

Monday, 08 April 2013
11:00-12:30

PHY 01: Network Coding I

Lattice-based Wyner-Ziv Coding for Parallel Gaussian Two-Way Relay Channels

Sinda Smirani (CEA, France); Mohammed Kamoun (CEA-LIST, France); Mireille Sarkiss (CEA LIST, France); Abdellatif Zaidi (Université Paris-Est Marne La Vallée, France); Pierre Duhamel (Lss Supelec, France)

Wireless Network-Coded Four-Way Relaying Using Latin Hyper-Cubes

Srishti Shukla (Indian Institute of Science, Bangalore, India); B. Sundar Rajan (Indian Institute of Science, India)

Two-Way Non-Coherent Physical-Layer Network Coded Differential Distributed Space-Time Block Coding

Kai Zhu (University of York, United Kingdom); Alister G. Burr (University of York, United Kingdom)

Multi-level Physical-Layer Network Coding for Gaussian Two-way Relay Channels

Zhiyong Chen (Shanghai Jiaotong University, P.R. China); Bin Xia (Shanghai Jiaotong University, P.R. China); Hui Liu (Shanghai JiaoTong University, P.R. China)

Hybrid AF and DF with Network Coding for Wireless Two Way Relay Networks

Yu Zhu (Fudan University, P.R. China); Xinhua Wu (Fudan University, P.R. China); Tianshi Zhu (Fudan University, P.R. China)

Asymptotic Behavior of Network Capacity under Spatial Network Coding

Farzan Farnia (Sharif University of Technology, Iran); S. Jamaloddin Golestani (Sharif University of Technology, Iran)

Monday, 08 April 2013
11:00-12:30

PHY 02: Communication Theory I - Secrecy

An Improved Achievable Secrecy Rate for the Relay-Eavesdropper Channel

Peng Xu (University of Science and Technology of China, P.R. China); Zhiguo Ding (Newcastle University, United Kingdom); Xuchu Dai (University of Science and Technology of China, P.R. China); Kin K. K. Leung (Imperial College, United Kingdom)

Using III-Conditioned Theory for Wireless Security in Time-Variant Channels

Wenyu Luo (national digital switching system engineering & technological R&D center, P.R. China)

Achieving Secrecy Capacity of MISO Fading Wiretap Channels with Artificial Noise

Qi Xiong (Nanyang Technological University, Singapore); Yi Gong (Nanyang Technological University, Singapore); Ying-Chang Liang (Institute for Infocomm Research, Singapore)

Secrecy Capacity Over Log-normal Fading Channel with Diversity Combining Techniques

Md. Zahurul Islam Sarkar (The University of Edinburgh, United Kingdom); Tharmalingam Ratnarajah (The University of Edinburgh, United Kingdom)

On the Physical Layer Security in Large Scale Cellular Networks

He Wang (Australian National University, Australia); Xiangyun Zhou (The Australian National University, Australia); Mark C Reed (UNSW Canberra, Australia)

Bits-to-Symbol Mappings for Superposition Coding Based HARQ Systems

Tumula V. K. Chaitanya (Linköping University, Sweden); Erik G. Larsson (Linköping University, Sweden)

Monday, 08 April 2013
11:00-12:30

PHY 03: Cognitive Radio I

Robust Beamforming for Relay-Aided Multiuser MIMO Cognitive Radio Networks

Tianxiang Luan (Tsinghua University, P.R. China); Feifei Gao (Tsinghua University, P.R. China); Xian-Da Zhang (Tsinghua University, P.R. China); James C. F. Li (NEC Laboratories China, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)

Network Utility Maximization of MIMO Cognitive Radio Network With Total Interference-Power Constraints

Yanqing Liu (Baylor University, USA); Liang Dong (Baylor University, USA)

A Novel Underlay TV Spectrum Sharing Scheme Based On Polarization Adaption for TD-LTE System

Dongming Li (Beijing University of Posts and Telecommunications, P.R. China); Caili Guo (Beijing University of Posts and Telecommunications, P.R. China); Zhimin Zeng (Beijing University of Posts and Telecommunications, P.R. China); Xiaolin Lin (Beijing University of Posts and Telecommunications, P.R. China)

Secondary Network Optimization for Overlaid Wireless Networks with MIMO Spatial Multiplexing

Xianling Wang (Beijing University of Posts and Telecommunications, P.R. China); Jianjun Liu (China Mobile Research Institute, P.R. China); Jian Geng (Beijing University of Posts and Telecommunications, P.R. China); Xin Zhang (Beijing University of Posts and Telecommunications, P.R. China); Dacheng Yang (Beijing University of Posts and Telecommunications, P.R. China)

Near-optimal Downlink Precoding of a MISO System for a Secondary Network Under the SINR Constraints of a Primary Network

Ki-Hong Park (King Abdullah University of Science and Technology, Saudi Arabia); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)

Optimal Linear Pre-coders for Opportunistic Spectrum Sharing with Arbitrary Input Assumption

Rui Zhu (Tsinghua, P.R. China)

Monday, 08 April 2013
11:00-12:30

PHY 04: Receivers I

Impact of I/Q Imbalance on the Performance of Two-Way CSI-Assisted AF Relaying

Jian Qi (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Sonia Aïssa (INRS, University of Quebec, Canada); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)

A Blind-ML Method for Frequency-Selective I/Q Mismatch Compensation in Low-IF Receivers

Aamir Ishaque (RWTH, Aachen University Germany, Germany); Gerd H. Ascheid (RWTH Aachen University, Germany)

Carrier Frequency Offset Estimation Approach for Multicarrier Transmission on Hexagonal Time-Frequency Lattice

Kui Xu (Institute of Communications Engineering, PLAUST, P.R. China); Wenfeng Ma (PLA University of Science and Technology, P.R. China); Lianguo Wu (PLA University of Science and Technology, P.R. China); Wei Xie (PLA University of Science and Technology, P.R. China); Dongmei Zhang (PLA University of Science and Technology, P.R. China); Youyun Xu (Shanghai Jiaotong University, P.R. China)

Towards Practical Channel Reciprocity Exploitation: Relative Calibration in the Presence of Frequency Offset

Maxime Guillaud (Vienna University of Technology, Austria); Florian Kaltenberger (Eurecom, France)

Interactive Distributed Detection with Conditionally Independent Observations

Shengyu Zhu (Syracuse University, USA); Earnest Akofo (Syracuse University, USA); Biao Chen (Syracuse University, USA)

Exploiting Cyclic Prefix in Turbo FDE Systems Using Factor Graph

Jindan Yang (University of Western Australia, Australia); Qinghua Guo (University of Wollongong, Australia); Defeng Huang (University of Western Australia, Australia); Nordholm Sven (Curtin University of Technology, Australia)

Monday, 08 April 2013
11:00-12:30

PHY 05: Energy Efficiency I

Energy Cooperation in Cellular Networks with Renewable Powered Base Stations

Yeow-Khiang Chia (Institute for Infocomm Research, Singapore); Sumei Sun (Institute for Infocomm Research, Singapore); Rui Zhang (National University of Singapore, Singapore)

Energy-efficient Uplink Training Design For Closed-loop MISO Systems

Xin Liu (Beihang University, P.R. China); Shengqian Han (Beihang University, P.R. China); Chenyang Yang (Beihang University, P.R. China); Chengjun Sun (Beijing Samsung Telecom R & D Center, P.R. China)

Energy-Efficient Downlink Transmission in Multi-Cell Coordinated Beamforming Systems

Xiaoming Wang (Southeast University, P.R. China); Pengcheng Zhu (National Mobile Communications Research Lab., P.R. China); Bin Sheng (Southeast University, P.R. China); Xiaohu You (National Mobile communication Research Lab., Southeast University, P.R. China)

On the Energy Efficiency of HARQ-IR Protocols for Wireless Network-Coded Butterfly Networks

Quoc-Tuan Vien (Glasgow Caledonian University, United Kingdom); Brian G Stewart (Glasgow Caledonian University, United Kingdom); Jinho Choi (Swansea University, United Kingdom); Huan X Nguyen (Middlesex University, United Kingdom)

Energy-Aware Power Allocation for Asymmetric Analog Network Coding with Statistical CSI

Chensi Zhang (Xidian University, P.R. China); Jianhua Ge (Xidian University, P.R. China); Jing Li (State Key Lab. of Integrated Service Networks, Xidian University, P.R. China); Yun Hu (Xidian University, P.R. China)

Spectrum Efficiency and Energy Efficiency Tradeoff for Heterogeneous Wireless Networks

Gaoning He (Huawei Technologies, P.R. China); Shunqing Zhang (Huawei Technologies, Co. Ltd., P.R. China); Yan Chen (Huawei, P.R. China); Shugong Xu (Huawei, P.R. China)

Monday, 08 April 2013

14:00-15:30

PHY 06: Channel Modeling and Characterization

Spatial-Temporal Wireless Network Channels

Yifan Chen (South University of Science and Technology of China, P.R. China); Lorenzo Mucchi (University of Florence, Italy); Rui Wang (The South University of Science and Technology of China, Hong Kong)

Channel Capacity of Magnetic Induction Based Wireless Underground Sensor Networks under Practical Constraints

Steven Kisseleff (University of Erlangen-Nuremberg, Germany); Wolfgang Gerstacker (University of Erlangen-Nuernberg, Germany); Robert Schober (University of British Columbia, Canada); Zhi Sun (State University of New York at Buffalo, USA); Ian F. Akyildiz (Georgia Institute of Technology, USA)

Deficiency of The Gilbert-Elliott Channel in Modeling Time Varying Channels

Benshuai Xu (University of Greenwich, United Kingdom); Predrag Rapajic (University of Greenwich, United Kingdom); Yifan Chen (South University of Science and Technology of China, P.R. China)

A New DVB-RCS Satellite Channel Model Based on Discrete Time Markov Chain and Quality Degree

Mauro Tropea (University of Calabria, Italy); Peppino Fazio (University of Calabria, Italy); Fiore Veltri (University of Calabria, Italy); Salvatore Marano (University of Calabria, Italy)

A Non-Stationary One-Ring Scattering Model

Alireza Borhani (University of Agder, Norway); Matthias Pätzold (University of Agder, Norway)

Experimental Validation of the CORNER Urban Propagation Model based on Signal Power Measurements in a Vehicular Environment

Abhinay Mukunthan (University of Wollongong, Australia); Craig S Cooper (University of Wollongong, Australia); Farzad Safaei (ICT Research Institute, University of Wollongong, Australia); Daniel Franklin (University of Technology Sydney, Australia); Mehran Abolhasan (University of Technology Sydney, Australia); Montserrat Ros (University of Wollongong, Australia)

Monday, 08 April 2013

14:00-15:30

PHY 07: Space-Time Coding

Space-Time Coding for Time and Frequency Asynchronous CoMP Transmissions

Yi Liu (Xidian University, P.R. China); Yongzhao Li (Xidian University, P.R. China); Danping Li (Xidian University, P.R.

China); Hailin Zhang (Xidian University, P.R. China)

Accurate BER Approximation for OSTBCs With Estimated CSI in Correlated Rayleigh Fading

Lennert Jacobs (Ghent University, Belgium); Marc Moeneclay (Ghent University, Belgium)

MC-CDMA Aided Multi-User Space-Time Shift Keying in Wideband Channels

Mohammad Ismat Kadir (University of Southampton, United Kingdom); Shinya Sugiura (Tokyo University of Agriculture and Technology, Japan); Sheng Chen (University of Southampton, United Kingdom); Lajos Hanzo (University of Southampton, United Kingdom)

Construction of Block Orthogonal STBCs and Reducing Their Sphere Decoding Complexity

G Jithamithra (Indian Institute of Science, India); B. Sundar Rajan (Indian Institute of Science, India)

Fast Block-wise Signal Processing for Layered STBC Systems

Chun-Ning Chiu (National Chung Cheng University, Taiwan); Tsung-Hsien Liu (National Chung Cheng University, Taiwan)

Diversity Analysis for Space-Time-Frequency (STF) Coded MIMO System with a General Correlation Model

Mang Liao (Beihang University, P.R. China); Youguang Zhang (Beihang University, P.R. China); Zixiang Xiong (Texas A&M University, USA)

Monday, 08 April 2013

14:00-15:30

PHY 08: Communication Theory II – Relays

Novel Nested Convolutional Lattice Codes for Multi-Way Relaying Systems over Fading Channels

Yuanye Ma (University of Sydney, Australia); Tao Huang (University of New South Wales, Australia); Jun Li (University of Sydney, Australia); Jinhong Yuan (University of New South Wales, Australia); Zihuai Lin (University of Sydney, Australia); Branka Vucetic (The University of Sydney, Australia)

On the Achievable Degrees of Freedom in a Class of Multi-user Half-duplex Relay Networks

Chao Wang (Royal Institute of Technology (KTH), Sweden); Mikael Skoglund (KTH Royal Institute of Technology, Sweden)

Fixed-Gain AF Relaying with Interference-Limited Destination in Rician/Nakagami-m Fading Channels

Anas M. Salhab (King Fahd University of Petroleum & Minerals, Saudi Arabia); Fawaz Al-Qahtani (Texas A&M University at Qatar, Qatar); Salam A. Zummo (KFUPM, Saudi Arabia); Hussein Alnuweiri (Texas A&M University, Qatar)

