibnkahla (Queen's University, Canada)

A Cross-Layer Mechanism for Solving Hidden Device Problem in IEEE 802.15.4 Wireless Sensor Networks

Hsueh-Wen Tseng, Shan-Chi Yang, Ping-Cheng Yeh, Ai-Chun Pang (National Taiwan University, Taiwan)

Joint Rate Control and Routing for Energy-constrained Wireless Sensor Networks with Real-time Requirement

Meng Zheng, Wei Liang, Xiaoling Zhang, Hai-bin Yu, Peng Zeng (Chinese Academy of Sciences, China)

A Joint Design of Opportunistic Forwarding and Energy-Efficient MAC Protocol in Wireless Sensor Networks

Haiming Chen (Chinese Academy of Sciences, China)

Li Cui (Institute of Computing Technology, China)

Victor O. K. Li (University of Hong Kong, China)

Joint Coding/Routing Optimization for Correlated Sources in Wireless Visual Sensor Networks

Chenglin Li, Junni Zou, Hongkai Xiong, Yongsheng Zhang (Shanghai Jiao Tong University, China)

Performance Modeling of Cognitive Wireless Sensor Networks Applied to Environmental Protection

Elyes Bdira, Mohamed Ibnkahla (Queen's University, Canada)

QUATTRO: QoS-Capable Cross-layer MAC Protocol for Wireless Sensor Networks

Joel Ruiz, Jose Gallardo (CICESE University of Ottawa, Mexico)

Luis Villasenor (CICESE, Mexico)

Dimitrios Makrakis, Hussein Mouftah (University of Ottawa, Canada)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Coral Ballroom Lounge

AHSN-24: Topics in Ad Hoc Sensor and Mesh Networking I (Poster)

Chair: Hossam S. Hassanein (Queen's University, Canada)

Parallel Singulation in RFID Systems

Kashif Ali, Hossam Hassanein (Queen's University, Canada)

Spatial Inference Using Networks of RFID receivers: a Bayesian approach

Ying Zhu, William Howard, Ken Pu (University of Ontario, Canada)

When Do Non-Regenerative Two-Hop Relaying Networks Require a Global Phase Reference?

Stefan Berger, Armin Wittneben (Swiss Federal Institute of Technology, Switzerland)

Three-Dimensional Markov Chain Model for Performance Analysis of the IEEE 802.11 Distributed Coordination Function

Ahed Alshanyour, Anjali Agarwal (Concordia University, Canada)

Anonymous Cardinality Estimation in RFID Systems with Multiple Readers

Vahid Shah-Mansouri, Vincent W. S. Wong (University of British Columbia, Canada)

Fast and Reliable Tag Estimation in RFID Systems with Collision-Oblivious Reader

Han-You Jeong, Won-Ju Yoon; Sang-Hwa Chung (Pusan National University, Korea)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Sea Pearl Suite 3-4

CTS-01: Multiple Access and Broadcast Channels

Chair: David Gesbert (Eurecom, France)

Block Diagonalization in the MIMO Broadcast Channel with Delayed CSIT

Jun Zhang, Jeffrey Andrews, Robert W. Heath, Jr. (The University of Texas at Austin, USA)

Capacity Region of Reversely Degraded Gaussian MIMO Broadcast Channel

Jun Chen (McMaster University, Canada)

Chao Tian (AT&T Labs - Research, USA)

De-hyiping Transmit Diversity in Modern MIMO Cellular Systems

Nihar Jindal (University of Minnesota, USA)

Angel Lozano (Universitat Pompeu Fabra, Spain)

Stochastic Resource Allocation over Fading Multiple Access and Broadcast Channels

Na Gao, Xin Wang (Florida Atlantic University, USA)

Constellation Constrained Capacity of Two-user Broadcast Channels

Naveen Deshpande, B. Sundar Rajan (Indian Institute of Science, India)

The Gap Approximation for Gaussian Multiple Access Channels

Dimitris Toumpakaris (University of Patras, Greece)

Jungwon Lee (Marvell Semiconductor, USA)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Iolani Suite 5-6

CISS-01: Physical Layer Security

Chair: Stamatios Kartalopoulos (University of Oklahoma, USA)

Secrecy Extraction from Increased Randomness in a Time-Variant MIMO Channel

Chan Chen, Michael Jensen (Brigham Young University, USA)

CatchIt: Detect Malicious Nodes in Collaborative Spectrum Sensing

Wenkai Wang (University of Rhode Island, USA)

Husheng Li (University of Tennessee, USA)

Yan Sun (University of Rhode Island, USA)

Zhu Han (University of Houston, USA)

Dogfight in Spectrum: Jamming and Anti-Jamming in Multichannel Cognitive Radio Systems

Husheng Li (University of Tennessee, USA)

Zhu Han (University of Houston, USA)

LDPC Codes for Physical Layer Security

Demijan Klinec (Georgia Institute of Technology, USA)

Jeongseok Ha (KAIST, Korea)

Steven W. McLaughlin (Georgia Institute of Technology, USA)

João Barros (University of Porto, Portugal)

Byung-Jae Kwak (Electronics and Telecommunications Research Institute, Korea)

Network Security: Synchronization in Chaotic Communication Systems

Stamatios K. Kartalopoulos (University of Oklahoma, USA)

A Framework of Multiplicative Spread Spectrum Embedding for Data Hiding: Performance, Decoder and Signature Design

Amir Valizadeh, Z. Jane Wang (University of British Columbia, Canada)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Kahili 1

CQPRM-01: Design of Networks and Services

Chair: Toshinori Tsuboi (Tokyo University of Technology, Japan)

Design Method of Robust Networks against Performance Deterioration during Failures

Nozomu Katayama, Takeshi Fujimura, Hiroyoshi Miwa (Kwansei Gakuin University, Japan)

Noriaki Kamiyama, Haruhisa Hasegawa, Hideaki Yoshino (NTT, Japan)

Construction of Candidate Topologies for Large-Scale Networks

Noriaki Kamiyama (NTT, Japan)

Network Administration using Web Services

Paolo Anedda, Luigi Atzori (University of Cagliari, Italy)

End-to-End Inference of Link Level Queueing Delay Statistics

Gianni Antichi, Andrea Di Pietro, Domenico Ficara, Stefano Giordano, Gregorio Procissi, Fabio Vitucci (University of Pisa, Italy)

Information-Guided Relay Selection for High Throughput in Half-Duplex Relay Channels

Yuli Yang (Alcatel-Lucent, China)

LTE Access Network Planning and Optimization: A Service-Oriented and Technology-Specific Perspective

Fernando Gordejuela-Sanchez, Jie Zhang (University of Bedfordshire, UK)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Sea Pearl Suite 5-6

CSS-01: Peer-to-Peer Services

Chair: Abdelhamid Mellouk (University Paris XII, France)

Analyzing the Aggregate Download Bandwidths in Peer-to-peer Live Streaming Systems

Yusuo Hu, Jiang Li (Microsoft Research Asia, China)

Superchunk based Fast Search in P2P-VoD System

Danqi Wang, Chai Kiat Yeo (Nanyang Technological University, Singapore)

FairE9: Fair File Distribution over Mesh-Only Peer-to-Peer

Eyal Zohar, Anat Lerner (The Open University of Israel, Israel)

SpamResist: Making Peer-to-Peer Tagging Systems Robust to Spam

Ennan Zhai, Ruichuan Chen (Peking University, China)

Eng Keong Lua (Carnegie Mellon University, USA)

Long Zhang, Huiping Sun, Zhuhua Cai, Sihan Qing, Zhong Chen (Peking University, China)

Time-shifted Streaming in a Peer-to-Peer Video Multicast System

Jeonghun Noh, Aditya Mavlankar (Stanford University, USA)

Pierpaolo Baccichet (Dyyno Inc., USA)

Bernd Girod (Stanford University, USA)

A Multicast-based Bootstrap Mechanism for Self-organizing P2P Networks

Simone Cirani, Luca Veltri (University of Parma, Italy)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Lehua Suite

NGNI-01: Emerging Networking-I

Chair: Vinod Mishra (Defense Information Systems Agency, USA)

MobiSN: Semantics-based Mobile Ad Hoc Social Network Framework

Juan Li, Samee Khan (North Dakota State University, USA)

ANTS - A Framework for Knowledge based NAT Traversal

Andreas Müller, Andreas Klenk, Georg Carle (Technische Universität München, Germany)

Host Identity Protocol and Proxy Mobile IPv6: A Secure Global and Localized Mobility Management Scheme for Multihomed Mobile Nodes

Giuliana Iapichino, Christian Bonnet (EURECOM, France)

Economics of Femtocells

Nikhil Shetty (University of California, Berkeley, USA)

Shyam Parekh (Alcatel-Lucent Bell Labs, USA)

Jean Walrand (University of California, Berkeley, USA)

Energy-aware Resource Adaptation for Next-Generation Network Equipment

Raffaele Bolla, Roberto Bruschi, Franco Davoli (University of Genoa, Italy)

Towards a Declarative Framework For Managing Application and Network Adaptations

Palanivel Kodeswaran, Anupam Joshi (University of Maryland Baltimore County, USA)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Coral Ballroom Lounge

NGNI-11: Topics in Next Generation Networking (Poster)

Chair: Luca Valcarenghi (Scuola Superiore Sant'Anna, Italy)

Revenue Management in the Presence of Self-Similar Alpha-Stable Distributions

Armin Ghayoori, Alberto Leon-Garcia (University of Toronto, Canada)

An Integrated Mobility Framework for Pervasive Communications

Raffaele Bolla, Riccardo Rapuzzi, Matteo Repetto (University of Genoa, Italy)

Second-Order Differential Encoding of Deterministic Finite Automata

Gianni Antichi, Andrea Di Pietro, Domenico Ficara, Stefano Giordano, Gregorio Procissi, Fabio Vitucci (University of Pisa, Italy)

Detecting Trustworthy Real-Time Communications using a Web-of-Trust

Jan Seedorf, Nico d'Heureuse; Saverio Niccolini (NEC Europe Ltd., Germany)
Marco Cornolti (University of Pisa, Italy)

A Novel Fingerprint Location Method Using Ray-tracing

Phillip Maher, Robert Malaney (University of New South Wales, Australia)

Caching in Content-based Publish/Subscribe Systems

Vasilis Sourlas (University of Thessaly, Greece)
Georgios S. Paschos (CERTH - ITI, Greece)
Paris Flegkas, Leandros Tassioulas (University of Thessaly, Greece)

Tuesday, 1 December 2009

10:15 - 12:15

ONS-01: Routing and Scheduling

Location: Iolani Suite 1-2

Chair: Eiji Oki (The University of Electro-Communications, Japan)

Optical Flow Switching with Time Deadlines for High-Performance Applications

Vincent V. S. Chan, Anurupa Ganguly, Guy Weichenberg (Massachusetts Institute of Technology, USA)

Dynamic Routing and Scheduling for Variable Bandwidth Circuit Switching

Ankitkumar N. Patel, Jason P. Jue (University of Texas at Dallas, USA)

Multi-Parametric Online RWA based on Impairment Generating Sources

Panagiotis Kokkinos, Kostas Christodoulopoulos, Konstantinos Manousakis, Emmanouel Varvarigos (University of Patras, Greece)