Rate Region for Deterministic Multiple Access Relay Channel

Yang Yu (Shanghai Jiaotong University, P.R. China); Wen Chen (Shanghai Jiao Tong University, P.R. China)

Achievable rate for a multi-source relaying system

Jun Li (University of Sydney, Australia); Jin Xu (ZTE, P.R. China); Zihuai Lin (University of Sydney, Australia); Branka Vucetic (The University of Sydney, Australia)

Sequential Slotted Amplify-Decode-and-Forward

Yiyong Chin (Queensland University of Technology, Australia); Anushka Widanagamage (Queensland University of Technology, Australia); Anagiyaddage D. S. Jayalath (Queensland University of Technology, Australia)

Monday, 08 April 2013

14:00-15:30

PHY 09: Precoding

Robust MMSE Precoding Strategy for Multiuser MIMO Relay Systems with Switched Relaying and Side Information

Yunlong Cai (Zhejiang University, P.R. China); Rodrigo C. de Lamare (University of York, United Kingdom); Lie-Liang Yang (University of Southampton, United Kingdom); Minjian Zhao (Zhejiang University, P.R. China)

Approximative Matrix Inverse Computations for Very-large MIMO and Applications to Linear Pre-coding Systems
Hemant Prabhu (Lund University, Sweden); Joachim Rodrigues (Lund University, Sweden); Ove Edfors (Lund University, Sweden); Fredrik Rusek (Lund University, Sweden)

On Generalized Spatial Modulation

Tanumay Datta (Indian Institute of Science, India); A. Chockalingam (Indian Institute of Science, India)

Performance Analysis on Precoding and Pilot Scheduling in Very Large MIMO Multi-cell Systems

Hairong Wang (Southeast University, P.R. China); Yongming Huang (Southeast University, P.R. China); Shi Jin (Southeast University, P.R. China); Fei Yu (Southeast University, P.R. China); Yang Luxi (SouthEast University, P.R. China)

Robust Tomlinson-Harashima Precoding Design in Amplify-and-Forward MIMO Relay Systems via MMSE Criterion

Lei Zhang (Zhejiang University, P.R. China); Yunlong Cai (Zhejiang University, P.R. China); Minjian Zhao (Zhejiang University, P.R. China); Jie Zhong (Zhejiang University, P.R. China)

Joint Source/Relay Precoding Designs in MIMO Two-Way AF Relay Systems with MMSE-SIC Receiver

Yinke Shi (University of Science and Technology of China, P.R. China); Zhengyu Zhang (PCNSS, P.R. China); Ling Qiu (PCN&SS Lab, P.R. China)

Monday, 08 April 2013

16:00-17:30

PHY 10: Coding and Modulation

GF(q) LDPC Coded Spread Dimension Scheme for Anti-jamming Communications

Haiyang Hu (Tsinghua University, P.R. China)

Construction of EIRA Codes with Enlarged Dual Diagonal Distance by EXIT Charts

Jianrong Bao (Hangzhou Dianzi University, P.R. China); Minjian Zhao (Zhejiang University, P.R. China); Jie Zhong (Zhejiang University, P.R. China); Yunlong Cai (Zhejiang University, P.R. China)

Adaptive Analog Fountain for Wireless Channels

Mahyar Shirvanimoghaddam (University of Sydney, Australia); Yonghui Li (University of Sydney, Australia); Branka Vucetic (The University of Sydney, Australia)

Turbo Trellis Coded Hierarchical Modulation for Cooperative Communications

Hua Sun (University of Southampton, United Kingdom); Yiru Shen (University of Southampton, United Kingdom); Soon Xin (Michael) Ng (University of Southampton, United Kingdom); Lajos Hanzo (University of Southampton, United Kingdom)

On the Complexity of Unary Error Correction Codes for the Near-Capacity Transmission of Symbol Values from an Infinite Set

Lajos Hanzo (University of Southampton, United Kingdom); Robert G Maunder (University of Southampton, United Kingdom); Wenbo Zhang (UOS, United Kingdom)

Low Complexity Network Error Correction Based on Nonbinary LDPC Codes over Matrix Channels

Yang Yu (Shanghai Jiaotong University, P.R. China); Wen Chen (Shanghai Jiao Tong University, P.R. China)

Monday, 08 April 2013

16:00-17:30

PHY 11: Energy Efficiency II

Performance Limits for Cognitive Small Cells

Matthias Wildemeersch (University of Twente, The Netherlands); Tony Q. S. Quek (Singapore University of Technology and Design (SUTD), Singapore); Alberto Rabbachin (Massachusetts Institute of Technology, USA); Cornelis H Slump (University of Twente, The Netherlands); Aiping Huang (Zhejiang University, P.R. China)

Trade-off of Average Area Spectrum Efficiency and Energy Efficiency

Long Zhao (Beijing University of Posts and Telecommunications, P.R. China); Hui Zhao (Beijing University of Posts and

Telecommunications, P.R. China); Kan Zheng (Beijing University of Posts&Telecommunications, P.R. China); Xingyu Xia (Beijing University of Posts & Telecommunications, P.R. China); Chengcheng Zhang (Beijing University of Posts and Telecommunication, P.R. China)

Energy-Efficient Channel Aggregation in Cognitive Radio Networks with Imperfect Sensing

Lei Li (University of Science and Technology of China, P.R. China); Wenzhong Zhang (China Ship Scientific Research Center, P.R. China); Sihai Zhang (University of Science and Technology of China, P.R. China); Zhao Ming (University of Science and Technology of China, P.R. China); Wuyang Zhou (University of Science and Technology of China, P.R. China)

The analysis of the Energy Efficiency for the Decode-and-Forward Two-Way Relay Networks

Huan Yu (Tsinghua University, P.R. China); Yunzhou Li (Tsinghua University, P.R. China); Xiaofeng Zhong (Tsinghua University, P.R. China); Lixuan Wang (State Key Laboratory of Wireless Mobile Communications (CATT), P.R. China); Jing Wang (EE, Tsinghua University, P.R. China)

Energy Efficient Transmission and Optimal Relay Location For Two-Way Relay System

Qi Sun (Beijing University of Posts and Telecommunications, P.R. China); Lihua Li (Beijing University of Posts and Telecommunications, P.R. China); Markku Juntti (University of Oulu, Finland)

Energy-Efficient Joint Beamforming and Antenna Selection for Multicast Systems

Bo Du (Southeast University, P.R. China); Wence Zhang (Southeast University, P.R. China); Cunhua Pan (Southeast University, P.R. China); Ming Chen (Southeast University, P.R. China)

Monday, 08 April 2013

16:00-17:30

PHY 12: Detection and Estimation I

Lattice Reduction Aided Detector for Dense MIMO via Ant Colony Optimization

José Carlos Marinello (State University of Londrina, Brazil); Taufik Abrão (State University of Londrina, Brazil)

Asymptotically Optimal Low-Complexity Estimation of Sampled Improper-Complex Second-Order Cyclostationary Random Process

Jeongho Yeo (Pohang University of Science and Technology (POSTECH), Korea); Joon Ho Cho (Pohang University of Science and Technology (POSTECH), Korea)

Fundamental Limits for Location and Velocity Estimation using Asynchronous Beacons

Mei Leng (Nanyang Technological University, Singapore); Wee Peng Tay (Nanyang Technological University, Singapore); Chong Meng Samson See (TL@NTU, Singapore); Sirajudeen Gulam Razul (Nanyang Technological University, Singapore)

Low Complexity Detection and Precoding for Massive MIMO Systems

Jun Won Choi (Qualcomm, USA); Byungju Lee (Korea University, Korea); Byonghyo Shim (Korea University, Korea); Insung Kang (Qualcomm Inc., USA)

The Modified Cramer-Rao Bound for Channel Estimation in Quantize-and-Forward Cooperative Systems

Iancu Avram (UGent, Belgium); Marc Moeneclaey (Ghent University, Belgium)

A Novel Modification of WSF for DOA Estimation

Haihua Chen (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Yiqing Zhou (Chinese Academy of Science, P.R. China); Lin Tian (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Jinglin Shi (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Jinlong Hu (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Masakiyo Suzuki (Graduate School of Engineering, Kitami Institute of Technology, Japan)

Monday, 08 April 2013
16:00-17:30

PHY 13: Compressive Sensing

Generalized Subspace Pursuit for Signal Recovery from Multiple-Measurement Vectors

Joe-Mei Feng (Academia Sinica, Taiwan); Chia-Han Lee (Academia Sinica, Taiwan)

Frequency Domain Compressive Sensing of Multicarrier-Based QAPM System

So-Ra Kim (Chungbuk National University, Korea); Heung-Gyoon Ryu (Chungbuk National University, Korea)

Performance Bounds of Compressed Sensing Recovery Algorithms for Sparse Noisy Signals

Xiangling Li (Beijing University of Post and Telecommunications, P.R. China); Qimei Cui (Beijing University of Posts and Telecommunications, P.R. China); Xiaofeng Tao (Beijing University of Posts and Telecommunications, P.R. China); Xianjun Yang (Beijing University of Post and Telecommunication, P.R. China); Waheed Ur Rehman (Beijing University of Posts and Telecommunications, P.R. China)

Compressive Sensing-based Channel Estimation for Massive Multiuser MIMO Systems

Sinh Nguyen (Concordia University, Canada); Ali Ghayeb (Concordia University, Canada)

Joint SNR and Channel Estimation for 60 GHz Systems using Compressed Sensing

Bo Gao (Tsinghua University, P.R. China); Zhenyu Xiao (Tsinghua University, P.R. China); Changming Zhang (Tsinghua University, P.R. China); Depeng Jin (Tsinghua University, P.R. China); Lieguang Zeng (Tsinghua University, P.R. China)

Collaborative Compressive Spectrum Sensing Using Kronecker Sparsifying Basis

Ahmed Mohamed Elzanati (Sinai University, Egypt); Mohamed Abdelkader (Port Said University, USA); Karim G Seddik (American University in Cairo, Egypt); Atef Ghuniem (Suez Canal University, Egypt)

Tuesday, 09 April 2013

11:00-12:30

PHY 14: Network Coding II

A Fully Distributed Opportunistic Network Coding Scheme for Cellular Relay Networks

Yulong Zou (University of Western Ontario, Canada); Jia Zhu (Nanjing University of Posts and Telecommunications, P.R. China); Baoyu Zheng (Nanjing University of Posts and Telecommunications, P.R. China)

On The Physical Layer Network Coded LDPC Codes for A Multiple-Access Relaying System

Jun Li (University of Sydney, Australia); Zihuai Lin (University of Sydney, Australia); Jin Xu (ZTE, P.R. China); Branka Vucetic (The University of Sydney, Australia)

Exact Outage Probability and Power Allocation of Two Nodes in Cooperative Networks

Jin-Taek Seong (Gwangju Institute of Science and Technology, Korea); Heung-No Lee (Gwangju Institute of Science and Technology, Korea)

Reliable Throughput for Two-way Relay Systems by Network Coding

Wanhua Lin (Southeast University, P.R. China); Xiangyang Wang (Southeast University, P.R. China)

Space-Time Analog Network Coding for Multiple Access Relay Channels

Lili Wei (Shanghai Jiao Tong University, P.R. China); Wen Chen (Shanghai Jiao Tong University, P.R. China)

Selection of Spatially-distributed Relays for Two-way Relaying with Network Coding

Jiang Yunxiang (The Hong Kong Polytechnic University, P.R. China); Francis C.M. Lau (The Hong Kong Polytechnic University, Hong Kong); Zeeshan Sattar (Hong Kong Polytechnic University, Hong Kong); Qingfeng Zhou (City University of Hong Kong, Hong Kong)

Tuesday, 09 April 2013

11:00-12:30

PHY 15: Cognitive Radio II

Performance Bounds on Cyclostationary Feature Detection over Fading Channels

Juei-chin Shen (University of Manchester, United Kingdom); Emad Alsusa (Manchester University, United Kingdom); Daniel K. C. So (University of Manchester, United Kingdom)

Cooperative Two-Way Selective Relaying in Spectrum-Sharing Systems with Distributed Beamforming

Ali Afana (Concordia University, Canada); Ali Ghayeb (Concordia University, Canada); Vahid Asghari (University of Quebec, INRS-EMT, Canada); Sofiene Affes (INRS-EMT, Canada)

Spectrum Sharing On Interference Channels With A Cognitive Relay

Qiang Li (Huazhong University of Science and Technology, P.R. China); Ashish Pandharipande (Philips Research Laboratories, The Netherlands); See Ho Ting (Nanyang Technological University, Singapore)

Area Spectral Efficiency of Underlay Cognitive Radio Transmission over Rayleigh Fading Channels

Lei Zhang (University of Victoria, Canada); Hong-Chuan Yang (University of Victoria, Canada); Mazen Omar Hasna (Qatar University, Qatar)

Effective Capacity and Interference Constraints in Multichannel Cognitive Radio Network

Mohamed Elaleem (Ryerson Canada, Canada); Lian Zhao (Ryerson University, Canada)

Effective Capacity Optimization Based on Overlay Cognitive Radio Network in Gamma Fading Environment