Dynamic Routing of Connections with Known Duration in WDM Networks

Diego Lucerna (Politecnico di Milano, Italy)
Massimo Tornatore, Biswanath Mukherjee (University of California Davis, USA)
Achille Pattavina (Politecnico di Milano, Italy)

A Multipath Routing Mechanism in Optical Networks with Extremely High Bandwidth Requests

Xiaomin Chen, Admela Jukan (Technische Universität Carolo-Wilhelmina zu Braunschweig, Germany)
André Drummond, Nelson L. S. da Fonseca (State University of Campinas, Brazil)

Flexible Scheduling of Multicast Sessions with Different Granularities for Large Data Distribution over WDM Networks

Dragos Andrei, Massimo Tornatore, Charles U. Martel, Biswanath Mukherjee (University of California Davis, USA)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Sea Pearl Suite 1-2

SAC(CRN)-01: Resource Allocation in Cognitive Radio Networks

Chair: Joseph B. Evans (University of Kansas, USA)

Probability-based Resource Allocation in Cognitive Radio Networks

Xiangwei Zhou, Geoffrey Ye Li (Georgia Institute of Technology, USA)
Dongdong Li, Dandan Wang, Anthony C. K. Soong (Huawei Technologies, USA)

Optimal Power Control for Concurrent Transmissions of Location-aware Mobile Cognitive Radio Ad Hoc Networks

Yi Song; Jiang Xie (University of North Carolina at Charlotte, USA)

Power Control of Cognitive Radio System in Rayleigh Fading

Chen Sun, Yohannes D. Alemseged, Ha Nguyen Tran, Hiroshi Harada (National Institute of Information & Communications Technology, Japan)

Fair Profit Allocation in the Spectrum Auction Using the Shapley Value

Miao Pan, Feng Chen (University of Florida, USA)
Xiaoyan Yin (Northwestern Polytechnical University, China)
Yuguang Fang (University of Florida, USA)

A Cognitive Radio Network Architecture Without Control Channel

Chunsheng Xin (Norfolk State University, USA)
Xiaojun Cao (Georgia State University, USA)

Distributed Power and Admission Control for Cognitive Radios in Spectrum Underlay Networks

John Tadrous, Ahmed Sultan (Nile University, Egypt)
Mohammed Nafie (Cairo University, Egypt)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Kahili 2

SAC(SSC)-01: Transmission and coding techniques for satellite and space communications

Chair: Giovanni Corazza (University of Bologna, Italy)

Threshold Detection Analysis for OFDM Timing and Frequency Recovery

Stefano Rosati (University of Bologna, Italy)
Adegbenga Awoseyila (University of Surrey, UK)
G. Alessandro Vanelli-Coralli (University of Bologna, Italy)
Christos Kasparis (University of Surrey, UK)
Giovanni Emanuele Corazza (University of Bologna, Italy)
Barry Evans (University of Surrey, UK)

Distributed Power and Carrier Allocation in Multibeam Satellite Uplink with Individual SINR Constraints

Joan Enric Barcelo Llado, Maria-Angeles Vázquez-Castro, Lei Jiang (Universidad Autónoma de Barcelona, Spain)
Are Hjørungnes (University of Oslo, Norway)

Packet Coding Performance with Correlated Fading and Shadowing

Marco Papaleo, Rosario Firrincieli, Giovanni Corazza, Alessandro Vanelli-Coralli (University of Bologna, Italy)

Performance Analysis of SDPSK and 1-Bit Differential GMSK Modems for FFH-FDMA Satellite Communications under Jamming

Junghwan Kim, Chong Wang, Mike Orra (The University of Toledo, USA)

A Study of Adaptive Equalizer for APSK in the Satellite Broadcasting System

Yoichi Suzuki, Akinori Hashimoto, Masaaki Kojima, Hisashi Sujikai, Shoji Tanaka, Takeshi Kimura, Kazuyoshi Shogen (NHK Science and Technical Research Laboratories, Japan)

Adaptive Optics based Telescope Array Receiver for Compensation of Optical Turbulence Effects in Deep Space Optical Communication Link with Mars

Ali Hashmi, Ali Eftekhari, Ali Adibi (Georgia Institute of Technology, USA)
Farid Amoozegar (California Institute of Technology, USA)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Iolani Suite 3-4

SPC-01: Adaptive Antennas and Beamforming

Chair: Shih Yu Chang (National Tsing Hua University of Taiwan), Hung Nguyen (The Aerospace Corp., USA)

Robust Noise Filtering in Wideband Frequency-Invariant Beamforming with Uniform Circular Arrays

Camillo Gentile (National Institute of Standards and Technology, USA)

SNR Maximization and Distributed Beamforming in Multiuser Multi-relay Networks

Duy H. N. Nguyen, Ha H. Nguyen (University of Saskatchewan, Canada)

Super-Gaussian Loading for Robust Beamforming

Jing Gu, Patrick Wolfe (Harvard University, USA)

Multicell Multicast Beamforming with Delayed SNR Feedback

Markus Jordan, Xitao Gong, Gerd Ascheid (RWTH Aachen University, Germany)

A Low-Complexity Planar Antenna Array for Wireless Communication Applications: Performance Analysis and Beamforming

Moon-Sik Lee (Electronics and Telecommunications Research Institute, Korea)

Multi-Source Multi-Destination Relay Network: An Interference-Free Multi-Beamforming Protocol

Shouhong Zhu, Zhiguo Ding (Lancaster University, UK)

Tuesday, 1 December 2009

10:15 - 12:15

Location: S. Pacific Ballroom #1

WCS-01: Cooperative Communication: Relay Selection

Chair: Andreas Molisch (University of Southern California, USA)

Relay Selection and Data Transmission Throughput Tradeoff in Cooperative Systems

Virag Shah, Neelesh Mehta (Indian Institute of Science, India)

Raymond Yim (Mitsubishi Electric Research Labs, USA)

Cooperative Selection Diversity with CSI-based Amplify-and-Forward Relaying in Nakagami-m Fading Channels

Phee Lep Yeoh (University of Sydney, Australia)

Maged Elkhassan, Iain B. Collings (CSIRO, ICT Centre, Australia)

Probabilistic Relay Selection for Fast Selection Cooperation in Half-Duplex Wireless Networks

Kuang-Hao Liu, Hsiao-Hwa Chen (National Cheng Kung University, Taiwan)

Achieving Full Diversity by Selection in Arbitrary Multi-hop Amplify-and-Forward Relay Networks

Wei Shi, Sumit Roy (University of Washington, USA)

Optimal Relay-Subset Selection and Time-Allocation in Decode-and-Forward Cooperative Networks

Elzbieta Beres, Raviraj Adve (University of Toronto, Canada)

A Novel Relay Selection Scheme with Simplified Power Allocation for Wireless Relay Networks
Hua Wu, Yafeng Wang (Beijing University of Posts and Telecommunications, China)

Tuesday, 1 December 2009

10:15 - 12:15

Location: S. Pacific Ballroom #2

WCS-02: MIMO

Chair: Nghi Tran (McGill University, Canada)

Effective SINR Computation for Maximum Likelihood Detector in MIMO Spatial Multiplexing Systems
Tetsushi Abe, Gerhard Bauch (DoCoMo Euro-Laboratories, Germany)

Achieving Near-Optimal Detection Using Adaptive Joint Combination of MLD and MMSE-SIC over Spatially Correlated MIMO Channels

Lisheng Fan (Shantou University, China)
Yangyang Zhang (University College London, UK)
Yongquan Jiang (Shantou University, China)
Kai-Kit Wong (University College London, UK)

Eigenmode Transmission for the MIMO Broadcast Channel with Semi-Orthogonal User Selection

Liang Sun, Matthew R. McKay (Hong Kong University of Science and Technology, Hong Kong)

MIMO Beam-forming at 60 GHz: Analysis of Ergodic Capacity

Navid Lashkarian (San Jose State University, USA)
Karim Nasiri Toussi (Sibeam Inc., USA)

Feasibility Conditions for Interference Alignment

Cenk M. Yetis (Istanbul Technical University, USA)
Tiangao Gou, Syed Jafar (University of California Irvine, USA)
Ahmet Kayran (Istanbul Technical University, Turkey)

Nonuniform Array Design for Robust Millimeter-Wave MIMO Links

Eric Torkildson, Colin Sheldon, Upamanyu Madhow, Mark Rodwell (University of California, Santa Barbara, USA)

Tuesday, 1 December 2009

10:15 - 12:15

Location: S. Pacific Ballroom #3

WCS-03: Resource Allocation

Chair: Patrick Marsch (Technische Universität Dresden, Germany)

Subcarrier-Pair Based Resource Allocation for Cooperative AF Multi-Relay OFDM Systems

Wenbing Dang, Meixia Tao, Hua Mu (Shanghai Jiao Tong University, China)
Jianwei Huang (The Chinese University of Hong Kong, Hong Kong)

Distributed Coordinated Multi-cell Transmission Based on Dual Decomposition

Antti Tolli, Harri Pennanen, Petri Komulainen (University of Oulu, Finland)

Fair Energy-Efficient Resource Allocation over Fading TDMA Channels

Xin Wang, Di Wang, Hanqi Zhuang, Salvatore D. Morgera (Florida Atlantic University, USA)

On the Rate Duality of the MIMO Interference Channel and its Application to Sum Rate Maximization

An Liu (Peking University, China)
Youjian Liu (University of Colorado at Boulder, USA)
Haige Xiang, Wu Luo (Peking University, China)

Impact of Interference Coupling - Loss of Convexity

Holger Boche, Siddharth Naik (Technical University of Berlin, Heinrich Hertz Institute, Germany)

On Optimization of Joint Base Station Association and Power Control via Benders' Decomposition

Jieying Chen, Liping Qian, Yingjun Zhang (The Chinese University of Hong Kong, Hong Kong)

Tuesday, 1 December 2009

10:15 - 12:15

Location: S. Pacific Ballroom #4

WCS-04: Multiple Access

Chair: Teng Joon Lim (University of Toronto, Canada)

Interference Cancellation Techniques for CDMA2000 1x Reverse Link

Peter Black, Yu-Cheun Jou, Rashid Attar, Jun Ma, Xin Zhang (Qualcomm Inc., USA)

Packet Acquisition for Time-Frequency Hopped Asynchronous Random Multiple Access

Hoang Nguyen, Fred Block (Massachusetts Institute of Technology Lincoln Lab, USA)

Multiple Access with Low-Density Signatures

Jaap van de Beek; Branislav Popovic (Huawei Technologies, Sweden)

Uplink Random Access Scheme with Prioritized Orthogonal Layers for OFDMA CSI Feedback

Megumi Kaneko, Kazunori Hayashi (Kyoto University, Japan)

Petar Popovski, Hiroyuki Yomo (Aalborg University, Denmark)

Hideaki Sakai (Kyoto University, Japan)

Design and Analysis of Framed Aloha based RFID Anti-collision Algorithms

Lei Zhu, Tak-shing, Peter Yum (Chinese University of Hong Kong, Hong Kong)

Rate Optimization for IDMA Systems with Iterative

Tao Yang, Jinhong Yuan, Zhenning Shi (University of New South Wales, Australia)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Coral Ballroom Lounge

WCS-37: Topics in Wireless Communications I (Poster)