Mohamed Elaleem (Ryerson Canada, Canada); Lian Zhao (Ryerson University, Canada)

Tuesday, 09 April 2013

11:00-12:30

PHY 16: Communication Theory III

A New Lower Bound on Error Probability for Nonuniform Signals over AWGN Channels

Zhiwei Mao (Fairleigh Dickinson University, USA); Julian Cheng (University of British Columbia, Canada); Jian Shen (USA)

Comparison of Different Multicast Strategies in Wireless Identically Distributed Channels

Erzim Veshi (TU Darmstadt, Germany); Alexander Kuehne (TU Darmstadt, Germany); Anja Klein (TU Darmstadt, Germany)

Maximizing Weighted Sum-Rate in the Uplink of Wireless Systems Using a Second-Order Approximation

Joerg Schaepperle (Alcatel-Lucent, Germany)

The Two-hop MISO Broadcast Network with Quantized Delayed CSIT

Zhao Wang (Royal Institute of Technology (KTH), Sweden); Chao Wang (Royal Institute of Technology (KTH), Sweden); Ming Xiao (Royal Institute of Technology, Sweden); Mikael Skoglund (KTH Royal Institute of Technology, Sweden)

Effect of Receiver Spatial Diversity on the Degrees of Freedom Region in Multi-Cell Random Beamforming

Hieu Duy Nguyen (National University of Singapore, Singapore); Rui Zhang (National University of Singapore, Singapore); Hon Tat Hui (National University of Singapore, Singapore)

Finite-SNR Diversity-Multiplexing Tradeoff for Spectrum-Aggregated Transmission

Jun Li (Zhejiang University, P.R. China); Zhaoyang Zhang (Zhejiang University, P.R. China); Chao Wang (Zhejiang University, P.R. China); Wei Wang (Zhejiang University, P.R. China); Caijun Zhong (Zhejiang University, P.R. China)

Tuesday, 09 April 2013

11:00-12:30

PHY 17: Limited and Delayed Feedback

Net Degrees of Freedom of Recent Schemes for the MISO BC with Delayed CSIT and Finite Coherence Time

Yohan Lejosne (EURECOM, France); Dirk Slock (Eurecom, France); Yi Yuan-Wu (Orange Labs, France)

Analog Feedback for MIMO-OFDM Systems

Pengcheng Zhu (National Mobile Communications Research Lab., P.R. China); Yan Wang (National Mobile Communication Research Lab., Southeast University, P.R. China); Xiaohu You (National Mobile communication Research Lab., Southeast University, P.R. China); Yuanjie Li (Huawei Technologies, P.R. China)

Feedback Granularity Control for Multiuser MIMO-OFDMA Systems

Hyun-Myung Kim (Pohang University of Science and Technology, Korea); Moonsik Min (POSTECH, Korea); Gi-Hong Im (POSTECH, Korea)

Opportunistic Feedback of Channel Information in Multi-user MIMO Environments

Jeong Soo Park (Seoul National University, Korea); Yong-suk Byun (Seoul National University, Korea); Moon Hyung Yoon (Seoul National University, Korea); Yong-Hwan Lee (Seoul National University, Korea)

User-Specific Coordination of Limited Feedback with Power Allocation in Multi-point System

Chi Zhang (Beijing University of Posts and Telecommunications, P.R. China); Chang Yongyu (Beijing University of Posts & Telecommunications, P.R. China); Dacheng Yang (Beijing University of Posts and Telecommunications, P.R. China)

Enhanced Limited Rate Implicit CSI Feedback and its Usage in Covariance Matrix Based MU-MIMO

Yang Li (Xi'an Jiaotong University, P.R. China); Shihua Zhu (Xi'an Jiaotong University, P.R. China); Hui Tong (Panasonic Beijing Laboratories, P.R. China); Ming Xu (Panasonic Beijing Laboratories, P.R. China)

Tuesday, 09 April 2013

11:00-12:30

PHY 18: Interference Alignment

Achievable Diversity Gain of Interference Channel

Shenghui Song (The Hong Kong University of Science and Technology, Hong Kong); Jing Zhong (HKUST, Hong Kong); Khaled Ben Letaief (Hong Kong University of Science & Technology, Hong Kong)

Distributed Interference Alignment and Power Control for Wireless MIMO Interference Networks

Hamed Farhadi (KTH Royal Institute of Technology, Sweden); Chao Wang (Royal Institute of Technology (KTH), Sweden); Mikael Skoglund (KTH Royal Institute of Technology, Sweden)

Design of ESPAR Based Blind Interference Alignment for Cellular Systems

Rongrong Qian (Heriot-Watt University, United Kingdom); Mathini Sellathurai (Heriot-Watt University, United Kingdom)

A Novel Interference Cancellation Scheme with Constellation Alignment

Rui Wang (The South University of Science and Technology of China, Hong Kong); Yinggang Du (Huawei Technologies Co., Ltd, P.R. China); Yifan Chen (South University of Science and Technology of China, P.R. China)

Enhanced Interference Whitening for Co-Channel Interference Suppression

Yingqun Yu (Samsung US R&D Center, USA); Jungwon Lee (Samsung US R&D Center, USA); Inyup Kang (Samsung Electronics, USA)

New Uplink Opportunistic Interference Alignment: An Active Alignment Approach

Hui Gao (Singapore University of Technology and Design, Singapore); Johann Leithon (Singapore University of Technology and Design, Singapore); Chau Yuen (Singapore University of Technology and Design, Singapore); Himel A Suraweera (Singapore University of Technology and Design, Singapore)

Tuesday, 09 April 2013

14:00-15:30

PHY 19: Cooperative and Coordinated Systems

Study on Codeword Selection for Per-cell Codebook with Limited Feedback in CoMP Systems

Zhirui Hu (Beijing University of Post and Telecommunication, P.R. China); Tiankui Zhang (Beijing University of Posts and Telecommunications, P.R. China); Feng Chunyan (Beijing University of Posts and Telecommunications, P.R. China); Qiubin Gao (Tsinghua University, P.R. China); Shaohui Sun (China Academy of Telecommunications Technology (CATT), P.R. China)

Partial Coordination in Clustered Base Station MIMO Transmission

Roberto Corvaja (University of Padova, Italy); Juan José García Fernández (Universidad Carlos III de Madrid, Spain); Ana García Armada (Universidad Carlos III de Madrid, Spain)

Robust Multi-cell Joint Transmission Beamforming Based on Uplink-Downlink Duality

He Shiwen (School of Information Science and Engineering, Southeast University, P.R. China); Yongming Huang (Southeast University, P.R. China); Shi Jin (Southeast University, P.R. China); Yang Luxi (SouthEast University, P.R. China); Lei Jiang (NEC Laboratories China, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)

Retrieving Channel Reciprocity for Coordinated Multi-point transmission

Liyang Su (Beihang University, P.R. China); Chenyang Yang (Beihang University, P.R. China); Gang Wang (NEC Labs, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)

Bit-Cooperative Coded Modulation

Zhiyong Chen (Shanghai Jiaotong University, P.R. China); Bin Xia (Shanghai Jiaotong University, P.R. China); Hui Liu (Shanghai JiaoTong University, P.R. China)

Common Rate Maximization in Cooperative Multiple Access Channels

Paul Ferrand (INSA-Lyon, France); Jean-Marie Gorce (INSA-Lyon, France); Claire Goursaud (INSA-Lyon, France)

Tuesday, 09 April 2013

14:00-15:30

PHY 20: Multiuser MIMO

Performance Analysis of Multi-Cell MMSE Based Receivers in MU-MIMO Systems with Very Large Antenna Arrays

Kaifeng Guo (RWTH Aachen University, Germany); Gerd H. Ascheid (RWTH Aachen University, Germany)

Robust Sum Rate Maximization in the Multi-Cell MU-MIMO Downlink

Richard Fritzsche (Technische Universität Dresden, Germany); Gerhard Fettweis (Technische Universität Dresden, Germany)

Block Diagonalization Precoding Game in a Multiuser Multicell System

Duy H. N. Nguyen (McGill University, Canada); Tho Le-Ngoc (McGill University, Canada)

Impact of Multi User Selection on the Performance of Transmit Precoding in MU-MIMO Cellular Systems

Danish Aziz (Alcatel-Lucent Bell Labs, Germany); Mustansir Mazhar (Alcatel-Lucent Bell Labs, Germany); Andreas Weber (Alcatel-Lucent, Germany)

MIMO Channel Capacity Spatial Distribution in a Microcell Environment

Ivo Sousa (Instituto de Telecomunicações/IST, Technical University of Lisbon, Portugal); Maria Paula Queluz (Instituto Superior Técnico, Portugal); António J. Rodrigues (IT / Instituto Superior Técnico, Portugal)

A User Selection Criterion for Vector-Perturbation Precoding in Multiuser Systems

Jinho Choi (Swansea University, United Kingdom)

Tuesday, 09 April 2013

14:00-15:30

PHY 21: Distributed Antenna Systems

Spectral Efficiency of Multi-Cell Multi-User DAS with Pilot Contamination

Dongming Wang (Southeast University, P.R. China); Chen Ji (National Mobile Communications Research Lab., Southeast University, P.R. China); Shaohui Sun (China Academy of Telecommunications Technology (CATT), P.R. China); Xiaohu You (National Mobile communication Research Lab., Southeast University, P.R. China)

The Impact of Antenna Selection and Location on the Performance of DAS in a Multi-storey Building

Temitope Alade (University of Kent, United Kingdom); Huiling Zhu (University of Kent, United Kingdom); Hassan Osman (University of Kent, United Kingdom)

Asymptotic Rate Analysis for Non-orthogonal Downlink Multi-user Systems with Co-located and Distributed Antennas

Junyuan Wang (City University of Hong Kong, P.R. China); Lin Dai (City University of Hong Kong, Hong Kong)

Fade Analysis of Selection Diversity in Distributed Antenna Systems

Lei Li (Information Technology Office, P.R. China); XiaoDong Wang (Naval Submarine Academy, P.R. China)

Energy and Spectral Efficiency of Distributed Antenna Systems

Chunlong He (Southeast University, P.R. China); Geoffrey Li (Georgia Tech, USA); Bin Sheng (Southeast University, P.R. China); Xiaohu You (National Mobile communication Research Lab., Southeast University, P.R. China)

Tuesday, 09 April 2013
14:00-15:30

PHY 22: Relay Networks

Approximation Algorithms for Cellular Networks Planning with Relay Nodes

Shaowei Wang (Nanjing University, P.R. China); Wentao Zhao (Nanjing University, P.R. China); Chonggang Wang (InterDigital Communications, USA)

A Two-Dimensional MMSE Equalizer for MIMO Relay Networks in Multipath Fading Channels

Keshav Singh (National Central University, Taiwan); Meng-lin Ku (National Central University, Taiwan); Jia-Chin Lin (National Central University, Taiwan)

An Optimal Temporal-and-Spatial Equalizer for Two-Hop MIMO Relay Networks with Backward CSIs

Keshav Singh (National Central University, Taiwan); Meng-lin Ku (National Central University, Taiwan); Jia-Chin Lin (National Central University, Taiwan)

Adaptive Scheduling for OFDM Bidirectional Transmission with A Buffered Relay

Bo Zhou (Shanghai Jiao Tong University, P.R. China); Yuan Liu (Shanghai Jiao Tong University, P.R. China); Meixia Tao (Shanghai Jiao Tong University, P.R. China)

Achieving Full Cooperative and Frequency Diversity in Bit-Interleaved Coded Two-Way Relay Networks

Ye Yang (Xidian University, P.R. China); Tsung-Hui Chang (National Taiwan University of Science and Technology, Taiwan); Jianhua Ge (Xidian University, P.R. China); Wing-Kin Ma (The Chinese University of Hong Kong, Hong Kong); Pc Ching (The Chinese University of Hong Kong, Hong Kong)

Layered Sources in Non-Orthogonal Amplify-Forward Relay Network

Payam Padidar (University of Waterloo, Canada); Pin-Han Ho (University of Waterloo, Canada); James Ho (University of Waterloo, Canada)

Tuesday, 09 April 2013
14:00-15:30

PHY 23: Resource Allocation I

Optimal Joint Antenna Selection and Power Adaptation in Underlay Cognitive Radios

Rimalapudi Sarvendranath (IISc, India); Neelesh B. Mehta (Indian Institute of Science, India)

Joint Resource Allocation for Learning-based Cognitive Radio Networks with MIMO-OFDM Relay-Aided Transmissions

Shuo Li (Beijing Institute of Technology, P.R. China); Bingquan Li (Beijing Institute of Technology, P.R. China); Chengwen Xing (Beijing Institute of Technology, P.R. China); Zesong Fei (Beijing Institute of Technology, P.R. China); Shaodan Ma (University of Macau, P.R. China)

A High-efficiency Semi-distributed Resource Allocation in OFDMA-based Wireless Relay Networks

Shengbo Zhang (Southeast University, P.R. China); Xiang-Gen Xia (University of Delaware, USA)

Novel Subcarrier-pair based Opportunistic DF Protocol for Cooperative Downlink OFDMA

Tao Wang (Universite Catholique de Louvain, Belgium); Fang Yong (Shanghai University, P.R. China); Luc Vandendorpe (University of Louvain, Belgium)