Chair: Padmini Vellore (Memorial University of Newfoundland, Canada)

Implications of Energy Profile and Storage on Energy Harvesting Sensor Link Performance

Bhargav Medepally, Neelesh Mehta, Chandra R. Murthy (Indian Institute of Science, India)

Centralized and Distributed Optimization of Ad-Hoc Cognitive Radio Network

Yao Ma (Iowa State University, USA)

Dong In Kim (Sungkyunkwan University, Korea)

Efficient Mutual Interference Minimization and Power Allocation for OFDM-based Cognitive Radio

Md. Jahidur Rahman, Xianbin Wang, Serguei L. Primak (The University of Western Ontario, Canada)

Effective Capacity Analysis of Cognitive Radio Channels for Quality of Service Provisioning

Sami Akin, Mustafa Cenk GURSOY (University of Nebraska-Lincoln, USA)

A Self-Organized Femtocell for IEEE 802.16e System

Young Jin Sang, Hae Gwang Hwang, Kwang Soon Kim (Yonsei University, Korea)

Probability Distribution of Multi-hop Multipath Connection in a Random Network
Padmini Vellore, Paul Gillard, Ramachandran Venkatesan (Memorial University, Canada)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Coral Ballroom #1

WNS-01: Channel Capacity

Chair: Petar Popovski (Aalborg University, Denmark)

An Analytical Expression for Service Curves of Fading Channels
Giacomo Verticale, Paolo Giacomazzi (Politecnico di Milano, Italy)

High-Order Analysis of Outage Probability in OFDMA Wireless Networks
Bo Bai, Wei Chen, Zhigang Cao (Tsinghua University, China)
Khaled B. Letaief (Hong Kong University of Science & Technology, Hong Kong)

Optimal MIMO Antenna Geometry Analysis for Wireless Networks in Underground Tunnels
Zhi Sun, Ian F. Akyildiz (Georgia Institute of Technology, USA)

Channel Coding Design to Support Asynchronous Physical Layer Network Coding
Dong Wang (Philips Research North America, USA)
Shengli Fu (University of North Texas, USA)
Kejie Lu (University of Puerto Rico at Mayaguez, Puerto Rico)

End-to-end Delay Analysis for Reliable Communications over Lossy Channels: Integrating Network Coding and ARQ Schemes
Francesco Chiti, Romano Fantacci, Russel Allan Johnson (University of Florence, Italy)
Vladimir Crnojevic, Dejan Vukobratovic, (University of Novi Sad, Serbia)

A Proposal of New Hybrid ARQ Scheme suitable for Multi-hop Transmissions using LDPC Codes
Takayuki Hashimoto, Tetsuya Wakiyama, Koji Ishibashi, Tadahiro Wada (Shizuoka University, Japan)

Tuesday, 1 December 2009

10:15 - 12:15

Location: Coral Ballroom #2

WNS-02: TCP and Congestion Control

Chair: Toktam Mahmoodi (King's College London, UK)

Performance of Different TCP Variants in IEEE 802.11 WLAN and The TCP-WOW Algorithm
Shan Chen, Brahim Bensaou, Ka-Lok Hung (The Hong Kong University of Science and Technology, Hong Kong)

RACING: Rate Control for Enhancing Intermittent Networking Performance for Mobile Users
Haruki Izumikawa (Universität Bremen, TZI, Germany)
Dirk Kutscher (NEC Europe Ltd., Germany)
Andreas Timm-Giel, Carsten Bormann (Universität Bremen, Germany)

Combined Congestion Control and Link Selection Strategies for Delay Tolerant Interplanetary Networks
Igor Bisio, Marco Cello (University of Genoa, Italy)
Tomaso De Cola (German Aerospace Center, Germany)
Mario Marchese (University of Genoa, Italy)

Hop-by-hop Congestion Control for Wireless Mesh Networks with Multi-channel MAC
Gang Feng (University of Electronic Science and Technology of China, China)
Fei Long (Siemens, China)
Yide Zhang (University of Electronic Science and Technology of China, China)

One-Hop Call Admission Control in Heterogeneous Wireless Networks: A Queueing Analysis

Wenzhou Ouyang, Luoyi Fu, Xinbing Wang (Shanghai Jiaotong University, China)
Ekram Hossain (University of Manitoba, Canada)

Improving TCP Performance During the Intra LTE Handover

Davide Pacifico, Matteo Pacifico, Carlo Fischione, Håkan Hjälmarsson, Karl Henrik Johansson (KTH Royal Institute of Technology, Sweden)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Honolulu Suite #1

AHSN-04: Energy Efficient Protocols for WSNs

Chair: Song Ci (University of Nebraska-Lincoln, USA), Sirisha Medidi (Boise State University, USA)

Lifetime Maximization via a New Cooperative MAC Protocol in Wireless Sensor Networks

Chao Zhai, Ju Liu, Lina Zheng, Hongji Xu (Shandong University, China)

Analytical Models for the Wake-up Receiver Power Budget for Wireless Sensor Networks

Maarten Lont, Dusan Milosevic (Eindhoven University of Technology, The Netherlands)
Guido Dolmans (Holst Centre, The Netherlands)
Peter Baltus, Arthur van Roermund (Eindhoven University of Technology, The Netherlands)

Optimal Flow Control for Utility-Lifetime Tradeoff in Wireless Sensor Networks

Jiming Chen, Shibo He, Youxian Sun (Zhejiang University, China)
Preetha Thulasiraman, Xuemin (Sherman) Shen (University of Waterloo, Canada)

Energy-Efficient k-Coverage for Wireless Sensor Networks with Variable Sensing Radii

Jiong Wang (Washington State University, USA)
Sirisha Medidi, Muralidhar Medidi (Boise State University, USA)

A Battery-Aware Deployment Scheme for Cooperative Wireless Sensor Networks

Jiucui Zhang, Song Ci, Hamid Sharif, Mahmoud Alahmad (University of Nebraska-Lincoln, USA)

TBCD-TDM: Novel Ultra-Low Energy Protocol for Implantable Wireless Body Sensor Networks

Fariborz Fereydouni-forouzandeh, Othmane Ait Mohamed (Concordia University, Canada)
Mohamad Sawan (École Polytechnique de Montréal, Canada)
Falah Awwad (United Arab Emirates University, UAE)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Honolulu Suite #2

AHSN-05: WSNs I

Chair: Sinem Coleri Ergen (University of California, Berkeley, USA)

Analysis of IEEE 802.15.4 Sensor Networks for Event Detection

Marco Gribaudo, Daniele Manini (University of Torino, Italy)
Alessandro Nordio, Carla-Fabiana Chiasserini (Politecnico di Torino, Italy)

MAC Protocol Engine for Sensor Networks

Sinem Coleri Ergen (Telecom Italia WSN Berkeley Lab, Berkeley, USA)
Piergiuseppe Di Marco, Carlo Fischione (Royal Institute of Technology, Sweden)

HE-MAC: Hop Extended MAC Protocol for Wireless Sensor Networks

Kyong-Tak Cho, Saewoong Bahk (Seoul National University, Korea)

MRSD: Multirate-based Service Differentiation for the IEEE 802.15.4 Wireless Sensor Network

Chewoo Na, Yaling Yang (Virginia Polytechnic Institute and State University, USA)

SPARE MAC Enhanced: A Dynamic TDMA Protocol for Wireless Sensor Networks

Fabio Turati, Matteo Cesana (Politecnico di Milano, Italy)

Luca Campelli (CEFRIEL Politecnico di Milano, Italy)

2C-WSN: A Configuration Protocol based on TDMA Communications over WSN

Fernando Royo (University of Castilla-La Mancha, Spain)

Miguel Lopez-Guerrero (Metropolitan Autonomous University, Mexico)

Luis Orozco-Barbosa, Teresa Olivares (University of Castilla-La Mancha, Spain)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Honolulu Suite #3

AHSN-06: WSNs II

Chair: Xi Zhang (Texas A&M University, USA)

Implementing Information Paths in a Dense Wireless Sensor Network

Masoumeh Haghpanahi, Mehdi Kalantari, Mark Shayman (University of Maryland, USA)

Fast Sensory Data Collection By Mobility-based Topology Exploration

Constantinos Marios Angelopoulos, Sotiris Nikolettseas (University of Patras and Computer Technology Institute, Greece)

Minimal Exposure Path Algorithms for Directional Sensor Networks

Liang Liu, Xi Zhang (Texas A&M University, USA)

Huadong Ma (Beijing University of Posts and Telecommunications, China)

A Fault Tolerant Dynamic Clustering Protocol of Wireless Sensor Networks

Lutful Karim, Nidal Nasser (University of Guelph, Canada)

Tarek Sheltami (King Fahd University of Petroleum & Minerals, Saudi Arabia)

Accelerating Initialization for Sensor Networks

Luoyi Fu, Linghe Kong, Xuemei Liu, Min-You Wu (Shanghai Jiao Tong University, China)

Event Reporting on Continuous Monitoring Wireless Sensor Networks

Mario E. Rivero-Angeles (Institut National de Recherche en Informatique et en Automatique/UPITA-IPN, France)

Nizar Bouabdallah (Institut National de Recherche en Informatique et en Automatique, France)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Coral Ballroom Lounge

AHSN-25: Topics in Ad Hoc Sensor and Mesh Networking II (Poster)

Chair: Yasamin Mostofi (University of New Mexico, USA)

Performance Evaluation of Asynchronous Ranging Algorithms

Hakyong Kim (LG Dacom, Korea)

Transmission Delay Analysis with Finite Coding Length in Wireless Cooperative Networks

Zhengguo Sheng (Imperial College London, UK)

Zhiguo Ding (Lancaster University, UK)

Kin K. Leung (Imperial College, UK)

Adaptive Optimal Buffer Management Policies for Realistic DTN

Yong Li, Mengjiong Qian, Depeng Jin, Li Su, Lieguang Zeng (Tsinghua University, China)

Range-only Tracking in Multipath Environments - An Algorithm Based on Particle Filtering

Thuraiappah Sathyan, Mark Hedley (Commonwealth Scientific and Industrial Research Organization, Australia)

Fusion and Diversity Trade-offs in Cooperative Estimation over Fading Channels

Mehrzad Malmirchegini, Yasamin Mostofi (University of New Mexico, USA)

Effect of Jamming Signals on Wireless Ad Hoc and Sensor Networks

Jahangir Sarker, Hussein Mouftah (University of Ottawa, Canada)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Iolani Suite 5-6

CISS-02: Sensor and Adhoc Network Security

Chair: Abderrahim Benslimane (University of Avignon & LIA/CERI, France)

Trust-Aware In-Network Aggregation for Wireless Sensor Networks

Hongmei Deng, Guang Jin, Kun Sun, Roger Xu, Margaret Lyell (Intelligent Automation Inc., USA)

Jahn Luke (AFRL/RYTIC, USA)

Software-Based Remote Code Attestation in Wireless Sensor Network

Tamer AbuHmed, Ninbold Nyamaa, DaeHun Nyang (Inha University, Korea)

An Efficient Post-Deployment Key Establishment Scheme for Heterogeneous Sensor Networks

Paul Loree, Kendall Nygard (North Dakota State University, USA)

Xiaojiang Du (Temple University, USA)

Secure Communication among Cell Phones and Sensor Networks

Arjan Duresi (Indiana University-Purdue University Indianapolis, USA)