A Low-Complexity Resource Allocation Algorithm in Multi-Cell DF Relay Aided OFDMA Systems

Zhiwen Jin (ICTEAM, Université Catholique de Louvain, Belgium); Tao Wang (Universite Catholique de Louvain, Belgium); Ji-Bo Wei (National University of Defense Technology, P.R. China); Luc Vandendorpe (University of Louvain, Belgium)

Capacity Expression and Power Allocation for Arbitrary Modulation and Coding Rates

Weisi Guo (University of Warwick, United Kingdom); Siyi Wang (The University of Sheffield, United Kingdom); Xiaoli Chu (University of Sheffield, United Kingdom)

Tuesday, 09 April 2013
14:00-15:30

PHY 24: LTE Systems

A Non-coherent Neighbor Cell Search Scheme for LTE/LTE-A Systems

Shun-Fang Liu (National Central University, Taiwan); Pei-Yun Tsai (National Central University, Taiwan)

Enhanced Preamble Detection for PRACH in LTE

Xiao-Bin Yang (University of Calgary, Canada); Abraham O Fapojuwo (University of Calgary, Canada)

Code Block Segmentation Hardware Architecture for LTE-Advanced

Karlo Lenzi (Universidade Estadual de Campinas, Brazil); José A. Bianco, Filho (UNICAMP, Brazil); Felipe Augusto P de Figueiredo (UNICAMP, Brazil)

Soft Interference Cancellation Receiver for SC-FDMA Uplink in LTE

Shi Cheng (Silicon Image Inc., USA); Ravi Narasimhan (Vigilo Networks, USA)

Search Space Design of Enhanced Physical Downlink Control Channel for Long Term Evolution Advanced System

Liu Liu (DOCOMO Beijing Communications Laboratories Co., Ltd, P.R. China); Qin Mu (DOCOMO Beijing Communications Laboratories Co., Ltd, P.R. China); Kazuaki Takeda (NTT DOCOMO, Inc., Japan); Lan Chen (DOCOMO Beijing Communication Laboratories Co., Ltd, P.R. China)

Combining PHY Experimental Results and Advanced Network Planning Tool for Accurate Coverage Estimation

Mathieu Brau (SIRADEL, France); Yoann Corre (SIRADEL, France); Florian Letourneux (Siradel, France); Guillaume Vivier (Sequans, France); Yves Lostanlen (SIRADEL, Canada)

Tuesday, 09 April 2013
16:00-17:30

PHY 25: Two-way Relay Networks

Outage Probability and BER of Switch-and-Stay Combining in Two-Way Relay Systems with Analog Network Coding

Xianfu Lei (Utah State University, USA); Lisheng Fan (Shantou University, P.R. China); Pingzhi Fan (Southwest Jiaotong University, P.R. China); Rose Qingyang Hu (Utah State University, USA); Xian Wang (Southwest Jiaotong University, P.R. China)

Multiuser Two-Way Relaying with Power Control for SC-FDE System

Homa Eghbali (Simon Fraser University, Canada); SeyedAmin Hejazi (Simon Fraser University, Canada); Sami Muhaidat (Khalifa University, UAE)

Distributed Collaborative Space-Time Block Codes for Two-Way Relaying Network

Fengkui Gong (Xidian University, P.R. China); Jian-Kang Zhang (McMaster University, Canada); Jianhua Ge (Xidian University, P.R. China); Nan Zhang (Xidian university, P.R. China)

Impact of Outdated Relay Selection on Two-way Relay Network

Lisheng Fan (Shantou University, P.R. China); Xianfu Lei (Utah State University, USA); Rose Qingyang Hu (Utah State University, USA); Winston K.G. Seah (Victoria University of Wellington, New Zealand)

Closed form solution and useful signal power maximization for interference alignment in multi-pair two-way relay networks

Rakash SivaSiva Ganesan (TU Darmstadt, Germany); Hong Quy Le (Technical University Darmstadt, Germany); Hussein A Al-Shatri (University of Rostock, Germany); Tobias Weber (Uni Rostock, Germany); Anja Klein (TU Darmstadt, Germany)

Iterative Algorithm for Secrecy Guarantee with Null Space Beamforming in Two-Way Relay Networks

Yunchuan Yang (Beijing University of Posts and Telecommunications, P.R. China); Hui Zhao (Beijing University of Posts and Telecommunications, P.R. China); Cong Sun (Academy of Mathematics and Systems Science, Chinses Academy of Sciences, P.R. China); Wenbo Wang (Beijing University of Posts and Telecommunications, P.R. China)

Tuesday, 09 April 2013
16:00-17:30

PHY 26: Channel and Interference Characterization

Statistical Characteristic of Polarization Dependent Loss

Xiaobin Wu (Beijing University of Posts and Telecommunications, P.R. China); Caili Guo (Beijing University of Posts and Telecommunications, P.R. China); Feng Chunyan (Beijing University of Posts and Telecommunications, P.R. China)

Characteristics of Inter-cell Interference for OFDMA Systems in Multipath Rayleigh Fading Channels

Jeng-Shin Sheu (National Yunlin University of Science & Technology, Taiwan); Wern-Ho Sheen (Chaoyang University of Technology, Taiwan)

On Frequency-Spatial Channel Correlation Maps for MIMO-OFDMA Systems

Huijun Li (RWTH Aachen University, Germany); Gerd H. Ascheid (RWTH Aachen University, Germany)

Weibull and Suzuki Fading Channel Generator Design to Reduce Hardware Resources

Pengda Huang (Southern Methodist University, USA); Dinesh Rajan (Southern Methodist University, USA); Joseph D. Camp (Southern Methodist University, USA)

Wireless Downlink High Data Rate Transmission in Multi-Floor Buildings

Hassan Osman (University of Kent, United Kingdom); Huiling Zhu (University of Kent, United Kingdom); Temitope Alade (University of Kent, United Kingdom); Dimitris Toumpakaris (University of Patras, Greece)

Preliminary Study of the Anisotropic Characteristics of Propagation Channels for Tx-Rx Polarization

Xuefeng Yin (Tongji University, P.R. China); Yongyu He (Tongji University, P.R. China); Cen Ling (Tongji University, P.R. China); Li Tian (Tongji University, P.R. China); Zhimeng Zhong (Huawei Technology Company, P.R. China)

Tuesday, 09 April 2013
16:00-17:30

PHY 27: Relays I

Performance Analysis for Decode-and-Forward Relay System with HARQ in Nakagami-m Fading Channels

Moon-Gun Song (Pohang University of Science and Technology, Korea); Hyoung-Jin Lim (POSTECH, Korea); Gi-Hong Im (POSTECH, Korea); Jaedon Park (Agency for Defense Development, Korea); Gui Soon Park (ADD, Korea)

End-to-End BER Analysis of Space Shift Keying in Decode-and-Forward Cooperative Relaying

Pritam Som (Indian Institute of Science, India); A. Chockalingam (Indian Institute of Science, India)

Accurate BER Analysis and Optimum Power Allocation for Adaptive Decode-and-Forward Relaying with Frame Transmissions

Tao Lu (Xidian University, P.R. China); Jianhua Ge (Xidian University, P.R. China); Ye Yang (Xidian University, P.R. China); Yang Gao (Xidian University, P.R. China)

A Centralized Role Selection Scheme for Two-User Amplify-and-Forward Relaying Systems

Haiyang Ding (Xidian University, P.R. China); Daniel Benevides da Costa (Federal University of Ceara (UFC), Brazil); Jianhua Ge (Xidian University, P.R. China)

Outage Performance of AF-based Time Division Broadcasting Protocol in the Presence of Co-channel Interference

Xiaochen Xia (Institute of Communications Engineering, PLAUST, P.R. China); Youyun Xu (PLA University of Science & Technology, P.R. China); Kui Xu (Institute of Communications Engineering, PLAUST, P.R. China); Dongmei Zhang (PLA University of Science and Technology, P.R. China); Ning Li (Nanjing Institute of Communications Engineering, P.R. China)

Optimal Power Allocation for Variable-Hop Cooperative Relay in Cognitive Networks

Sisi Ma (Beijing University Of Posts And Telecommunications, P.R. China); Zhiqing Wei (Beijing University of Posts and Telecommunications, P.R. China); Kaidong Wang (Beijing University of Posts and Telecommunications, P.R. China); Qixun Zhang (Beijing University of Posts and Telecommunications, P.R. China); Zhiyong Feng (Beijing University of Posts and Telecommunications, P.R. China); Cong Wang (Beijing University of Posts and Telecommunications, P.R. China)

Tuesday, 09 April 2013
16:00-17:30

PHY 28: Beamforming

Design of Downlink Beamformer for Real-time and Non-real-time Services

Siduo Shen (The Chinese University of Hong Kong, Hong Kong); Haoran Fang (The Chinese University of Hong Kong, Hong Kong); Tat M. Lok (The Chinese University of Hong Kong, Hong Kong)

Improved Transmit Beamforming for WLAN Systems

Pengfei Xia (Interdigital, USA); Monisha Ghosh (Interdigital, USA); Hanqing Lou (Interdigital, USA); Robert L. Olesen (Interdigital Communications Corp., USA)

A Fast-Convergence Algorithm for Distributed Transmit Beamforming

Yifei Yu (Beijing University of Posts and Telecommunications, P.R. China); Qiang Wang (Beijing University of Posts and Telecommunications, P.R. China); Ji Xu (Beijing University of Posts and Telecommunications, P.R. China)

Wireless MIMO Switching: Sum Rate Optimization

Fangfang Wang (Beijing Jiaotong University, P.R. China); Xiaojun Yuan (The Chinese University of Hong Kong, Hong Kong); Soung Chang Liew (The Chinese University of Hong Kong, Hong Kong); Dongning Guo (Northwestern University, USA)

Analysis of Collaborative Beamforming Designs in Real-World Environments

Slim Zaidi (University of Quebec, INRS-EMT, Canada); Sofiene Affes (INRS-EMT, Canada)

Low Complexity Coordinated Beamforming Using Interference Alignment

Chongning Na (DOCOMO Beijing Communications Laboratories Co., Ltd., P.R. China); Xiaolin Hou (DOCOMO Beijing Communications Laboratories Co., Ltd, P.R. China); Atsushi Harada (DOCOMO Beijing Communications Laboratories Co., Ltd., P.R. China); Hirohito Suda (DOCOMO Technology, Inc., Japan)

Tuesday, 09 April 2013
16:00-17:30

PHY 29: Relays II

Cooperative Diversity by Censorial Relays for Communications over Rayleigh Fading Channels

Lun-Chung Peng (National Taiwan University of Science and Technology, Taiwan); Kuen-Tsair Lay (National Taiwan University of Science and Technology, Taiwan)

Signal-Level Cooperative Spatial Multiplexing for Uplink Throughput Enhancement in MIMO Broadband Systems

Hatim Chergui (ExceliaCom Solutions, Morocco); Tarik Ait-Idir (Exceliacom Solutions, Morocco); Mustapha Benjillali (INPT, Morocco); Samir Saoudi (Telecom-Bretagne, France)

Regenerative Multi-Way Relaying: Joint Transceiver Design in Space-Time Domain

Jianfei Cao (NEC Laboratories China, P.R. China); Dalin Zhu (NEC Laboratories China, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)

A Decode-and-Forward Relaying Protocol with Partial CSIT and Optimal Time Allocation

Yinjie Su (Shanghai Jiaotong University, P.R. China); Lingge Jiang (Shanghai Jiaotong University, P.R. China); Chen He (Shanghai Jiaotong University, P.R. China)

A Rateless Code for Dynamic Decode-and-Forward Relaying in Wireless Relay Networks

Shuang Tian (The University of Sydney, Australia); Yonghui Li (University of Sydney, Australia); Branka Vucetic (The University of Sydney, Australia)

Distributed Subcarrier Pairing and Relay Selection for OFDM Based Cooperative Relay Networks

Roya Arab Loodaricheh (UBC, Canada); Shankhanaad Mallick (University of British Columbia, Canada); Vijay Bhargava (University of British Columbia, Canada)

Tuesday, 09 April 2013
16:00-17:30

PHY 30: Interference Avoidance and Mitigation I

Combining Interference Alignment and Alamouti Codes for the 3-user MIMO Interference Channel

Ahmed Zaki (Royal Institute of Technology (KTH), Sweden); Chao Wang (Royal Institute of Technology (KTH), Sweden); Lars K. Rasmussen (KTH Royal Institute of Technology, Sweden)

Signal Alignment for Two-Cell CR Networks

Lu Lu (Georgia Institute of Technology, USA); Geoffrey Li (Georgia Tech, USA)

Linear Precoder Designs for Interference Alignment in Constant MIMO Interference Channels

Chao Wang (Xi'an Jiaotong University, P.R. China); Bohan Zhang (Xi'an Jiaotong University, P.R. China); Xiaodan Zhang (ZTE Corporation, P.R. China); Ke Deng (Xi'an Jiaotong University, P.R. China)

Inter-Cell Interference Management Using Multi-Cell Shared Relay Nodes in 3GPP LTE-Advanced Networks