Vamsi Paruchuri (University of Central Arkansas, USA)

Multi-path Key Establishment Against REM Attacks in Wireless Ad Hoc Networks

Tian Lan, Ruby Lee, Mung Chiang (Princeton University, USA)

A Novel Framework for Message Authentication in Vehicular Communication Networks

Hong Wen, Pin-Han Ho, Guang Gong (University of Waterloo, Canada)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Kahili 1

CQPRM-02: Quality and Performance in Wireless and Mobile Networks I

Chair: Tommaso Pecorella (Università di Firenze & CNIT, Italy)

QoS Scheduling for Heterogeneous Traffic in OFDMA-based Wireless Systems

Youngki Kim (KT, Korea)

Kyuhoo Son, Song Chong (KAIST, Korea)

Admission Control in the IEEE 802.11e WLANs based on Analytical Modelling and Game Theory

Jia Hu, Geyong Min (University of Bradford, UK)

Weijia Jia (City University of Hong Kong, China)

Mike E. Woodward (University of Bradford, UK)

Measurements of Multicast Service Discovery in a Campus Wireless Network

Se Gi Hong, Suman Srinivasan, Henning Schulzrinne (Columbia University, USA)

A Link Level Efficiency Measure for Wireless Home Area Networks

Oliver Hoffmann, Ruediger Kays (Dortmund University of Technology, Germany)

Optimization of Energy Efficient Transmission in Underwater Sensor Networks

Hongkun Yang, Liu Bin, Fengyuan Ren, Hao Wen, Chuang Lin (Tsinghua University, China)

Modeling User Cooperation Problem in Mobile Overlay Multicast as a Multi-agent System

Matoko Yoshino, Hiroyuki Kubo, Ryoichi Shinkuma, Tatsuro Takahashi (Kyoto University, Japan)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Sea Pearl Suite 5-6

CSS-02: Fixed and Mobile Service Platforms

Chair: Jalel Ben-othman (University of Versailles, France)

Design and Implementation of Aggregation Platform for Extended Ethernet Transport and Services

Shu Xiao (Cisco Systems, Inc., USA)

Chaoping Wu (Applied Micro Circuits Corporation, USA)

Sathish Teganahalli, Shakeel Ahmed, Hao Tran, Rajashekhar Reddy (Cisco Systems, Inc., USA)

A Flow-based Traffic Model for SIP Messages in IMS

Jie Xiao, Changcheng Huang, James Yan (Carleton University, Canada)

Applying Recommender System based Mashup to Web-Telecom Hybrid Service Creation

Guo Jie, Cheng Bo, Chen Junliang, Lix Xiangtao (Beijing University of Posts and Telecommunications, China)

On the Performance Gains of VoIP Aggregation and ROHC over a WirelessMAN-OFDMA Air Interface

Jarno Pinola, Esa Piri, Kostas Pentikousis (VTT Technical Research Centre of Finland, Finland)

Cross-Layer Based Data Management in Mobile Ad Hoc Networks

Mieso K. Denko, Jun Tian, Thabo K. R. Nkwe (University of Guelph, Canada)

Mohammad S. Obaidat (Monmouth University, USA)

SV-BCMCS: Scalable Video Multicast in Hybrid 3G/Ad-hoc Networks

Sha Hua (Polytechnic Institute of New York University, USA)

Yang Guo (Thomson, USA)

Yong Liu (Polytechnic Institute of New York University, USA)

Hang Liu (Thomson Inc., USA)

Shivendra Panwar (Polytechnic Institute of New York University, USA)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Sea Pearl Suite 3-4

CTS-02: MIMO and OFDM

Chair: Robert Heath (University of Texas at Austin, USA)

Analysis of Low Complexity Max Log MAP Detector and MMSE Detector for Interference Suppression in Correlated Fading

Rizwan Ghaffar, Raymond Knopp (Eurecom, France)

Interference Cancellation Based on Divergence Minimization for MIMO-OFDM Receivers

Carles Navarro Manchon, Gunvor Elisabeth Kirkelund, Bernard Fleury, Preben Mogensen, Luc Deneire, Troels Sørensen (Aalborg University, Denmark)

Christian Rom (Infineon Technologies, Denmark)

Effect of I/Q Imbalance on Pilot Design for MIMO OFDM Channel Estimation

Hlaing Minn, Daniel Munoz (University of Texas at Dallas, USA)

Symbol-Wise Beamforming for Co-Channel Interference Reduction in MIMO-OFDM Systems

André Pollok, Nick Letzepis, William G. Cowley (University of South Australia, Australia)

BER Analysis for MIMO-OFDM Beamforming with MRC under Channel Prediction and Interpolation Errors

F. Javier Lopez-Martinez, Eduardo Martos-Naya, Jose F. Paris (University of Málaga, Spain)

Andrea Goldsmith (Stanford University, USA)

Low-Complexity OFDM Channel Estimation in the Presence of I/Q Imbalance and Phase Noise

Payam Rabiei, Won Namgoong, Naofal Al-Dhahir (University of Texas at Dallas, USA)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Room 11

NGNI-02: Emerging Networking-II

Chair: TBD

On the Efficiency of Inter-Domain State Advertising in Multi-Domain Networks

Yingdi Yu, Yaohui Jin, Weiqiang Sun, Wei Guo, Weisheng Hu (Shanghai Jiao Tong University, China)

ARROW-TCP: Accelerating Transmission toward Efficiency and Fairness for High-speed Networks

Jianxin Wang, Liang Rong (Central South University, China)

Xi Zhang, Jianer Chen (Texas A&M University, USA)

Adaptive Dynamic Routing Supporting Service Management for Future Internet

Sasitharan Balasubramaniam, Dimitri Botvich, Ray Carroll, Julien Mineraud, William Donnelly (Waterford Institute of Technology, Ireland)

Tadashi Nakano (Osaka University, Japan)

Tatsuya Suda (University of California, Irvine, USA)

On Handover Procedure with Data Forwarding for Reducing Buffered User Data in Base Stations

Yoshinori Kitatsuji, Yujin Noishiki, Hidetoshi Yokota (KDDI R&D Laboratories Inc., Japan)

A Distribution-Based Approach to Anomaly Detection for 3G Mobile Networks

Alessandro D'Alconzo (Forschungszentrum Telekommunikation Wien, Austria)

Angelo Coluccia, Fabio Ricciato (University of Salento, Italy)

Peter Romirer-Maierhofer (Forschungszentrum Telekommunikation Wien, Austria)

Towards Green Broadband Access Networks

Pulak Chowdhury, Massimo Tornatore, Suman Sarkar, Biswanath Mukherjee (University of California Davis, USA)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Coral Ballroom Lounge

NGNI-12: Routing & Switching -V (Poster)

Chair: Seshadri Mohan (University of Arkansas at Little Rock, USA)

Energy-Efficient Multi-Pipeline Architecture for Terabit Packet Classification

Weirong Jiang, Viktor Prasanna (University of Southern California, USA)

Frame-scheduling for Input-queued Switches with Energy Reconfiguration Costs

Andrea Bianco, Paolo Giaccone, Marco Ricca (Politecnico di Torino, Italy)

Traffic Grooming: a Changing Role in Green Optical Networks

Shu Huang (Renaissance Computing Institute, USA)

Deepa Seshadri, Rudra Dutta (North Carolina State University, USA)

ClassBenchv6: An IPv6 Packet Classification Benchmark

Qiong Sun, XiaoHong Huang, Wei Yang, XiaoJu Zhou, Yan Ma (Beijing University of Posts and Telecommunications, China)

Cong Wang (Dublin City University, Ireland)

Hole Reshaping Routing in Large-Scale Mobile Ad-Hoc Networks

Peiqiang Li, Guojun Wang (The Central South University, China)

Jie Wu (Florida Atlantic University, USA)

Hong-Chuan Yang (University of Victoria, Canada)

PreDA: Predicate Routing for DTN Architectures over MANET

Flavio Esposito, Ibrahim Matta (Boston University, USA)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Iolani Suite 1-2

ONS-02: Survivability and Reconfiguration

Chair: Jason Jue (University of Texas at Dallas, USA)

Analyzing Two Conflicting Objectives of the WDM Lightpath Network Reconfiguration Problem

Fernando Solano Donado (Warsaw University of Technology, Poland)

Tree-based Protection of Multicast Services in WDM Mesh Networks

Long Long, Ahmed Kamal (Iowa State University, USA)

Performance Analysis of Nature Inspired Heuristics for Survivable Virtual Topology Mapping

Fatma Corut Ergin (Marmara University, Turkey)

Elif Kaldirim, Aysegul Yayimli, Sima Uyar (Istanbul Technical University, Turkey)

Differentiated Quality-of-Service in Survivable WDM Mesh Networks

Samir Sebbah, Brigitte Jaumard (Concordia University, Canada)

Handling Double-Link Failures in Metro Ethernet Networks Using Fast Spanning Tree Reconnection
Jian Qiu, Gurusamy Mohan, Kee Chaing Chua, Yong Liu (National University of Singapore, Singapore)

A Cross-Layer ILP Formulation for Finding p-Cycles in All-Optical Networks
Amir Askarian, Suresh Subramaniam (George Washington University, USA)
Maite Brandt-Pearce (University of Virginia, USA)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Sea Pearl Suite 1-2

SAC(CRN)-02: Performance Analysis of Cognitive Radio Networks

Chair: Linda Jiang Xie (University of North Carolina at Charlotte, USA)

On Outage Capacity of Secondary Users in Fading Cognitive Radio Networks with Primary User's Outage Constraint

Xin Kang (National University of Singapore, Singapore)
Rui Zhang, Ying-Chang Liang (Institute for Infocomm Research, Singapore)
Hari Krishna Garg (National University of Singapore, Singapore)

Channel Capacity Limits of Cognitive Radio with Imperfect Channel Knowledge

Himal Suraweera (National University of Singapore, Singapore)
Peter Smith (The University of Canterbury, New Zealand)
Mansoor Shafi (Telecom New Zealand, New Zealand)
Michael Faulkner (Victoria University, Australia)

Achievable Capacity of a Spectrum Sharing System over Hyper Fading Channels

Sabit Ekin (Texas A&M University at Qatar, Qatar)
Ferkan Yilmaz (KAUST, Saudi Arabia)
Hasari Celebi, Khalid A. Qaraqe (Texas A&M University at Qatar, Qatar)
Mohamed-Slim Alouini, (KAUST, Saudi Arabia)
Erchin Serpedin (Texas A&M University at Qatar, Qatar)

Achievable Rate of Gaussian Cognitive Z-Interference Channel with Partial Side Information

Yong Peng, Dinesh Rajan (Southern Methodist University, USA)

Capacity Impact of Location-aware Cognitive Sensing

Peng Jia, Mai Vu, Tho Le-Ngoc (McGill University, Canada)

Information Theoretic Results for Three-User Cognitive Radio Channels

Kyatsandra G. Nagananda (Lehigh University, USA)
Chandra Murthy (Indian Institute of Science, India)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Kahili 2

SAC(SSC)-02: Technologies for next-generation satellite and space networking

Chair: Igor Bisio (University of Genoa, Italy)

Routing Decisions Independent of Queuing Delays in Broadband LEO Networks

Janusz Jurski, Jozef Wozniak (Gdansk University of Technology, Poland)