Mochan Yang (Soongsil University, Korea); Oh-Soon Shin (Soongsil University, Korea); Yoan Shin (Soongsil University, Korea); Hakseong Kim (LG Electronics Co., Korea)

On the Interference Avoidance Method in Two-tier LTE Networks with Femtocells

Peng Gao (China Mobile Group Design Institute Co., Ltd., P.R. China); Da Chen (Huazhong University of Science and Technology, P.R. China); Mingjie Feng (Huazhong University of Science and Technology, P.R. China); Daiming Qu (Huazhong University of Science and Technology, Wuhan, Hubei, P.R. China); Tao Jiang (Huazhong University of Science and Technology, P.R. China)

Relay Aided Interference Mitigation in Cellular Networks

Juan A. Maya (University of Buenos Aires, Argentina); Sheng Yang (Supélec, France)

Wednesday, 10 April 2013

11:00-12:30

PHY 31: Relay Selection

Average Outage Rate and Average Outage Duration of Adaptive Selection DF Relaying in Cooperative Networks

Zhengwei Ni (Beijing University of Posts and Telecommunications, P.R. China); Xiaoyi Liu (University of California, Irvine, USA); Xin Zhang (Beijing University of Posts and Telecommunications, P.R. China); Dacheng Yang (Beijing University of Posts and Telecommunications, P.R. China)

Novel Hierarchical Modulation Scheme for Multi-user Transmission in Relay Systems

Chunlin Yan (DOCOMO Beijing Communications Laboratories Co., Ltd, P.R. China); Anxin Li (DOCOMO Beijing Communications Laboratories Co., Ltd, P.R. China); Atsushi Harada (DOCOMO Beijing Communications Laboratories Co., Ltd., P.R. China)

Partial Relay Selection with Fixed-Gain Relays and Outdated CSI in Underlay Cognitive Networks

Bin Zhong (University of Science and Technology Beijing (USTB), P.R. China); Yan Li (University of Science and Technology Beijing (USTB), P.R. China); Jun Wang (University of Science and Technology Beijing (USTB), P.R. China); Zhongshan Zhang (University of Science and Technology Beijing (USTB), P.R. China); Keping Long (University of Science and Technology Beijing, P.R. China)

Relay Selection in Cognitive Relay Networks via Potential Game

Gang Chen (Institute of Communications Engineering, PLAUST, P.R. China); Wei Zhong (Nanjing Institute of Communications Engineering, PLAUST, P.R. China); Hua Tian (PLA University of Sci. and Tech., P.R. China)

Relay Selection with Optimal Amplification Factors in Imperfect Cooperative Networks

Jianhua Zhang (Beijing University of Posts and Telecommunications, P.R. China); Yuning Wang (BUPT, P.R. China); Ping Zhang (BUPT, P.R. China)

Distributed Relay Selection for Virtual MIMO in Spectral Efficient Broadcasting Networks

Shih-Jung Lu (Academia Sinica, Taiwan); Ronald Y. Chang (Academia Sinica, Taiwan); Wei-Ho Chung (Academia Sinica, Taiwan)

Wednesday, 10 April 2013

11:00-12:30

PHY 32: Relays III

Performance Analysis of Partial Relay Selection with Feedback Delay in the Presence of Interference in Nakagami-m fading channels

Fawaz Al-Qahtani (Texas A&M University at Qatar, Qatar); Caijun Zhong (Zhejiang University, P.R. China); Redha M Radaideh (Alfaisal University, Saudi Arabia); Hussein Alnuweiri (Texas A&M University, Qatar)

Performance of Distributed Turbo-Coded Cooperative Networks with Multiple Dual-Hop Relays over Nakagami-m Fading Channels

Jules Merlin Moutatou Moualeu (University of KwaZulu-Natal, South Africa); Walaa Hamouda (Concordia University, Canada); HongJun Xu (University of KwaZulu-Natal, South Africa); Fambirai Takawira (University of KwaZulu-Natal, South Africa)

Outage and Symbol Error Probabilities of Dual-Hop AF Relaying in a Poisson Field of Interferers

Alessandro Guidotti (University of Bologna, Italy); Valentina Buccigrossi (University of L'Aquila, Italy); Marco Di Renzo (French National Center for Scientific Research (CNRS), France); Giovanni Emanuele Corazza (University of Bologna, Italy); Fortunato Santucci (University of L'Aquila, Italy)

Performance Analysis of Amplify-and-Forward Two-Way Relaying with Co-Channel Interference and Channel Estimation Error

Liang Yang (Jinan University, P.R. China); Khalid A. Qaraqe (Texas A&M University at Qatar, USA); Erchin Serpedin (Texas A&M University, USA); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)

Optimality of Amplify-and-Forward Based Two-Way Relaying

Han Li (The Hong Kong University of Science and Technology, Hong Kong); Mengwei Liu (Hong Kong University of Science and Technology, Hong Kong); Shenghui Song (The Hong Kong University of Science and Technology, Hong Kong); Khaled Letaief (The Hong Kong University of Science and Technology, Hong Kong)

Impact of Partial Relay Selection on the Capacity of Communications Systems with Outdated CSI and Adaptive Transmission Techniques

Bin Zhong (University of Science and Technology Beijing (USTB), P.R. China); Xu Zhang (University of Science and Technology Beijing (USTB), P.R. China); Yan Li (University of Science and Technology Beijing (USTB), P.R. China); Zhongshan Zhang (University of Science and Technology Beijing (USTB), P.R. China); Keping Long (University of Science and Technology Beijing, P.R. China)

Wednesday, 10 April 2013

11:00-12:30

PHY 33: OFDM and OFDMA

Subband Interference Suppression in Channel Shortening for OFDMA Downlink Systems

Hyun-Myung Kim (Pohang University of Science and Technology, Korea); Dongsik Kim (Pohang University of Science and Technology (POSTECH), Korea); Gi-Hong Im (POSTECH, Korea); Seongwoo Ahn (Samsung Electronics, Korea)

Differential Overlap Decoding: Combating Hidden Terminals in OFDM Systems

Jingye Cao (Shanghai Jiao Tong University, P.R. China); Feng Yang (Shanghai Jiaotong University, P.R. China); Lianghui Ding (Shanghai Jiao Tong University, P.R. China); Liang Qian (Shanghai Jiao Tong University, P.R. China); Cheng Zhi (Shanghai Jiao Tong University, P.R. China)

New Insights in Optimal Pilot Symbol Patterns for OFDM Systems

Michal Simko (Vienna University of Technology, Austria); Paulo Diniz (Universidade Federal do Rio de Janeiro, Brazil); Qi Wang (Vienna University of Technology, Austria); Markus Rupp (Vienna University of Technology, Austria)

Optimal Cooperative Water-Filling Power Allocation for OFDM System

Hui Wang (Beijing University of Posts and Telecommunications, P.R. China); Qimei Cui (Beijing University of Posts and Telecommunications, P.R. China); Xiaofeng Tao (Beijing University of Posts and Telecommunications, P.R. China)

Optimal Pilot Design for LMMSE Channel Estimation in MIMO-OFDM Systems

Bin Jiang (Southeast University, P.R. China); Xin Xiong (Southeast University, P.R. China); Xiqi Gao (Southeast University, P.R. China)

Spectrally Efficient Time-Frequency Training OFDM for MIMO Systems

Linglong Dai (Tsinghua University, P.R. China); Zhaocheng Wang (Tsinghua University, P.R. China)

Wednesday, 10 April 2013

11:00-12:30

PHY 34: Wireless Networks I

Cluster-based Dynamic DL/UL Reconfiguration Method in Centralized RAN TDD with Trellis Exploration Algorithm

Dalin Zhu (NEC Laboratories China, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)

A Clustering Scheme Based on Timing Requirements in Coordinated Base-Stations Cooperative Communications

Ahmed M. Hamza (University of Waterloo, Canada); Jon Mark (University of Waterloo, Canada)

Spectral Efficiency Optimization in Overlapping Channels using TR-MISO Systems

Hua Fu (INSA de Rennes, France); Matthieu Crussière (IETR - Electronics and Telecommunications Research Institute of Rennes (IETR), France); Maryline Hélaré (INSA Rennes, France)

Semi-Distributed Clustering Method for CoMP with Limited Backhaul Data Transfer

Jian Zhao (Institute for Infocomm Research, Singapore); Tony Q. S. Quek (Singapore University of Technology and Design (SUTD), Singapore); Zander Zhongding Lei (Institute for Infocomm Research, Singapore)

Connectivity based on Shadow Fading and Interference in Wireless Ad hoc Networks

Xinming Zhang (University of Science and Technology of China, P.R. China); Leyi Wu (University of Science and Technology of China, P.R. China); Yue Zhang (University of Science and Technology of China, P.R. China)

Interference Dynamics in MANETs with a Random Direction Node Mobility Model

Xinming Zhang (University of Science and Technology of China, P.R. China); Leyi Wu (University of Science and Technology of China, P.R. China); Yue Zhang (University of Science and Technology of China, P.R. China); Dan Keun Sung (Korea Advanced Institute of Science and Technology, Korea)

Wednesday, 10 April 2013

11:00-12:30

PHY 35: Green Radio

On the Bandwidth-Power Tradeoff for Heterogeneous Networks with Site Sleeping and Inter-cell Interference

Shunqing Zhang (Huawei Technologies, Co. Ltd., P.R. China); Gaoning He (Huawei Technologies, P.R. China); Yan Chen (Huawei, P.R. China); Shugong Xu (Huawei, P.R. China)

Modulation Optimization for Green Radios in Cooperative Networks

Yuning Wang (BUPT, P.R. China); Jianhua Zhang (Beijing University of Posts and Telecommunications, P.R. China); Ping Zhang (BUPT, P.R. China)

Power Allocation in Decode and Forward Relaying for Green Cooperative Cognitive Radio Systems

Muhammad Naeem (Ryerson University, Canada); Kandasamy Illanko (Ryerson University, Canada); Ashok K Karmokar (Ryerson University, Canada); Alagan Anpalagan (Ryerson University, Canada); Muhammad Jaseemuddin (Ryerson University, Canada)

Green-oriented Opportunistic Cooperation in Relay-based Cellular Networks with Grid-connected Photovoltaic Power Generators

Shi-Yong Lee (Academia Sinica, Taiwan); Min-Kuan Chang (National Chung Hsing University, Taiwan); De-Nian Yang (Academia Sinica, Taiwan)

A Green Approach to Femtocells Capacity Improvement by Recycling Wasted Resources

Leonardo S. Cardoso (INSA - Lyon, France); Marco Maso (Supelec, France); M  rouane Debbah (Supelec, France)

Energy-Efficient Resource Allocation in Multiuser OFDM Systems with Wireless Information and Power Transfer

Derrick Wing Kwan Ng (University Erlangen-N  rnberg, Germany); Ernest S. Lo (Centre Tecnol  gic de Telecomunicacions de Catalunya, Hong Kong); Robert Schober (University of British Columbia, Canada)

Wednesday, 10 April 2013

11:00-12:30

PHY 36: Receivers II

Two Novel Reordering Methods for MIMO Sphere Detection Based on MMSE Detection

Sun Songlin (Beijing University of Posts and Telecommunications, P.R. China); Shiliang Wang (Beijing University of Posts and Telecommunications, P.R. China)

Signal Detection and Joint Constellation Modulation for Two-Way Relaying with Multiple Antennas

Lei Wang (Shanghai University, P.R. China); Zhuo Wu (Shanghai University, P.R. China)

A Double Decoding Scheme to Improve the PER Performance of V2V Communications

Zheng Li (Carnegie Mellon University, USA); B. V. K. Vijaya Kumar (Carnegie Mellon University, USA); Fan Bai (General Motors, USA)

A Highly Parallelized MIMO Detector for Vector-Based Reconfigurable Architectures

Chenxin Zhang (Lund University, Sweden); Liang Liu (Lund University, Sweden); Yian Wang (Lund University, Sweden); Meifang Zhu (Lund University, Sweden); Ove Edfors (Lund University, Sweden); Viktor   wall (Lund University, Sweden)

BICM Performance Improvement via Online LLR Optimization

Jinhong Wu (Samsung Information Systems America, USA); Mostafa El-Khamy (Samsung Information Systems America, USA); Jungwon Lee (Samsung US R&D Center, USA); Inyup Kang (Samsung Electronics, USA)

Reduced-Complexity Decoding of LT Codes over Noisy Channels

Iqbal Hussain (Royal Institute of Technology (KTH), Sweden); Ming Xiao (Royal Institute of Technology, Sweden); Lars K. Rasmussen (KTH Royal Institute of Technology, Sweden)

Wednesday, 10 April 2013

14:00-15:30

PHY 37: Performance Analysis I

Effective Capacity in Multihop Multi-Rate Adaptive Cooperative Networks Under Nakagami-m Fading

Suat Aksu (Istanbul Technical University, Turkey); Gunes Karabulut Kurt (Istanbul Technical University, Turkey)

Modelling the Impact of Downlink CoMP in a Realistic Scenario

Sascha Berger (Technische Universit  t Dresden, Germany); Zhanhong Lu (Vodafone Group Research and Development, United Kingdom); Ralf Irmer (Vodafone Group, United Kingdom); Gerhard Fettweis (Technische Universit  t Dresden, Germany)