Analysis of Uncoordinated ISL Networks

William G. Cowley, Marc P. Lavenant (University of South Australia, Australia)

The Single Frequency Satellite Network Concept: Multiple Beams for Unified Coverage

Giovanni E. Corazza, Claudio Palestini, Enzo Alberto Candreva, Alessandro Vanelli-Coralli (University of Bologna, Italy)

Experimental Evaluation of Delay Tolerant Networking (DTN) Protocols for Long-Delay Cislunar Communications

Ruhai Wang, Xuan Wu, Tiaotiao Wang (Lamar University, USA)
Tarik Taleb (NEC Europe Ltds, Germany)

Design and Evaluation Guidelines for Bandwidth Allocation Solutions in Satellite Environments

Igor Bisio, Mario Marchese (University of Genoa, Italy)

DART: Enhancing Data Acceleration with Compression for Satellite Links

Thava Iyer, Roksana Boreli, Golam Sarwar, Christoph Dwertmann (Information and Communications Technology Centre of Excellence, Australia)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Iolani Suite 3-4

SPC-02: Channel Estimation, Modeling and Equalization 1

Chair: Chintha Tellambura (University of Alberta, Canada), Tomohiko Taniguchi (Fujitsu Laboratories Ltd., Japan)

Blind Channel Equalization Using Expectation Maximization of Auxiliary Objective Function for Complex Constellations

Dongxin Xu (Infoture Inc., USA)
Kun Yan, Hsiao-Chun Wu (Louisiana State University, USA)

Joint Frequency Offset and Channel Estimation Methods for Two-Way Relay Networks

Gongpu Wang (University of Alberta, Canada)
Feifei Gao (Jacobs University, Bremen, Germany)
Chintha Tellambura (University of Alberta, Canada)

An EM Algorithm for Path Delay and Complex Gain Estimation of Slowly Varying Fading Channel for CPM Signals

Habti Abeida, Jean-Marc Brossier, Laurent Ros, Jordi Vilà-Valls (GIPSA-lab/DIS, France)

Time-Varying FIR Decision Feedback Equalization for MIMO Transmission over Doubly Selective Channels

Imad Barhumi (United Arab Emirates University, UAE)
Marc Moonen (Katholieke Universiteit Leuven, Belgium)

Statistical Modeling of Co-Channel Interference

Kapil Gulati, Aditya Chopra, Brian L. Evans (University of Texas, Austin, USA)
Keith R. Tinsley (Intel Corporation, USA)

Tri-diagonalizing Approach on Frequency Domain Equalization in a Doubly-selective Channel

Keisuke Saito, Julian Webber, Toshihiko Nishimura, Takeo Ohgane, Yasutaka Ogawa (Hokkaido University, Japan)

Tuesday, 1 December 2009

14:00 - 16:00

Location: S. Pacific Ballroom #1

WCS-05: Cooperative Communication: Beamforming

Chair: Tony Q. S. Quek (Institute for Infocomm Research & Nanyang Technological University, Singapore)

Effect of Feedback Delay on Downlink Amplify-and-Forward Relaying with Beamforming

Himal A. Suraweera (National University of Singapore, Singapore)
Theodoros A. Tsiftsis, George K. Karagiannidis (Aristotle University of Thessaloniki, Greece)
Michael Faulkner (Victoria University, Australia)

Power Allocation for Beamforming Relay Networks under Channel Uncertainties

Jingon Joung, Ali H. Sayed (University of California, Los Angeles, USA)

Downlink Distributed Beamforming Through Relay Networks

Yi Zheng, Steven Blostein (Queen's University, Canada)

Distributed Beamforming in Multiuser Multi-relay Networks with Guaranteed QoS

Duy H. N. Nguyen, Ha H. Nguyen, Tung T. Pham (University of Saskatchewan, Canada)

Cooperative Multi-User MIMO Wireless Systems Employing Precoding and Beamforming

Wibowo Hardjawana, Branka Vucetic, Yonghui Li, Zhendong Zhou (The University of Sydney, Australia)

An Optimized Cooperative Beamforming Scheme in MIMO Relay Broadcast Channels

Zhendong Zhou, Branka Vucetic (The University of Sydney, Australia)

Tuesday, 1 December 2009

14:00 - 16:00

Location: S. Pacific Ballroom #2

WCS-06: Limited Feedback MIMO

Chair: Megumi Kaneko (Kyoto University, Japan)

Vector Perturbation Precoding for MIMO Broadcast Channel with Quantized Channel Feedback

Peng Lu, Hong-Chuan Yang (University of Victoria, Canada)

Trellis Exploration Algorithm Aided Precoder Design in Maximizing MIMO Capacity with Limited Feedback

Dalin Zhu, Balasubramaniam Natarajan (Kansas State University, USA)

Joint Power Control and Beamforming Codebook Design for MISO Channels with Limited Feedback

Behrouz Khoshnevis, Wei Yu (University of Toronto, Canada)

Limited Feedback in Multiuser MIMO OFDM Systems Based on Rate Approximation

Jan Schreck, Peter Jung, Gerhard Wunder (Fraunhofer German-Sino Lab for Mobile Communications at Heinrich-Hertz-Institut, Germany)
Michael Ohm, Hans-Peter Mayer (Alcatel-Lucent Bell Labs, Germany)

Distributed Multicell and Multiantenna Precoding: Characterization and Performance Evaluation

Emil Björnson (Royal Institute of Technology, Sweden)
Randa Zakhour, David Gesbert (Eurecom, France)
Björn Ottersten (Royal Institute of Technology, Sweden)

Multi-Antenna Downlink Spatial Division Multiplexing with Opportunistic Feedback

Taiwen Tang, Teng Joon Lim (University of Toronto, Canada)

Tuesday, 1 December 2009

14:00 - 16:00

Location: S. Pacific Ballroom #3

WCS-07: Resource Allocation for OFDMA

Chair: Xiaoli Chu (King's College London, UK)

Optimal Resource Allocation in the OFDMA Downlink with Feedback of Buffer State Information

Rajiv Agarwal, John M. Cioffi (Stanford University, USA)

A Graph-based Resource Allocation Algorithm for Downlink MIMO-OFDMA Networks

Ahmed Zaki, Abraham O. Fapojuwo (University of Calgary, Canada)

Delay-Optimal Resource Allocation for OFDMA Systems via Stochastic Approximation

Vincent K. N. Lau, Ying Cui (Hong Kong University of Science and Technology, Hong Kong)

A Distributed Power Allocation Algorithm with Inter-cell Interference Coordination for Multi-cell OFDMA Systems

Gangming Lv, Shihua Zhu, Hui Hui (Xi'an Jiaotong University, China)

On the Modeling of a Non-cooperative Multicell OFDMA Resource Allocation Game with Integer Bit-Loading

Zhenyu Liang (National University of Singapore, Singapore)

Yong Huat Chew (Institute for Infocomm Research, Singapore)

Chi Chung Ko (National University of Singapore, Singapore)

A Fair Radio Resource Allocation Scheme for Ubiquitous High-data-rate Coverage in OFDMA-based Cellular Relay Networks

Mohamed Salem, Abdulkareem Adinoyi, Halim Yanikomeroglu, David Falconer (Carleton University, Canada)

Young-Doo Kim (Samsung Electronics, Korea)

Tuesday, 1 December 2009

14:00 - 16:00

Location: S. Pacific Ballroom #4

WCS-08: Equalization

Chair: Xiaolin Hou (DOCOMO Beijing Communications Laboratories, Ltd., China)

Semi-Blind Gradient-Newton CMA and SDD Algorithm for MIMO Space-Time Equalisation

S. Chen, L. Hanzo, H. -T. Cheng (University of Southampton, UK)

Layered Frequency-Domain Equalization for Single Carrier MIMO Systems with Multiple Carrier Frequency Offsets

Jian Zhang, Yahong Zheng (Missouri University of Science and Technology, USA)

A Low Complexity Two Stage MMSE-Based Receiver for Single-Carrier Frequency-Domain Equalization Transmissions over Frequency-Selective Channels

Homa Eghbali, Sami Muhaidat (Simon Fraser University, Canada)

Naofal Al-Dhahir (University of Texas at Dallas, USA)

Training Sequence versus Cyclic Prefix for CPM with Frequency Domain Equalization

Wim Van Thillo, Valery Ramon, Andre Bourdoux (Interuniversity Micro-Electronics Center, Belgium)

François Horlin (Université Libre de Bruxelles, Belgium)

Kristof Sleurs (Katholieke Universiteit Leuven, Belgium)

Rudy Lauwereins (Interuniversity Micro-Electronics Center, Belgium)

Space-Time Equalization for Asynchronous Multiuser Bit-Interleaved Coded OFDM

Taiwen Tang, Teng Joon Lim (University of Toronto, Canada)

Iterative versus Adaptive Equalizers in Time-Variant Channels

Clemens Buchacher, Joachim Wehinger (Infineon Technologies AG, Germany)

Mario Huemer (Klagenfurt University, Austria)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Coral Ballroom Lounge

WCS-38: Topics in Propagation and Channel Modeling (Poster)

Chair: Camillo Anthony Gentile (National Institute of Standards and Technology, USA)

Reflection Coefficient Measurement for House Flooring Materials at 57-64 GHz

Javad Ahmadi-Shokouh (University of Manitoba, Canada)

Sima Noghianian (University of North Dakota, USA)

Ekram Hossain, Majid Ostad-Rahimi, James Dietrich (University of Manitoba, Canada)

SAR Analysis in Dispersive Tissues for In Vivo UWB Body Area Networks

Toshiaki Koike-Akino (Harvard University, USA)

A Comprehensive Spatial-Temporal Channel Propagation Model for the Ultra-Wideband Spectrum 2-8 GHz

Camillo Gentile, Sofia Martinez Lopez, Alfred Kik (National Institute of Standards and Technology, USA)

On-chip Integrated Antenna Structures in CMOS for 60 GHz WPAN Systems

Felix Gutierrez Jr., Kristen Parrish, Theodore J. Rappaport (University of Texas at Austin, USA)

Improved Channel Sounding using Zero Correlation Zone Sequences

Reginald Cooper, Daniel Stancil (Carnegie Mellon University, USA)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Coral Ballroom #1

WNS-03: Cross-layer Design

Chair: Hans-Juergen Zepernick (Blekinge Institute of Technology, Sweden)

Power Allocation for Cooperative Diversity Networks with Inaccurate CSI: A Robust and Constrained Kalman Filtering Approach

Mohamad Khatarr Awad, Velupillai Mahinthan, Xeumin (Sherman) Shen, Jon W. Mark (University of Waterloo, Canada)

Multi-Team Data Flow Optimization in Wireless Multi-rate Multi-hop Networks

Qian Zhang (Hong Kong University of Science and Technology, Hong Kong)

Hierarchical Network Formation Games in the Uplink of Multi-Hop Wireless Networks

Walid Saad (UNIK - University of Oslo, Norway)

Quanyan Zhu, Tamer Basar (University of Illinois at Champaign-Urbana, USA)

Zhu Han (University of Houston, USA)

Are Hjørungnes (UNIK - University of Oslo, Norway)

Distributed Joint Resource Allocation in Multi-Radio Multi-Channel Wireless Mesh Networks

Kewei Li, Furong Wang (Huazhong University of Science and Technology, China)
Yan Zhang (Simula Research Laboratory, Norway)
Fan Zhang, Xu Xie (Huazhong University of Science and Technology, China)

Using 802.11 MAC Retransmissions for Path Selection in Multi-homed Transport Layer Protocols

Sheila Fallon, Paul Jacob, Yuansong Qiao (Athlone Institute of Technology, Ireland)
Liam Murphy (University College Dublin, Ireland)
Austin Hanley (Athlone Institute of Technology, Ireland)

Cross-Layer Resource Allocation for Efficient Message Dissemination in Rural Infostation Systems

Hao Liang, Weihua Zhuang (University of Waterloo, Canada)

Tuesday, 1 December 2009

14:00 - 16:00

Location: Coral Ballroom #2

WNS-04: Handoff and Mobility Management

Chair: Vincent Wong (University of British Columbia, Canada)

Distributed or Centralized Mobility?