Performance of Spatial Modulation over Correlated Fading Channels with Channel Estimation Errors

Mutlu Koca (Bogazici University, Turkey); Hikmet Sari (Ecole Sup  rieure d'Electricit   (SUPELEC), France)

On the Approximate Noise Modeling for the Estimate-and-Forward Relay with the Bayesian Estimator

Feng Hu (University of Oulu, Finland); Wei Li (Renesas, Finland); Jorma Olavi Lilleberg (Renesas Mobile, Finland); Matti Latva-aho (UoOulu, Finland)

TD-LTE Network Indoor Performance with Micro and Femto Deployment in a Realistic Metropolitan Scenario

Jianfeng Kang (Nokia Siemens Networks, P.R. China); ZhuYan Zhao (Nokia Siemens Networks, P.R. China); Hao Guan (Nokia Siemens Networks, P.R. China); Benny Vejlg  rd (Nokia Siemens Networks, Denmark); Guangyi Liu (Research Institute of China Mobile, P.R. China)

HSPA Performance Improvement through Coordinated Dynamic Antenna Tilt & Scheduling

Robert M Joyce (University of Leeds, United Kingdom); Li Zhang (University of Leeds, United Kingdom); David Barker (Qualcomm Technology Inc., USA)

Wednesday, 10 April 2013
14:00-15:30

PHY 38: Iterative Methods

Channel Information Estimation and Data Detection for MIMO-OFDM Systems under Unknown Narrowband Interference

The-Hanh Pham (Institute for Infocomm Research, Singapore); Ying-Chang Liang (Institute for Infocomm Research, Singapore); Yonghong Zeng (Institute for Infocomm Research, Singapore); Yiyang Pei (Institute for Infocomm Research, Singapore); Fengye Hu (Jilin University, P.R. China)

Robust Transceiver Design for MIMO Interference Network with Norm Bounded Channel Uncertainty

Qingzhong Li (Harbin Institute of Technology, P.R. China); Xuemai Gu (Harbin Institute of Technology, P.R. China); Hanqing Li (School of Electronics and Information Engineering, Harbin Institute of Technology, P.R. China); Tao Tang (Harbin Institute of Technology, P.R. China)

Iterative Non-coherent Detection of Serially-Concatenated Codes with Differential Modulation

Kai Zhu (University of York, United Kingdom); Alister G. Burr (University of York, United Kingdom)

Iterative Equalization for MIMO Systems: Algorithm Design and Evolution Analysis

Xiaojun Yuan (The Chinese University of Hong Kong, Hong Kong); Junjie Ma (City University of Hong Kong, Hong Kong)

An Efficient Iterative Frequency Domain Equalization for Relay-Assisted ARQ Single Carrier Transmissions

Haitao Zhang (Beijing University of Posts and Telecommunications, P.R. China); Xin Zhang (Beijing University of Posts and Telecommunications, P.R. China); Dacheng Yang (Beijing University of Posts and Telecommunications, P.R. China)

Near-Capacity Joint Channel Estimation and Three-Stage Turbo Detection for MIMO Systems

Peichang Zhang (UOS, United Kingdom); Sheng Chen (University of Southampton, United Kingdom); Lajos Hanzo (University of Southampton, United Kingdom)

Wednesday, 10 April 2013
14:00-15:30

PHY 39: Detection and Estimation II

Enhanced LTE TOA/OTDOA Estimation with First Arriving Path Detection

Ming Huang (Technical University Munich, P.R. China); Wen Xu (Intel, Germany)

Time Delay Based Location Estimation in Decode-and-Forward Cooperative Relay Networks

Gokhan Celik (Gebze Institute of Technology, Turkey); Hasari Celebi (Gebze Institute of Technology, Turkey)

Efficient QRM-MAP Detector for Spatial Multiplexing MIMO Systems

Hyun-Myung Kim (Pohang University of Science and Technology, Korea); Dongsik Kim (Pohang University of Science and Technology (POSTECH), Korea); Tae-Kyoung Kim (POSTECH, Korea); Gi-Hong Im (POSTECH, Korea)

Application of Orthogonal Experimental Design to MIMO Detection

Jiang Han (Beijing University of Posts and Telecommunications, P.R. China); Qimei Cui (Beijing University of Posts and Telecommunications, P.R. China); Lingzhi Guo (Beijing University of Posts and Telecommunications, P.R. China); Waheed Ur Rehman (Beijing University of Posts and Telecommunications, P.R. China)

Reduced-Complexity Maximum-Likelihood Decoding for 3D MIMO Code

Ming Liu (Institute of Electronics and Telecommunications of Rennes (IETR), France); Jean-François Héland (IETR, France); Matthieu Crussière (IETR - Electronics and Telecommunications Research Institute of Rennes (IETR), France); Maryline Héland (INSA Rennes, France)

On the efficiency of sphere decoding for linearly precoded MIMO systems

Viet-Hoa Nguyen (IRISA/INRIA, Université de Rennes 1 - ENSSAT, France); Olivier Berder (IRISA, University of Rennes 1, France); Pascal Scalart (University of Rennes, France)

Wednesday, 10 April 2013
14:00-15:30

PHY 40: Transmitter Nonlinearities

Multiply-and-Forward - a Robust Transmission Scheme for Two-way Cooperative Communication in the Presence of Nonlinear Power Amplifier Distortion

Huai Tan (Simon Fraser University, Canada); Paul Ho (Simon Fraser University, Canada)

Closed-form Approximations to the Out-of-Band Emission Due to Nonlinear Power Amplifier

Meng Wah Chia (Institute for Infocomm Research, Singapore); Yonghong Zeng (Institute for Infocomm Research, Singapore); Ying-Chang Liang (Institute for Infocomm Research, Singapore)

Effect of Nonlinearities in Wireless Communication with Digital Receiver

Peng Xue (Tsinghua University, P.R. China); Haibin Yang (Tsinghua University, P.R. China); Zhan Xu (BIT, P.R. China); Chunhui Zhou (Tsinghua University, P.R. China); Shidong Zhou (Tsinghua University, P.R. China)

Real-Time Sidelobe Suppression for OFDM Systems Using Advanced Subcarrier Weighting

Ahmed Selim (Trinity College, Dublin, Ireland); Linda Doyle (Trinity College Dublin, Ireland)

A Novel PAPR Reduction Scheme without Side Information by Using Linear Phase Rotation Vector

Szu-Lin Su (NCKU, Taiwan); Chi-Hsien Lee (National Cheng Kung University, Taiwan); Chieh Lung Lin (National Cheng Kung University, Taiwan); Yung-Chuan Lin (National Cheng Kung University, Taiwan)

Efficient Embedded Signaling Through Alamouti STBC Precoders in MIMO-OFDM Systems

Mouna Sghaier (High School of Communications of Tunis (SUPCOM), Tunisia); Fatma Abdelkefi (High School of Communications of Tunis (SUPCOM), Tunisia); Mohamed Siala (Sup'Com, Tunisia)

Wednesday, 10 April 2013
14:00-15:30

PHY 41: Adaptive Methods

Realistic Prediction of BER and AMC with MRC Diversity for Indoor Wireless Transmissions

Meiling Luo (Ranplan Wireless Network Design Ltd., United Kingdom); Guillaume Villemaud (Université de Lyon, INRIA, INSA-Lyon, CITI, France); Jialai Weng (University of Sheffield, United Kingdom); Jean-Marie Gorce (INSA-Lyon, France); Jie Zhang (University of Sheffield, Dept. of Electronic and Electrical Engineering, United Kingdom)

Constellation and Rate Selection in Adaptive Modulation and Coding based on Finite Blocklength Analysis

Jin Meng (University of Waterloo, Canada); En-hui Yang (University of Waterloo, Canada)

Low-Complexity Adaptive Transceiver Techniques for K-Pair MIMO Interference Channels

Yunlong Cai (Zhejiang University, P.R. China); Benoit Champagne (McGill University, Canada); Rodrigo C. de Lamare (University of York, United Kingdom)

An Efficient Unequal Error Protection Scheme for 3-D Video Transmission

Omar Salim, Omar (University of Southern Queensland, Australia); Wei Xiang (University of Southern Queensland, Australia); John Leis (University of Southern Queensland, Australia)

Adaptive Low-Complexity Constellation-Reduction Aided Detection in MIMO Systems Employing High-Order Modulation

Ruijuan Ma (Xi'an Jiaotong University, P.R. China); Pinyi Ren (Xi'an Jiaotong University, P.R. China); Shaoli Xue (Xi'an Jiaotong University, P.R. China); Qinghe Du (Xi'an Jiaotong University, P.R. China)

Acoustic Broadband Communications over Deep Drill Strings using Adaptive OFDM

Miguel Angel Gutierrez-Estevez (Fraunhofer Heinrich Hertz Institute, Germany); Udo Krueger (Fraunhofer Heinrich Hertz Institut, Germany); Kirsten Krueger (Fraunhofer Heinrich Hertz Institute, Germany); Konstantinos Manolakis (Technische Universität Berlin, Germany); Volker Jungnickel (Fraunhofer Heinrich Hertz Institute, Germany); Katrin Jaksch (Geoforschungszentrum Potsdam, Germany); Kay Krueger (Geoforschungszentrum Potsdam, Germany); Stephan Mikulla (Geoforschungszentrum Potsdam, Germany); Rudi Giese (Geoforschungszentrum Potsdam, Germany); Michael Sohmer (Tu Bergakademie Freiberg, Germany); Matthias Reich (Tu Bergakademie Freiberg, Germany)

Wednesday, 10 April 2013
14:00-15:30

PHY 42: Spectrum Sensing

Performance of linear--quadratic detectors in spectrum sensing

Ezio Biglieri (Universitat Pompeu Fabra, Barcelona, Spain); Marco Lops (University of Cassino, Italy)

Minimum Transmission Delay via Spectrum Sensing in Cognitive Radio Networks

Hang Hu (PLA University of Science and Technology, P.R. China); Hang Zhang (PLA University of Science & Technology, P.R. China); Hong Yu (PLA University of Science and Technology, P.R. China); Youyun Xu (PLA University of Science & Technology, P.R. China); Ning Li (Nanjing Institute of Communications Engineering, P.R. China)

Distributed Boundary Estimation for Spectrum Sensing in Cognitive Radio Networks

Yi Zhang (Nanyang Technological University, Singapore); Wee Peng Tay (Nanyang Technological University, Singapore); Kwok Hung Li (Nanyang Technological University, Singapore); Dominique Gaiti (University of Technology of Troyes, France)

Decoding Feedback Based Sensing Strategy for Cognitive Radio Network

Zhong Chen (Tsinghua University, P.R. China); Feifei Gao (Tsinghua University, P.R. China); Xian-Da Zhang (Tsinghua University, P.R. China); James C. F. Li (NEC Laboratories China, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)

Overlapping Coalitional Games for Collaborative Sensing in Cognitive Radio Networks

Tianyu Wang (Peking University, P.R. China); Lingyang Song (Peking University, P.R. China); Zhu Han (University of Houston, USA); Walid Saad (University of Miami, USA)

Optimal Sensing Time of Soft Decision Cooperative Spectrum Sensing in Cognitive Radio Networks

Dafei Sun (Southeast University, P.R. China); Song Tiecheng (National communications research laboratory, P.R. China); M. WU (University of Southeast, P.R. China); Jing Hu (Southeast University, PRC, P.R. China); Jie Guo (Southeast University, P.R. China); Bin Gu (Southeast University, P.R. China)

Wednesday, 10 April 2013
16:00-17:30

PHY 43: 60 GHz systems and Device-to-Device communication

Improved Pilot Design and Channel Estimation for 60GHz OFDM Based on IEEE 802.11.ad

Bixing Ye (Southeast University, P.R. China); Zaichen Zhang (Southeast University, P.R. China)

Robust IQ Imbalance Estimation and Compensation via Specific Preamble for 60 GHz Systems

Changming Zhang (Tsinghua University, P.R. China); Zhenyu Xiao (Tsinghua University, P.R. China); Bo Gao (Tsinghua University, P.R. China); Li Su (Tsinghua University, P.R. China); Depeng Jin (Tsinghua University, P.R. China)

Circular-Antenna-Array-Based Codebook Design and Training Method for 60GHz Beamforming

Wei Feng (Tsinghua University, P.R. China); Zhenyu Xiao (Tsinghua University, P.R. China); Depeng Jin (Tsinghua University, P.R. China); Lieguang Zeng (Tsinghua University, P.R. China)

System Level Performance of Millimeter-wave Access Link for Outdoor Coverage

Mohamed Abouelseoud (InterDigital Communications Corp., USA); Gregg A Charlton (InterDigital Communications Corp., USA)

Rate-Maximized Transceiver Optimization for Multi-Antenna Device-to-Device Communications

Daohua Zhu (National Mobile Communications Research Laboratory, Southeast University, P.R. China); Wei Xu (Southeast University, P.R. China); Hua Zhang (Southeast University, P.R. China); Chunming Zhao (National Mobile Communications Research Laboratory, Southeast University, P.R. China); James C. F. Li (NEC Laboratories China, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)

Robust Null-Space Based Interference Avoiding Scheme for D2D Communication Underlying Cellular Networks