Philippe Bertin, Servane Bonjour (Orange Labs, France)
Jean-Marie Bonnin (Telecom Bretagne, France)

A QoS-Based Vertical Handoff Scheme for Interworking of WLAN and WiMAX

Dong Ma, Maode Ma (Nanyang Technological University, Singapore)

A Group-based Handoff Scheme for Correlated Mobile Nodes in Proxy Mobile IPv6

Yong Li, Yurong Jiang, Haibo Su, Depeng Jin, Li Su, Lieguang Zeng (Tsinghua University, China)

Network-based Micro-Mobility in Wireless Mesh Networks: is MPLS convenient?

Rosario G. Garroppo, Stefano Giordano, Luca Tavanti (University of Pisa, Italy)

Network Friendliness of Mobility Management Protocols

Md Sazzadur Rahman, Mohammed Atiquzzaman (University of Oklahoma, USA)

UPMT: Universal Per-application Mobility Management using Tunnels

Marco Bonola, Stefano Salsano, Andrea Polidoro (University of Roma "Tor Vergata", Italy)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Honolulu Suite #1

AHSN-07: WSNs III

Chair: Yi Shang (University of Missouri, USA), Arunabha Sen (Arizona State University, USA)

Fusion of Decisions Modeled as Weak Signals in Wireless Sensor Networks

Jintae Park, Kiseon Kim (Gwangju Institute of Science and Technology, Korea)
Eun Ro Kim (Agency for Defense Development, Korea)
Georgy Shevlyakov (St. Petersburg State Polytechnic University, Russian Federation)

Decentralized Cooperative Positioning and Tracking Based on a Weighted Sign Algorithm for Wireless Sensor Networks

Dong-Shing Wu, Chin-Liang Wang (National Tsing Hua University, Taiwan)

Distributed faulty sensor detection

Peng Zhuang, Dan Wang, Yi Shang (University of Missouri - Columbia, USA)

Irregular Sensing Range Detection Algorithm for Coverage Protocols in Wireless Sensor Networks

Xin Fei, Azzedine Boukerche (University of Ottawa, Canada)

Regina Araujo (Federal University of São Carlos, Brazil)

Cooperative Communications with Relay Selection for QoS Provisioning in Wireless Sensor Networks

Xuedong Liang (University of Oslo, Norway)

Ilangko Balasingham (Norwegian University of Science Technology, Norway)

Victor C. M. Leung (University of British Columbia, Canada)

Approximation Algorithm for Avoiding Hotspot Formation of Sensor Networks for Temperature Sensitive Environments

Nibedita Das, Pavel Ghosh, Arunabha Sen (Arizona State University, USA)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Honolulu Suite #2

AHSN-08: Data Collection and Aggregation

Chair: Xiang-Yang Li (Illinois Institute of Technology, USA), Daniel Mosse (University of Pittsburgh, USA)

Efficient Data Aggregation in Multi-hop WSNs

XiaoHua Xu, ShiGuang Wang, Xufei Mao, Shao-Jie Tang, Ping Xu, Xiang-Yang Li (Illinois Institute of Technology, USA)

Considering Link Qualities in Fault Tolerant Aggregation in Wireless Sensor Networks

Sameh Gobriel (Intel Corporation, USA)

Sherif Khattab (Cairo University, Egypt)

Daniel Mosse, Rami Melhem (University of Pittsburgh, USA)

Data Collection Capacity of Random-Deployed Wireless Sensor Networks

Siyuan Chen, Yu Wang (University of North Carolina at Charlotte, USA)

Xiang-Yang Li (Illinois Institute of Technology, USA)

Xinghua Shi (University of Chicago, USA)

Efficient Data Collection for Wireless Networks: Delay and Energy Tradeoffs

Chao Ren (Northwestern Polytechnical University, China)

XuFei Mao, Xiang-Yang Li, Ping Xu (Illinois Institute of Technology, USA)

GuoJun Dai (Hangzhou Dianzi University, China)

Reduce Data Aggregation Latency by Using Partially Overlapped Channels in Sensor Networks

Baobing Wang, Xiaohua Jia (City University of Hong Kong, Hong Kong)

Biased Sink Mobility with Adaptive Stop Times for Low Latency Data Collection in Sensor Networks

Athanasios Kinalis, Sotiris Nikolettseas, Dimitra Patroumpa (University of Patras and Computer Technology Institute, Greece)

Jose Rolim (Centre Universitaire d' Informatique, Switzerland)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Honolulu Suite #3

AHSN-09: WMNs

Chair: Terence D. Todd (McMaster University, Canada)

Route Capacity Estimation Based Admission Control and QoS Routing for Mesh Networks

Chi Harold Liu, Athanasios Gkelias, Kin K. Leung (Imperial College, UK)

On Supporting P2P-based VoD Services over Mesh Networks

Mostafa Fouda (Tohoku University, Japan)

Tarik Taleb (NEC Europe Ltds, Germany)

Mohsen Guizani (Western Michigan University, USA)

Yoshiaki Nemoto, Nei Kato (Tohoku University, Japan)

A Wireless Network Coding Scheme with Forward Error Correction Code in Wireless Mesh Networks

Jeong-Yoon Lee, Woo-Jae Kim, Joo-Young Baek, Young-Joo Suh (Pohang University of Science and Technology, Korea)

Load-Balancing Gateway Selection Method in Multi-hop Wireless Networks

Kotaro Tada, Miki Yamamoto (Kansai University, Japan)

Managing Traffic Growth in Solar Powered Wireless Mesh Networks

Ghada H. Badawy, Amir A. Sayegh, Terence T. Todd (McMaster University, Canada)

A Performance Model for Integrated Wireless Mesh Networks and WLANs with Heterogeneous Stations

Yulei Wu, Geyong Min (University of Bradford, UK)

Keqiu Li (Dalian University of Technology, China)

Ahmed Y. Al-Dubai (Napier University, UK)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Coral Ballroom Lounge

AHSN-26: Topics in Ad Hoc Sensor and Mesh Networking III (Poster)

Chair: Subhrakanti Dey (University of Melbourne, Australia)

An Adaptive Forwarding Scheme for Message Delivery over Delay Tolerant Networks

Fen Hou, Xeumin (Sherman) Shen (University of Waterloo, Canada)

Distortion Outage Minimisation in Rayleigh Fading Using Limited Feedback

Chih-Hong Wang, Dey Subhrakanti (University of Melbourne, Australia)

Mechanism for Coding-Aware Opportunistic Retransmission in Wireless Networks

Yan Yan, Zhuang Zhao, Baoxian Zhang (Chinese Academy of Sciences, China)

Hussein Mouftah (University of Ottawa, Canada)

Jian Ma (Nokia Research Center, China)

Generalized Second Price Auction in Multi-Path Routing with Selfish Nodes

Xueyuan Su (Yale University, USA)

Sammy Chan, Gang Peng (City University of Hong Kong, Hong Kong)

Impact of Information on Network Performance -- An Information-Theoretic Perspective

Jun Hong, Victor O. K. Li (University of Hong Kong, Hong Kong)

Probabilistic Voting-Theoretic Strategies for Resource Allocation in Heterogenous Wireless Networks

Amitav Mukherjee (University of California, Irvine, USA)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Iolani Suite 5-6

CISS-03: Anomaly Detection

Chair: Thomas Gamer (Universität Karlsruhe (TH), Germany)

Online Anomaly Detection using KDE

Tarem Ahmed (BRAC University, Bangladesh)

Optimizing Network Anomaly Detection Scheme Using Instance Selection Mechanism

Yang Li (Chinese Academy of Sciences, China and Mobile Research Institute, China)

Tian-Bo Lu (Beijing University of Posts Telecommunications, China)

Li Guo (Chinese Academy of Sciences, China)

Zhi-Hong Tian (Harbin Institute of Technology, China)

Lin Qi (University of Maryland, USA)

Anomaly-based Identification of Large-Scale Attacks

Thomas Gamer (University of Karlsruhe, Germany)

Forecasting-based Sampling Decision for Accurate and Scalable Anomaly Detection

Fazirulhisyam Hashim, Abbas Jamalipour (University of Sydney, Australia)

AnomBench: A Benchmark for Volume-Based Internet Anomaly Detection

Shashank Shanbhag, Tilman Wolf (University of Massachusetts, USA)

BANBAD -- A Centralized Belief-Networks-Based Anomaly Detection Algorithm for MANETs

Chaoli Cai (Western Michigan University, USA)

Aakash Gupta (University of Michigan, USA)

Rajib Paul (Western Michigan University, USA)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Kahili 1

CQPRM-03: Quality and Performance in Wireless and Mobile Networks II

Chair: Stefano Giordano (University of Pisa, Italy)

Capacity Gains of Some Frequency Reuse Schemes in OFDMA Networks

Thomas Bonald, Nidhi Hegde (Orange Labs, France)

Traffic-based Study of Femtocell Access Policy Impacts on HSPA Service Quality

Shaunak Joshi, Ray Cheung, Pooya Monajemi, John D. Villasenor (University of California, Los Angeles, USA)

On the Effect of Feedback Errors in Markov Models for SR ARQ Packet Delays

Leonardo Badia (IMT Lucca Institute for Advanced Studies, Italy)

The Impact of Channel Variations on Wireless Distributed Computing Networks

Xuetao Chen, Timothy R. Newman, Dinesh Datla, Tamal Bose, Jeffrey H. Reed (Wireless@VT, USA)

Uplink Scheduler and Admission Control for the IEEE 802.16 Standard

Juliana Borin, Nelson L. S. da Fonseca (University of Campinas, Brazil)

The Impact of Mobility on OFDMA-based Cellular Systems with Reuse Partitioning

Rubén Murillo-Pérez, Carmen Rodríguez Estrello, Felipe Cruz-Pérez (Instituto Politecnico Nacional, Mexico)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Sea Pearl Suite 5-6

CSS-03: Multimedia Applications and Services

Chair: Shiwen Mao (Auburn University, USA)

Distortion Prediction for Video Quality Optimization over Packet Switched Networks

Andrea Vesco, Enrico Masala, Carlo Novara (Politecnico di Torino, Italy)

Distributed Scheduling for Video Streaming over Multi-Channel Multi-Radio Multi-Hop Wireless Networks

Liang Zhou, Benoit Geller (ENSTA-ParisTech, France)

Baoyu Zheng, Sulan Tang, Jingwu Cui, Dengyin Zhang (Nanjing University of Posts and Telecommunications, China)

Analysis and Design of A Proportional-Integral Rate Controller for Streaming Videos

Yingsong Huang, Shiwen Mao (Auburn University, USA)

Buffer-based Low-Delay Playout Control Methods for IPTV Terminals

Masayuki Baba, Hiroyuki Kurokawa, Yoshiaki Kato (Mitsubishi Electric Corporation, Japan)

A Suboptimal Network Utility Maximization Approach for Scalable Multimedia Applications

Mohammad S. Talebi, Ahmad Khonsari, Mohammad H. Hajiesmaili (IPM, Iran)

Sina Jafarpour (Princeton University, USA)

Analysis of Patching Scheme from a Practical Perspective

Joonho Choi, Biswanath Mukherjee (University of California, Davis, USA)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Sea Pearl Suite 3-4

CTS-03: Training and Feedback

Chair: Nihar Jindal (University of Minnesota, USA)

Hybrid Pilot/Quantization based Feedback in Multi-Antenna TDD Systems

Umer Salim, David Gesbert, Dirk Slock (Eurecom, France)

Zafer Beyaztas (Accenture, The Netherlands)

How Much Training is Needed for Iterative Multiuser Detection and Decoding?

Mikko Vehkaperä (Norwegian University of Science and Technology, Norway)

Keigo Takeuchi (University of Electro-Communications, Japan)

Ralf Mueller (Norwegian University of Science and Technology, Norway)

Toshiyuki Tanaka (Kyoto University, Japan)

On Active Learning and Supervised Transmission of Spectrum Sharing Based Cognitive Radios by Exploiting Hidden Primary Radio Feedback

Rui Zhang (Institute of Infocomm Research, Singapore)

Coding Versus ARQ in Fading Channels: How Reliable Should the PHY Be?

Peng Wu, Nihar Jindal (University of Minnesota, USA)

MIMO Precoding with Limited Rate Feedback: Simple Quantizers Work Well

Mingguang Xu, Dongning Guo, Mike Honig (Northwestern University, USA)

Iterative NR Decoding and Channel Estimation for TDS-OFDM System
Qiuliang Xie, Kewu Peng, Fang Yang, Zhixing Yang (Tsinghua University, China)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Coral Ballroom Lounge

CTS-14: Topics in Communications Theory I (Poster)

Chair: Tony Q. S. Quek (Institute for Infocomm Research & Nanyang Technological University, Singapore)

A Fresh Look at Multicanonical Monte Carlo from a Telecom Perspective

Alberto Bononi (Università di Parma, Italy)

Leslie Rusch, Amirhossein Ghazisaeidi, Francesco Vacondio (Laval University, Canada)

Nicola Rossi (Università di Parma, Italy)

Coded-sequence Self-encoded Spread Spectrum Communications

Poomathi Duraisamy, Lim Nguyen (University of Nebraska-Lincoln, USA)

Dual Optimal Resource Allocation for Heterogeneous Transmission in OFDMA Systems

Chunhui Liu, Anke Schmeink, Rudolf Mathar (RWTH Aachen University, Germany)

Product of the Powers of Generalized Nakagami-m Variates and Performance of Cascaded Fading Channels

Ferkan Yilmaz, Mohamed-Slim Alouini (KAUST, Saudi Arabia)

Near-complementary Sequences of Various Lengths and Low PMEPR for Multicarrier Communications

Nam Yul Yu (Lakehead University, Canada)

Guang Gong (University of Waterloo, Canada)

Cross-layer Resource Allocation for Wireless Networks via Signomial Programming

Chathuranga Weeraddana, Marian Codreanu, Matti Latva-aho (University of Oulu, Finland)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Lehua Suite

NGNI-03: Peer-to-Peer Networking

Chair: Ashwin A. Gumaste (Indian Institute of Technology, Bombay/Massachusetts Institute of Technology, India)

P2P-ISP Cooperation: Risks and Mitigation in Multiple-ISP Networks

Aliye Ozge Kaya (Rutgers University, USA)

Mung Chiang (Princeton University, USA)

Wade Trappe (Rutgers University, USA)

Peer-to-Peer Single Hop Distributed Hash Tables

Luiz Monnerat (Petrobras, Brazil)

Claudio Amorim (Federal University of Rio de Janeiro, Brazil)

Scalability and Peer Churning in IP-TV: An Analytical Insight

Maria Luisa Merani, Gian Paolo Leonardi, Daniela Saladino (University of Modena and Reggio Emilia, Italy)

SPID: A Novel P2P-based Information Diffusion Scheme for Mobile Networks

Mohammad Towhidul Islam, Mursalin Akon, Xeumin (Sherman) Shen (University of Waterloo, Canada)

A Construction Scheme for Scale Free DHT-Based Networks

Salma Ktari, Artur Hecker, Houda Labiod (TELECOM ParisTech, France)

SFDHT: A DHT Designed for Server Farm

Lichun Li, Chunhong Zhang, Wei Mi, Yonghui Zhang, Tao Ma, Yang Ji, Xiaofeng Qiu (Beijing University of Posts and Telecommunications, China)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Iolani Suite 1-2

ONS-03: Optical Burst and Packet Switching

Chair: Ahmed Kamal (Iowa State University, USA)

Contention Resolution in Optical Burst Switched Networks using Spectral-Amplitude-Coding Optical Code Division Multiple Access

Mohammad Sowailam, Mohamed Morsy, Hossam Shalaby (Alexandria University, Egypt)

Packet Loss Differentiation using Network Layer Packet Redundancy in Optical Packet/Burst Switched Networks

Harald Overby (Norwegian University of Science and Technology, Norway)

Scheduling Bursts using Interval Graphs in Optical Burst Switching Networks

Xiaojun Cao, Yichuan Wang, Alexander Zelikovsky (Georgia State University, USA)

An Absolute and Fair QoS Differentiation Scheme For DWDM OBS Networks

Abdeltouab Belbekkouche, Abdelhakim Hafid, Mariam Tagmouti, Michel Gendreau (University of Montreal, Canada)

TCP Based Estimation Method for Loss Control in OBS Networks

Mohamed Faten Zhani (UQAM-Canada, ENSI-Tunisia, Canada)

Halima Elbiaze, Wael Hosny Fouad Aly (University of Quebec at Montreal, Canada)

Graphical Probabilistic Routing Model for OBS Networks with Realistic Traffic Scenario

Martin Lévesque, Halima Elbiaze (University of Quebec at Montreal, Canada)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Sea Pearl Suite 1-2

SAC(CRN)-03: Game Theory for Cognitive Radio Networks

Chair: Dusit Niyato (Nanyang Technological University, Singapore)

A Noncooperative Spectrum Sensing Game with Maximum Network Throughput

Wei Wang, Chen He (Shanghai Jiaotong University, China)

Price of Anarchy for Cognitive MAC Games

Lok Man Law, Jianwei Huang (The Chinese University of Hong Kong, Hong Kong)

Mingyan Liu (University of Michigan, USA)

Shuo-yen Li (The Chinese University of Hong Kong, Hong Kong)

Optimal Power Allocation Strategy Against Jamming Attacks Using the Colonel Blotto Game

Yongle Wu, Beibei Wang, K. J. Ray Liu (University of Maryland, USA)

Dynamic Power Management in Cognitive Radio Networks based on Constrained Stochastic Games

Chia-Wei Wang, Yu-Pin Hsu, Kai-Ten Feng (National Chiao Tung University, Taiwan)

A Hierarchical Game Approach to Inter-Operator Spectrum Sharing

Mehdi Bennis (University of Oulu, Finland)
Merouane Debbah, Samson Lasaulce (SUPELEC, France)
Alagan Anpalagan (Ryerson University, Canada)

On Spectrum Selection Games in Cognitive Radio Networks

Ilaria Malanchini, Matteo Cesana, Nicola Gatti (Politecnico di Milano, Italy)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Kahili 2

SAC(DS)-01: Advanced Coding and Signal Processing Algorithms in Data Storage

Chair: Hao Zhong (LSI Corporation, USA), Fatih Erden (Seagate Technology, USA)

Frame Synchronization for PPM-encoded Longitudinal Position Words in Magnetic Tape Storage

Giovanni Cherubini, Roy D. Cideciyan, Evangelos Eleftheriou, Jens Jelitto (IBM Research - Zurich, Switzerland)

Compensation of PLL Loop Delay in Read Channels for Tape Storage Systems

Sedat Oelcer, Evangelos Eleftheriou (IBM Research - Zurich, Switzerland)
Robert Hutchins (IBM-STG Tucson, USA)

A New Class of MDS Erasure Codes Based on Graphs

Nattakan Puttarak, Phisan Kaewprapha (Lehigh University, USA)
Boon Chong Ng (Nanyang Technological University, Singapore)
Jing (Tiffany) Li (Lehigh University, USA)

LDPC Decoding Strategies for Two-Dimensional Magnetic Recording

Anantha Raman Krishnan, Rathnakumar Radhakrishnan, Bane Vasic (University of Arizona, USA)

Performance Evaluation of the Probe Storage Channel

Thomas Parnell (Siglead Europe, UK)
Haralampos Pozidis (IBM Research, Switzerland)
Oleg Zaboronski (University of Warwick, UK)

Maximum-Likelihood Sequence Detector for Dynamic Mode High Density Probe Storage

Naveen Kumar (Iowa State University, USA)
Pranav Agarwal (University of Minnesota, USA)
Aditya Ramamoorthy (Iowa State University, USA)
Murti Salapaka (University of Minnesota, USA)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Iolani Suite 3-4

SPC-03: Channel Estimation, Modeling and Equalization 2

Chair: Jingxian Wu (University of Arkansas, USA), Tomohiko Taniguchi (Fujitsu Laboratories Ltd., Japan)

Improved BER Performance for MIMO-OFDM Systems with Interference Using Joint Parameter Estimation Spatial Filtering aided MAP Detection

Lisheng Fan (Shantou University, P.R. China)
Yangyang Zhang (University College London, UK)
Yongquan Jiang (Shantou University, China)
Kai-Kit Wong (University College London, UK)

A Reactive Tabu Search Based Equalizer for UWB MIMO-ISI Channels

Nagaraja Srinidhi, Saif K. Mohammed, Ananthanarayanan Chockalingam (Indian Institute of Science, India)

Robust Channel Estimation and Detection for Uplink Control Channel in 3GPP-LTE

Ramakrishna Raghavendra (Motorola, India)

Shirish Nagaraj (Motorola, USA)

Pradap Venkatramanan Konda (Motorola, India)

Phil Fleming (Motorola, USA)

Impact of DFE Error Propagation on FEC-Based High-Speed I/O Links

Rajan Narasimha (University of Illinois, Urbana-Champaign, USA)

Nirmal Warke (Texas Instruments Inc, USA)

Naresh Shanbhag (University of Illinois, Urbana-Champaign, USA)

A Single FPGA Filter-Based Multipath Fading Emulator

Saeed Fouladi Fard, Amirhossein Alimohammad (Ukalta Engineering, Canada)

Bruce Cockburn, Christian Schlegel (University of Alberta, Canada)

An Adaptive Approach to Estimation and Compensation of Frequency-Dependent I/Q Imbalances in MIMO-OFDM Systems