Wei Fu (Beijing University of Posts and Telecommunications, P.R. China); Ruochen Yao (Beijing Institute of Technology, P.R. China); Feifei Gao (Tsinghua University, P.R. China); James C. F. Li (NEC Laboratories China, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)

Wednesday, 10 April 2013
16:00-17:30

PHY 44: Physical Layer Security

Generalized Anti-Eavesdropping Space-Time Network Coding for Cooperative Communications

Xiang Li (Xi'an Jiaotong University, P.R. China); Zhenzhen Gao (Xi'an Jiaotong University, USA); Gangming Lv (Xi'an Jiaotong University, P.R. China); Shihua Zhu (Xi'an Jiaotong University, P.R. China)

A Stackelberg Security Game with Cooperative Jamming over a Multiuser OFDMA Network

An Wang (PLA University of Science and Technology, P.R. China); Cai Yueming (Institute of Communications Engineering, PLAUST, P.R. China); Wendong Yang (Institute of Communications Engineering, P.R. China); Zhao Hou (Institute of Communications Engineering of PLAUST, P.R. China)

Cooperative Jamming and Power Allocation in Three-Phase Two-Way Relaying Wiretap Systems

Hang Long (Beijing University of Posts & Telecommunications, P.R. China); Wei Xiang (University of Southern Queensland, Australia); Jing Wang (Beijing University of Posts & Telecommunications, P.R. China); Yueying Zhang (Beijing University of Posts and Telecommunications, P.R. China); Wenbo Wang (Beijing University of Posts and Telecommunications, P.R. China)

Secure Beamforming for MIMO Two-Way Transmission with an Untrusted Relay

Jianhua Mo (Shanghai Jiao Tong University, P.R. China); Meixia Tao (Shanghai Jiao Tong University, P.R. China); Yuan Liu (Shanghai Jiao Tong University, P.R. China); Bin Xia (Shanghai Jiaotong University, P.R. China); Xiaoli Ma (Georgia Tech, USA)

Worst-Case Robust Masked Beamforming for Secure Broadcasting

Yanqun Tang (National University of Defense Technology, P.R. China); Wei Li (National University of Defense Technology, P.R. China); Dongtang Ma (National University of Defense Technology, P.R. China); Xiaoying Zhang (National University of Defense Technology, P.R. China); Ji-Bo Wei (National University of Defense Technology, P.R. China)

A Secure Space-Time Code for Asynchronous Cooperative Communication Systems with Untrusted Relays

Zhenzhen Gao (Xi'an Jiaotong University, USA); Liao Xuewen (Xi'an Jiaotong University, P.R. China); Xiaodong Sun (Xi'an Jiaotong University, P.R. China); Shihua Zhu (Xi'an Jiaotong University, P.R. China)

Wednesday, 10 April 2013
16:00-17:30

PHY 45: Power Control

Energy-Efficient Contention-Based Synchronization in OFDMA Systems with Discrete Powers and Limited Feedback

Giacomo Bacci (University of Pisa, Italy); Luca Sanguinetti (University of Pisa, Italy); Marco Luise (University of Pisa, Italy); H. Vincent Poor (Princeton University, USA)

Power Control Method for MIMO-Based Cognitive Radio with Imperfect Channel State Information

Samuli Tiirio (Tokyo University of Agriculture and Technology, Japan); Kenta Umebayashi (Tokyo University of Agriculture and Technology, Japan); Yasuo Suzuki (Tokyo University of Agriculture and Technology, Japan)

Robust Power Control in Cognitive Radio Networks with Channel Uncertainty

Shimin Gong (Nanyang Technological University, Singapore); Ping Wang (Nanyang Technological University, Singapore); Yongkang Liu (University of Waterloo, Canada); Weihua Zhuang (University of Waterloo, Canada)

Efficient Power Control in Heterogeneous Femto-Macro Cell Networks

Yanhui Ma (Beijing University of Posts and Telecommunications, P.R. China); Tiejun Lv (Beijing University of Posts and Telecommunications, P.R. China)

Power Allocation for Multi-Point Joint Transmission with Different Node Activeness

Jingya Li (Chalmers University of Technology, Sweden); Behrooz Makki (Chalmers University of Technology, Sweden); Tommy Svensson (Chalmers University of Technology, Sweden); Thomas Eriksson (Chalmers University of Technology, Sweden)

Energy-Efficient Cooperative Transmission in Heterogeneous Networks

Zhikun Xu (Beihang University, P.R. China); Chenyang Yang (Beihang University, P.R. China); Geoffrey Li (Georgia Tech, USA); Yalin Liu (Huawei Technologies Co., Ltd, P.R. China); Shugong Xu (Huawei, P.R. China)

Wednesday, 10 April 2013

16:00-17:30

PHY 46: Energy Harvesting

Average Throughput Maximization for Energy Harvesting Transmitters With Causal Energy Arrival Information
Qing Bai (Technische Universität München, Germany); Rana Ali Amjad (Technische Universität München, Germany); Josef A. Nossek (Technische Universität München, Germany)

Mutual Information Maximization for a Wireless Energy Harvesting Node Considering the Circuitry Power Consumption

Maria Gregori (CTTC, Spain); Antonio Pascual-Iserte (Universitat Politècnica de Catalunya, Spain); Miquel Payaró (CTTC, Spain)

Hybrid Energy Harvesting Wireless Systems: Performance Evaluation and Benchmarking

Shilpa Rao (Indian Institute of Science, India); Neelesh B. Mehta (Indian Institute of Science, India)

A Novel Mode Switching Scheme Utilizing Random Beamforming for Opportunistic Energy Harvesting

Hyungsik Ju (National University of Singapore, Singapore); Rui Zhang (National University of Singapore, Singapore)

Harvest-Use Cooperative Networks with Half/Full-Duplex Relaying

Ioannis Krikidis (SnT, University of Luxembourg, Luxembourg); Gan Zheng (University of Luxembourg, Luxembourg); Björn Ottersten (KTH Royal Institute of Technology, Sweden)

Wednesday, 10 April 2013

16:00-17:30

PHY 47: Optical Wireless Communications

Subcarrier BPSK Modulated FSO Communications with Pointing Errors

Xuegui Song (University of British Columbia, Canada); Fan Yang (Southeast University, P.R. China); Julian Cheng (University of British Columbia, Canada)

Space-Time Coded MPSK Coherent MIMO FSO Systems in Gamma-Gamma Turbulence

Mingbo Niu (University of British Columbia, Canada); Julian Cheng (University of British Columbia, Canada); Jonathan F Holzman (University of British Columbia (UBC) Okanagan, Canada)

Single Carrier Frequency Domain Equalization based on On-Off-Keying for Optical Wireless Communications

Asanka Nuwanpriya (University of South Australia, Australia); Jian (Andrew) Zhang (CSIRO ICT Centre, Australia); Alex Grant (University of South Australia, Australia); Siu-Wai Ho (University of South Australia, Australia); Lin Luo (University of South Australia, Australia)

An Equal-Radius Constellation with Improved PTMER for Optical Wireless Communications

Xian Liu (University of Arkansas at Little Rock, USA)

Fractionally Spaced Equalization in Visible Light

Mingxuan Zhang (Southeast University, P.R. China); Zaichen Zhang (Southeast University, P.R. China)

Linear Equalization in Communications With Mismatched Modeling Using Krylov Subspace Expansion

Jun Tong (Universität Paderborn, Germany); Peter J. Schreier (Universität Paderborn, Germany)

Wednesday, 10 April 2013

16:00-17:30

PHY 48: Decoder Design and Performance

Analysis of Voltage- and Clock-Scaling-Induced Timing Errors in Stochastic LDPC Decoders

Lajos Hanzo (University of Southampton, United Kingdom); Robert G Maunder (University of Southampton, United Kingdom); Isaac Perez-Andrade (University of Southampton, United Kingdom); Xin Zuo (University of Southampton, United Kingdom); Bashir Al-Hashimi (University of Southampton, United Kingdom)

Improved Soft-Decision Decoding of RSCC Codes

Li Chen (Sun Yat-sen University, P.R. China)

A Fully Parallel Truncated Viterbi Decoder for Software Defined Radio on GPUs

Rongchun Li (National University of Defense Technology, P.R. China); Yong Dou (National University of Defense Technology (NUDT), P.R. China); Yu Li (National University of Defense Technology, P.R. China); Shi Wang (Changsha Military Delegate Bureau, P.R. China)

Locally-Optimized Reweighted Belief Propagation for Decoding Finite-Length LDPC codes

Jingjing Liu (University of York, United Kingdom); Rodrigo C. de Lamare (University of York, United Kingdom); Henk Wymeersch (Chalmers University of Technology, Sweden)

LDPC coding with Soft Information Relaying in Cooperative Wireless Networks

Dushanta N K Jayakody (University College Dublin, Ireland); Mark F. Flanagan (University College Dublin, Ireland)

Generator matrix design and degree-oriented scheduling for the fast decoding convergence of rateless codes

Huang Chang Lee (National Tsing Hua University, Taiwan); Chih-Wei Chan (National Tsing Hua University, Taiwan); Yeong-Luh Ueng (National Tsing Hua University, Taiwan); Yen-Ming Chen (National Tsing Hua University, Taiwan)

Monday, 08 April 2013

11:00-12:30

PHY 49: UWB and TOA Estimation I - (Poster Session I)

Short Range Ultra-Wideband Multiple Input Multiple Output Channel Measurements

Nikola Gvozdenovic (Vienna University of Technology, Austria); William Thompson (University of Bristol, United Kingdom); Mark Beach (University of Bristol, United Kingdom); Christoph F Mecklenbräuer (Vienna University of Technology, Austria); Geoffrey Hilton (University of Bristol, United Kingdom)

Bounds on Performance of UWB TOA Estimation using Finite Resolution Quantization

Fei Sun (University of Science and Technology of China, P.R. China); Huarui Yin (University of Science and Technology of China, P.R. China); Weidong Wang (University of Science and Technology of China, P.R. China)

Inter-Symbol Interference Cancellation in Monobit Transmitted-Reference Impulse Radio UWB Receivers

Hassan Khani (University of Northern Iowa, USA); Hong Nie (University of Northern Iowa, USA); Weidong Xiang (University of Michigan, Dearborn, USA); Zhizhang (David) Chen (Dalhousie University, Canada)

A Simple Pearson Distribution Based Detector with Applications to Time-Hopping Multiuser UWB Receiver Design

Jun Yang (National University of Defense Technology, P.R. China); Ning Wang (University of Victoria, Canada)

Monday, 08 April 2013

14:00-15:30

PHY 50: Transmitter and Receiver design – (Poster Session II)

A Novel UHF RFID Dual-band Tag Antenna with Inductively Coupled Feed Structure

Yejun He (Shenzhen University, P.R. China); Bing Zhao (Shenzhen University, P.R. China)

Discrete Hartley Transform Based SFBC-OFDM Transceiver Design with Low Complexity

Xing Ouyang (Dalian Polytechnic University, P.R. China); Jiyu Jin (Dalian Polytechnic University, P.R. China); Guiyue Jin (Dalian Polytechnic University, P.R. China); Zhisen Wang (Dalian Polytechnic University, P.R. China)

Partial Shift Mapping with Inter-Antenna Switch for PAPR Reduction in MIMO-OFDM Systems

Xing Ouyang (Dalian Polytechnic University, P.R. China); Jiyu Jin (Dalian Polytechnic University, P.R. China); Guiyue Jin (Dalian Polytechnic University, P.R. China); Zhisen Wang (Dalian Polytechnic University, P.R. China)

Sample Rate Conversion with Parallel Processing for High Speed Multiband OFDM Systems

Xiaoqing Huang (CSIRO ICT Centre, Australia); Jayasri Joseph (CSIRO ICT Centre, Australia); Jian (Andrew) Zhang (CSIRO ICT Centre, Australia); Y Jay Guo (CSIRO, Australia)

Monday, 08 April 2013
16:00-17:30

PHY 51: Channel Estimation I – (Poster Session III)

A High-Resolution Wideband Digital Channelizer for Software Radio Systems Using High-Order Perfect Reconstruction Filterbanks

Bo Li (Tsinghua University, P.R. China); Jian Yan (Tsinghua University, P.R. China); Xiang Chen (Tsinghua University, P.R. China); Shunliang Mei (Tsinghua University, P.R. China)

Wideband MIMO Channel Capacity Analysis based on Indoor Channel Measurement

Junjun Gao (Beijing University of Posts and Telecommunications, P.R. China); Jianhua Zhang (Beijing University of Posts and Telecommunications, P.R. China); Xiaofeng Tao (Beijing University of Posts and Telecommunications, P.R. China)

Comparisons of Channel Estimation for OFDM-based and Wavelet-based Underwater Acoustic Communications

Chenhao Qi (Southeast University, P.R. China); Lenan Wu (Southeast University, P.R. China)

H-inf channel estimation for MIMO-OFDM systems in the presence of carrier frequency offset

Peng Xu (Northeastern University at Qinhuangdao, P.R. China); Jinkuan Wang (P.O.Box120 Northeastern Qinhuangdao City Hebei Province P.R. China, P.R. China); Yinghua Han (Northeastern University at Qinhuangdao, P.R. China); Feng Qi (Advanced Science Institute, RIKEN, Japan)

Measurement Based Channel Modeling with Directional Antennas for High-Speed Railways

Ruisi He (Beijing Jiaotong University, P.R. China); Andreas Molisch (University of Southern California, USA); Zhangdui Zhong (Beijing Jiaotong University, P.R. China); Ai Bo (Beijing Jiaotong University, P.R. China); Jian-wen Ding (Beijing Jiaotong University, P.R. China); Ruifeng Chen (Beijing Jiaotong University, P.R. China); Zheda Li (University of Southern California, USA)

Tuesday, 09 April 2013
11:00-12:30

PHY 52: Channel Estimation II – (Poster Session I)

Improved Adaptive Sparse Channel Estimation Based on the Least Mean Square Algorithm

Guan Gui (Tohoku University, Japan); Wei Peng (Tohoku University, Japan); Fumiyouki Adachi (Tohoku University, Japan)

Channel Estimation and ICI Cancellation for High Mobility Pilot-Aided MIMO-OFDM Systems

Neda Aboutorab (Australian National University, Australia); Wibowo Hardjawana (The University of Sydney, Australia); Branka Vucetic (The University of Sydney, Australia)

Frequency Domain Averaging for Channel Estimation in OQAM-OFDM systems

DeJin Kong (Huazhong University of Science and Technology, P.R. China); Daiming Qu (Huazhong University of Science and Technology, Wuhan, Hubei, P.R. China); Peng Gao (China Mobile Group Design Institute Co., Ltd., P.R. China); Chonggang Wang (InterDigital Communications, USA); Tao Jiang (Huazhong University of Science and Technology, P.R. China)

A Robust Least Square Channel Estimation Algorithm for OFDM Systems Under Interferences

Yang Zhang (Beijing University of Posts and Telecommunications, P.R. China); Xin Zhang (Beijing University of Posts and Telecommunications, P.R. China); Dacheng Yang (Beijing University of Posts and Telecommunications, P.R. China)

Low Complexity Channel Estimation in TDD Coordinated Multi-point Transmission Systems

Zhilin Chen (Beihang University, P.R. China); Xueying Hou (Beihang University, P.R. China); Shengqian Han (Beihang University, P.R. China); Chenyang Yang (Beihang University, P.R. China); Gang Wang (NEC Labs, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)

Multi-Element Antenna with Close Spacing for Highly Mobile OFDM Systems

Ting-Li Liu (National Taiwan University, Taiwan); Wei-Ho Chung (Academia Sinica, Taiwan); Li-Sheng Chen (National Taiwan University, Taiwan); Zhang Hongke (Beijing Jiaotong University, P.R. China); Sy-Yen Kuo (National Taiwan University, Taiwan)

Tuesday, 09 April 2013
14:00-15:30

PHY 53: Resource Allocation - (Poster Session II)

Optimal Power Allocation for Two-Way Decode-and-Forward Relay Networks with Equal Transmit Power at Source Nodes

Yeonggyu Shim (KAIST, Korea); Hyuncheol Park (KAIST, Korea); Hyuck Kwon (Wichita State University, USA)

RNTP-Based Resource Block Allocation in LTE Downlink Indoor Scenarios

Ying Wang (Beijing University of Posts and Telecommunications, P.R. China); Weidong Zhang (Beijing University of Posts and Telecommunications, P.R. China); Fei Peng (Beijing University of Posts and Telecommunications, P.R. China); Yuan Yuan (Beijing University of Posts and Telecommunications, P.R. China)

Resource Allocation for Device-to-Device Communication Overlaying Two-Way Cellular Networks

Yiyang Pei (Institute for Infocomm Research, Singapore); Ying-Chang Liang (Institute for Infocomm Research, Singapore)

Online Power Allocation For Maximizing Mutual Information in Cognitive Radio System

Rahul Vaze (TIFR Mumbai, India)

Cognitive Relaying and Power Allocation under Channel State Uncertainties

P Ubaidulla (King Abdulla University of Science and Technology, Saudi Arabia); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Sonia Aïssa (INRS, University of Quebec, Canada)

Game Theoretic Distributed Dynamic Resource Allocation with Interference Avoidance in Cognitive Femtocell Networks

Wei-Sheng Lai (National Chiao Tung University, Taiwan); Muh-En Chiang (National Chiao Tung University, Taiwan); Shen-Chung Lee (National Chiao Tung University, Taiwan); Ta-Sung Lee (National Chiao Tung University, Taiwan)

Tuesday, 09 April 2013
14:00-15:30

PHY 54: Cognitive Radio and Spectrum Sensing – (Poster Session III)

Wideband Sensing of Slow FH Primary Users with Unknown Hop Duration

Abubakar U. Makarfi (University of Manchester, United Kingdom); Khairi A. Hamdi (University of Manchester, United Kingdom)

Non-Cooperative Double-Threshold Sensing Scheme: A Sensing-Throughput Tradeoff

Javad Jafarian (University of Manchester, United Kingdom); Khairi A. Hamdi (University of Manchester, United Kingdom)

Optimal Access Strategy for Capacity Optimization in Cognitive Radio System

Mohamed Elalem (Ryerson Canada, Canada); Lian Zhao (Ryerson University, Canada)

Transport Capacity of Cognitive Radio Ad Hoc Networks with Primary Outage Constraint

Yuchen Guo (Beijing University of Posts and Telecommunications, P.R. China); Yingchun Ma (Beijing University of Posts and Telecommunications, P.R. China); Kai Niu (Beijing University of Posts and Telecommunications, P.R. China); Jiuru Lin (Beijing University of Posts and Telecommunications, P.R. China)

Performance Analysis of Uplink Cognitive Cellular Networks in Nakagami-m Fading Channels

Yuzhen Huang (PLA University of Science & Technology, China)

Tuesday, 09 April 2013
16:00-17:30

PHY 55: Interference Management and Mitigation – (Poster Session III)

Downlink Interference Cancellation in LTE: Potential and Challenges

Eric Hardouin (France Telecom, Research & Development Division, France); Mohamad Sayed Hassan (ALTEN SIR/Orange Labs, France); Ahmed Saadani (Orange Labs, France)

Interference Protection Mechanism for LTE-Advanced Radio Access Networks Supporting Dynamic Spectrum Access

Juan Naranjo (Universität der Bundeswehr München, Germany); Abdallah Bou Saleh (Aalto University School of Electrical Engineering, Germany); Ruediger Halfmann (Nokia Siemens Networks, Germany); Ingo Viering (Nomor Research GmbH, Germany); Gerhard Bauch (Hamburg University of Technology, Germany)

On Throughput Gains by Exploiting Green Interference Power in the Multi-User MIMO Downlink

Christos Masouros (University College London, United Kingdom)

On the Capacity of DMPR Wireless Networks

Yuan Gao (Huazhong University of Science & Technology, P.R. China); Li Yu (Huazhong University of Science & Technology, P.R. China); Zuhao Liu (Huazhong University of Science & Technology, P.R. China); Cong Liu (Huazhong University of Science & Technology, P.R. China); Desheng Wang (Huazhong University of Science and Technology, P.R. China)

Location Information Based Interference Control for Cognitive Radio Network in TV White Spaces

Xin Tao (Zhejiang University, P.R. China); Zhifeng Zhao (Zhejiang University, P.R. China); Honggang Zhang (Université Européenne de Bretagne (UEB) & Supelec, France)

A Soft Tree Pruning Based Fixed-complexity Sphere Decoder for Interference-limited MIMO Systems

Guangxia Zhou (Intel Mobile Communications, Germany); Wen Xu (Intel, Germany); Gerhard Bauch (Hamburg University of Technology, Germany)

Fast Robust Adaptive XPI Cancellation

Vasily A. Khlebnikov (Russian R&D Center, Huawei Technologies Co., Ltd, Russia); Vladimir Ivanov (Huawei Technologies, Russia); Zeng Yanxing (Huawei Technologies, P.R. China); Jiangiang Shen (Huawei Technologies, Germany); Wang Guangjian (Huawei Technologies, P.R. China)

Application of Full-Duplex Wireless Communication System on Echo Cancellation

Faramarz Asharif (University of the Ryukyus, Japan); Shiro Tamaki (University of The Ryukyus, Japan); Mohammad Reza Asharif (University of Ryukyus, Japan); Heung-Gyoon Ryu (Chungbuk National University, Korea)

Tuesday, 09 April 2013

16:00-17:30

PHY 56: Wireless Networks II – (Poster Session III)

Throughput Maximization Transmission Scheme for Virtual MIMO in Clustered Wireless Sensor Networks

Li Wang (Tsinghua University, P.R. China); Yuhang Dong (Tsinghua University, P.R. China); Xuedan Zhang (Tsinghua University, P.R. China)

Sensor Integration underlying Cellular Networks through MC-CDMA and Mobile Sink

Feng Hu (University of Oulu, Finland); Nandana Rajatheva (University of Oulu, Finland); Matti Latva-aho (UoOulu, Finland); Markku Juntti (University of Oulu, Finland)

Reducing the observation error in a WSN through a consensus-based subspace projection

Fernando Camaró-Nogués (Universidad de Valencia, Spain); Daniel Alonso-Román (Universidad de Valencia, Spain); César Asensio-Marco (Universidad de Valencia, Spain); Baltasar Beferull-Lozano (Universidad de Valencia, Spain)

Dynamic Access Strategy Selection in User Deployed Small Cell Networks

Pu Yuan (Nanyang Technological University, Singapore); Ying-Chang Liang (Institute for Infocomm Research, Singapore); Guoan Bi (Nanyang Technological University, Singapore)

Wednesday, 10 April 2013

11:00-12:30

PHY 57: Performance analysis II - (Poster Session)

Link-level Performance of an LTE UE Receiver in Synchronous and Asynchronous Networks

Panayiotis Papadimitriou (Nokia Research Center, Finland); Tero Ihalainen (Nokia Research Center, Finland); Heikki Berg (Nokia, Finland); Klaus Hugl (Nokia, Finland)

Differential Amplify-and-Forward Relaying in Time-Varying Rayleigh Fading Channels

M R. Avendi (University of Saskatchewan, Canada); Ha Nguyen (University of Saskatchewan, Canada)

Error Performance Analysis of Differential Detection for Amplify-and-Forward Relay Systems

Xuzheng Lin (National University of Singapore, Singapore); Ming-Wei Wu (Zhejiang University of Science and Technology, P.R. China); Pooi-Yuen Kam (National University of Singapore, Singapore)

The Effect of Carrier Phase Jitter on Variable Rate CI/MC-CDMA Performance

Mithun Mukherjee (Indian Institute of Technology Patna, India); Preetam Kumar (Indian Institute of Technology Patna, India)

Optimization Design of CCPM with Short Frame and its Implementation

Xiaojie Dai (University of Tsinghua, P.R. China); Yafeng Zhan (Tsinghua University, P.R. China); Ruyuan Zhang (University of Tsinghua, P.R. China)

Non-Binary Low-Density Parity-Check coded Cyclic Code-Shift Keying

Oussama Abassi (Université de Bretagne Sud, France); Laura Conde-Canencia (Université de Bretagne Sud, France); Mohammad Mansour (American University of Beirut, Lebanon); Emmanuel Boutillon (Université de Bretagne Sud, France)

A Mixed Quality of Service Based Linear Transceiver Design for a Multiuser MIMO Network with Linear Transmit Covariance Constraints

Kanathippillai Cumanan (Newcastle University, United Kingdom); Yogachandran Rahulamathavan (City University London, United Kingdom); Sangarapillai Lambotharan (Loughborough University, United Kingdom); Zhiguo Ding (Newcastle University, United Kingdom)

Reduced-complexity Superbaud Timing Recovery for PAM-based Multi-h CPM Receivers

Yonggang Wang (PLA University of Science and Technology, P.R. China); Aijun Liu (PLA University of Science and Technology, P.R. China); Yingxian Zhang (PLA University of Science and Technology, P.R. China); Heng Wang (PLA University of Science and Technology, P.R. China); Kun Zhao (PLA University of Science and Technology, P.R. China)

Design and Implementation of Digital Predistorter with Orthonormal Polynomials

Saijie Yao (Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, P.R. China); Hao Huang (Chinese Academy of Sciences, P.R. China); Hua Qian (Chinese Academy of Sciences, P.R. China)

Binary Sequence Pair Based Time-Domain Superimposed Training for OFDM

Jiong Shi (Zhejiang Wanli University, P.R. China); Liping Jin (Zhejiang Wanli University, P.R. China); Zhaoxi Fang (Zhejiang Wanli University, P.R. China); Ting Jiang (Beijing University of Posts & Telecommunications, P.R. China); Zheng Zhou (Beijing University of Posts and Telecommunications, P.R. China)

Concatenated Training in Distributed Transmit Beamforming Systems

Jian (Andrew) Zhang (CSIRO ICT Centre, Australia); Tao Yang (CSIRO, Australia); Zhuo Chen (CSIRO ICT Centre, Australia)

Feedback rate allocation of precoder and bit loading for MIMO systems with limited feedback

Hung-Chun Chen (National Chiao Tung University, Taiwan); Yuan-Pei Lin (National Chiao Tung University, Taiwan)