Shichuan Ma, Deborah D. Duran, Hami Sharif, Yaoqing (Lamar) Yang (University of Nebraska-Lincoln, USA)

Tuesday, 1 December 2009

16:30 - 18:30

Location: S. Pacific Ballroom #1

WCS-09: Cooperative Communication: Cellular Networks

Chair: Dong In Kim (Sungkyunkwan University, Korea)

The Resource-Optimized Differentially Modulated Hybrid AF/DF Cooperative Cellular Uplink

Li Wang, Lajos Hanzo (University of Southampton, UK)

Adaptive Multi-Tx Multi-Rx MIMO Transmission Scheme for LTE-Advanced Downlink

Xiaolin Hou, Zhan Zhang, Hidetoshi Kayama (DOCOMO Beijing Labs, China)

On the Performance of Compressed Interference Forwarding for Uplink Base Station Cooperation

Michael Grieger, Patrick Marsch (Dresden University of Technology, Germany)

John M. Cioffi (Stanford University, USA)

Gerhard Fettweis (Dresden University of Technology, Germany)

Multi-user Cooperative Communications with Relay-Coding for Uplink IMT-advanced 4G Systems

Lei Cao (University of Mississippi, USA)

Jinyun Zhang (Mitsubishi Electric Research Laboratories, USA)

Norio Kanno (Mitsubishi Electric Corporation, Japan)

A Decentralized Framework for Dynamic Downlink Base Station Cooperation

Sheng Zhou, Jie Gong, Zhisheng Niu (Tsinghua University, China)

Yunjian Jia (Hitachi, Ltd., Japan)

Peng Yang (Hitachi (China) Research & Development Corporation, China)

Dynamical Cooperative MAC based on Optimal Selection of Multiple Helpers

Yun Li, Bin Cao (Chongqing University of Post and Telecommunications, China)

Chonggang Wang (NEC Laboratories America, USA)

Xiaohu You (Southeast University, China)

Ali Daneshmand (AT&T, USA)

Hongcheng Zhuang (Huawei Technology Co. Ltd, China)

Tao Jiang (Huazhong University of Science and Technology, China)

Tuesday, 1 December 2009

16:30 - 18:30

Location: S. Pacific Ballroom #2

WCS-10: Propagation and Channel Modeling

Chair: Cheng-Xiang Wang (Heriot-Watt University, UK)

Impact of Mutual Coupling on MIMO Vehicle-to-vehicle Systems

Alenka Zajic (Naval Research Laboratory, USA)

A Geometry-Based Stochastic Model for Wideband MIMO Mobile-to-Mobile Channels

Xiang Cheng, Cheng-Xiang Wang (Heriot-Watt University, UK)

David Laurenson (University of Edinburgh, UK)

A Novel Coupling-based Model for Wideband MIMO Channel

Yan Zhang, Xinwei Hu, Yuanzhi Jia, Shidong Zhou, Xiang Chen, Jing Wang (Tsinghua University, China)

Stationarity Test for Wireless Communication Channels

Dmitry Umansky, Matthias Pätzold (University of Agder, Norway)

On the alpha-mu Autocorrelation and Power Spectrum Functions: Field Trials and Validation

Ugo Dias, Michel Yacoub (University of Campinas, Brazil)

Design of Measurement-Based Stochastic Wideband MIMO Channel Simulators

Dmitry Umansky, Matthias Pätzold (University of Agder, Norway)

Tuesday, 1 December 2009

16:30 - 18:30

Location: S. Pacific Ballroom #3

WCS-11: Scheduling

Chair: Ramachandran Venkatesan (Memorial University of Newfoundland, Canada)

A Game-Theoretic Approach to Decentralized Interference-Avoidance Scheduling for Cellular Systems: Algorithm and Equilibria

Igor Stanojev, Umberto Spagnolini (Politecnico di Milano, Italy)

Channel Aware Distributed Random Access

Guowang Miao, Geoffrey Ye Li (Georgia Institute of Technology, USA)

Ananthram Swami (Army Research Lab., USA)

A Multi-Gbps Millimeter-wave WPAN System based on STDMA with Heuristic Scheduling

Chin-Sean Sum, Zhou Lan, Mohammad Azizur Rahman, Junyi Wang, Tuncer Baykas, Ryuhei Funada, Hiroshi Harad, Shuzo Kato (National Institute of Information & Communications Technology, Japan)

Channel Norm-Based User Scheduler in Coordinated Multi-Point Systems

Shengqian Han, Chenyang Yang (Beihang University, China)

Mats Bengtsson (Royal Institute of Technology, Sweden)

Ana I. Pérez-Neira (University Politecnica de Catalunya, Spain)

A Low-Complexity Algorithm for Uplink Scheduling in Cooperative Cellular Networks with a Capacity-Constrained Backhaul Infrastructure

Fabian Diehm, Patrick Marsch, Gerhard Fettweis (Technische Universität Dresden, Germany)
Bhaskar Ramamurthi (Indian Institute of Technology, India)

Weighted-SNR-Based Fair Scheduling for Uplink OFDMA

Yao Ma, Alex Leith (Iowa State University, USA)
Mohamed-Slim Alouini (KAUST, Saudi Arabia)
Xeumin (Sherman) Shen (University of Waterloo, Canada)

Tuesday, 1 December 2009

16:30 - 18:30

Location: S. Pacific Ballroom #4

WCS-12: Channel Estimation and Synchronization

Chair: Weiyi Zhang (North Dakota State University, USA)

CFO Estimation and Compensation in Single Carrier Interleaved FDMA Systems

Yu Zhu (Fudan University, China)
Khaled Ben Letaief (Hong Kong University of Science & Technology, Hong Kong)

Performance of Superimposed Training-Based Channel Estimation in MIMO-CDMA Systems

Ayman Assra, Walaa Hamouda, Amr Youssef (Concordia University, Canada)

OFDM Channel Estimation with Optimal Threshold-Based Selection of CIR Samples

Stefano Rosati, Giovanni Emanuele Corazza, Alessandro Vanelli-Coralli (University of Bologna, Italy)

Optimal Wavelet Design for Multicarrier Modulation with Time Synchronization Error

Madan Kumar Lakshmanan, Homayoun Nikookar, Dzemal Karamehmedović (Delft University of Technology, The Netherlands)

Closed-Form Expressions for the Exact Cramér-Rao Bound for Parameter Estimation of Arbitrary Square QAM-Modulated Signals

Faouzi Bellili, Nesrine Atitallah, Sofiène Affes, Alex Stephenne (Institut National de la Recherche Scientifique, Canada)

EM Algorithm for Non-Data-Aided SNR Estimation of Linearly-Modulated Signals over SIMO Channels

Mohamed Ali Boujelben, Faouzi Bellili, Sofiène Affes, Alex Stephenne (Institut National de la Recherche Scientifique, Canada)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Coral Ballroom Lounge

WCS-39: Topics in Resource Management (Poster)

Chair: Hai Jiang (University of Alberta, Canada)

A Novel Radio Admission Control Scheme for Multiclass Services in LTE Systems

Manli Qian, Yi Huang, Jinglin Shi, Yao Yuan, Lin Tian (Chinese Academy of Sciences, China)
Eryk Dutkiewicz (Macquarie University, Australia)

Mode Selection-Based Channel Feedback Reduction Scheme for Opportunistic Scheduling in OFDMA Systems

Soomin Ko, Seungmin Lee, Hojoong Kwon, Byeong Gi Lee (Seoul National University, Korea)

Mitigating Performance Anomaly of TFRC in Multi-Rate IEEE 802.11 Wireless LANs

Kenichi Kashibuchi, Yoshiaki Nemoto, Nei Kato (Tohoku University, Japan)

An Adaptive Rate Assignment Strategy for CDMA2000 IS-856 Subject to RAB Delay

Kaveh Moezzi, Seyed Kian Jalaeddini, Amir Aghdam (Concordia University, Canada)
Mehdi Alasti (Global Technology Associates)
Vahid Tarokh (Harvard University, USA)

Rate Adaptation with NAK-Aided Loss Differentiation in 802.11 Wireless Networks

Anne N. Ngugi, Yuanzhu Peter Chen (Memorial University of Newfoundland, Canada)
Qing Li (Southwestern University of Finance and Economics, Chengdu, China)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Coral Ballroom #1

WNS-05: Resource Management

Chair: Zhifeng Tao (Mitsubishi Electric Research Laboratories, USA)

On Scheduling and Power Control in Multi-Cell Coordinated Clusters

Norbert Reider (Budapest University of Technology and Economics, Hungary)
Andras Racz, Gabor Fodor (Ericsson Research, Sweden)

Optimum Power Allocation against Information Leakage in Wireless Network

Shafi Bashar, Zhi Ding (University of California at Davis, USA)

Near Optimum Power Control Under Fairness Constraints in CoMP Systems

Gabor Fodor (Ericsson Research, Sweden)
Mikael Johansson, Pablo Soldati (Royal Institute of Technology, Sweden)

Maintaining Utility Fairness Using Weighting Factors in Wireless Networks

Mehri Mehrjoo, Mohamad Khattar Awad (University Of Waterloo, Canada)
Mehrdad Dianati (University of Surrey, UK)
Xeumin (Sherman) Shen (University of Waterloo, Canada)

Utility-Based Resource Allocation for Layer-Encoded Multimedia Multicasting over Wireless Relay Networks

Ya-Ju Yu, Ai-Chun Pang, Yan-Chi Fang, Pang-Feng Liu (National Taiwan University, Taiwan)

MDP-based CAC for Two-Dimension Spreading VSF-OFCDM in 4G Cellular Communications

Ben-Jye Chang (National Yunlin University of Science and Technology, Taiwan)
Ying-Hsin Liang (Nankai University of Technology, Taiwan)
Chih-Hsien Wu, Yung-Fa Huang (Chaoyang University of Technology, Taiwan)
Ren-Hung Hwang (National Chung-Cheng University, Taiwan)

Tuesday, 1 December 2009

16:30 - 18:30

Location: Coral Ballroom #2

WNS-06: Mobility Modeling and Mobility Effect

Chair: Maode Ma (Nanyang Technological University, Singapore)

Stochastic Properties and Application of City Section Mobility Model

Md Shohrab Hossain, Mohammed Atiqzaman (University of Oklahoma, USA)

Optimal Pattern in Epidemic Networks

Supriya Nirkhiwale, Caterina Scoglio (Kansas State University, USA)

Connectivity Analysis of Mobile Linear Networks with Delay Constraint

Jingxian Wu (University of Arkansas, USA)

Analyzing the Effect of Node Mobility in Clustered Wireless Ad Hoc Networks

Yanying Gu, R. Venkatesha Prasad, Ignas Niemegeers (Delft University of Technology, Netherlands)

An Efficient Multicast Search Scheme under 2D Markov Walk Model

Yao Yuan, Yucheng Zhang, Li Hu, Yi Huang, Manli Qian (Chinese Academy of Sciences, China)

Jihua Zhou (Chongqing Jinmei Communication Co., Ltd, China)

Jinglin Shi (Chinese Academy of Sciences, China)

Analytical Modelling of the GC-Based Handover Scheme with Heavy-Tailed Call Holding Times

Xiaolong Jin, Geyong Min, Jianmin Jiang (University of Bradford, UK)