

2012 IEEE Global Communications Conference

(GLOBECOM 2012)

**Anaheim, California, USA
3 - 7 December 2012**

Pages 1-788



IEEE Catalog Number: CFP12GLO-PRT
ISBN: 978-1-4673-0920-2

GC12 AHSN: Globecom 2012 - Ad Hoc and Sensor Networking Symposium - Program

AHSN01: Ad Hoc Routing

Quasi-greedy Geographic Routing in Wireless Networks

Jung-Tsung Tsai (National Taiwan Normal University, Taiwan); Yen-Cheng Li (National Taiwan Normal University, Taiwan)
pp. 8-13

A New Routing Scheme Based on Adaptive Selection of Geographic Directions

Zimu Yuan (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Wei Li (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Shuhui Yang (Purdue University Calumet, USA)
pp. 14-19

Automatic Routing Using Multiple Prefix Labels

Rumi Ghosh (University of California, Santa Cruz, USA); Jj Garcia-Luna-Aceves (University of California at Santa Cruz, USA)
pp. 20-25

Throughput Capacity of the Group-Based Two-Hop Relay Algorithm in MANETs

Jiajia Liu (Tohoku University, Japan); Xiaohong Jiang (Future University-Hakodate, Japan); Hiroki Nishiyama (Tohoku University, Japan); Nei Kato (Tohoku University, Japan)
pp. 26-30

Energy-Efficient Routing through Weighted Load Balancing

Donovan Bradley (North Carolina Central University, USA); RN Uma (NCCU, USA)
pp. 31-37

Ad Hoc Network Metrics: Which is Best?

Qian Zhang (InterDigital, USA); David W Matolak (University of South Carolina, USA)
pp. 38-43

AHSN10: VANETs, 1

HHLS: A Hybrid Routing Technique for VANETs

Marwane Ayaida (University of Reims Champagne-Ardenne & CReSTIC, France); Mohtadi Barhoumi (University of Reims Champagne Ardenne, France); Hacene Fouchal (Université de Reims Champagne-Ardenne, France); Yacine Ghamri-Doudane (ENSIEE & Université Paris-Est (LIGM Lab), France); Lissan Afilal (CReSTIC, France)
pp. 44-48

An Intersection Collision Avoidance System for Scooters Utilizing Non-Line-Of-Sight Links

Po-Jui Chiu (National Taiwan University, Taiwan); Hsin-Mu Tsai (National Taiwan University, Taiwan)
pp. 49-55

Wireless Connection Steering for Vehicles

Tarik Taleb (NEC Europe Ltd., Germany); Adlen Ksentini (University of Rennes 1 / IRISA Lab, France); Fethi Filali (QMIC, Qatar)
pp. 56-60

A Low Complexity Clustering Approach Enabling Context Awareness in Sparse VANETs

Francesco Chiti (Università degli Studi di Firenze, Italy); Romano Fantacci (University of Florence, Italy); Riccardo Mastandrea (University of Florence, Italy)
pp. 61-66

Infotainment traffic flow dissemination in an urban VANET

Pierpaolo Salvo (University of Rome Sapienza, Italy); Mario De Felice (Sapienza University of Roma & Lionbridge Inc., Italy); Francesca Cuomo (University of Rome Sapienza, Italy); Andrea Baiocchi (University of Roma Sapienza, Italy)
pp. 67-72

A Distributed Infrastructure-Based Congestion Avoidance Protocol for Vehicular Ad Hoc Networks

Maram Bani Younes (University of Ottawa, Canada); Graciela Roman Alonso (Universidad Autonoma Metropolitana-Izt, Mexico); Azzedine Boukerche (University of Ottawa, Canada)
pp. 73-78

AHSN02: Data Mules and Mobile Sinks

Energy conservation in sensor network data ferrying: a reinforcement metalearning approach

Ben Pearre (University of Colorado, Boulder, USA); Timothy Brown (University of Colorado, USA)
pp. 79-85

Smooth Path Construction for Data Mule Tours in Wireless Sensor Networks

Andrew Wichmann (University of Texas at San Antonio, USA); Justin Chester (University of Texas at San Antonio, USA); Turgay Korkmaz (University of Texas at San Antonio, USA)
pp. 86-92

Delay-Tolerant Data Gathering in Energy Harvesting Sensor Networks With a Mobile Sink

Xiaojiang Ren (The Australian National University, Australia); Weifa Liang (The Australian National University, Australia)
pp. 93-99

Traffic-Attracted Mobile Relay Deployment in a Wireless Ad Hoc Network

Fang-Jing Wu (National Chiao-Tung University, Taiwan); Hsiu-Chi Hsu (National Chiao-Tung University, Taiwan); Yu-Chee Tseng (National Chiao-Tung University, Taiwan)
pp. 100-105

Sweeping and Active Skipping in Wireless Sensor Networks with Mobile Elements

Jun Tao (Souteast University, P.R. China); Liang He (Singapore University of Technology and Design, Singapore); Yanyan Zhuang (University of Victoria, Canada); Jianping Pan (University of Victoria, Canada); Maryam Ahmadi (University of Victoria, Canada)
pp. 106-111

AHSN11: Network Coding

Restricted Isometry Property in Quantized Network Coding of Sparse Messages

Mahdy Nabae (McGill University, Canada); Fabrice Labeau (McGill University, Canada)
pp. 112-117

Modeling the Transmission of Coded Packets for Coding Aware Routing

Diego Passos (Universidade Federal Fluminense, Brazil); Celio Albuquerque (Fluminense Federal University, Brazil)
pp. 118-124

TCP VON: Joint Congestion Control and Online Network Coding for Wireless Networks

Wei Bao (University of Toronto, Canada); Vahid Shah-Mansouri (University of British Columbia, Canada); Vincent W.S. Wong (University of British Columbia, Canada); Victor CM Leung (The University of British Columbia, Canada)
pp. 125-130

Hybrid Network-Erasure Coding Protection of Multi-Source, Multi-Sink Multicast Sessions in WSNs

Suhas Shetty (Iowa State University, USA); Ahmed E. Kamal (Iowa State University, USA)
pp. 131-137

MWNCast: Cooperative Multicast based on Moving Window Network Coding

Fei Wu (Zhejiang University, P.R. China); Cunqing Hua (Shanghai Jiao Tong University, P.R. China); Hangguan Shan (Zhejiang University, P.R. China); Aiping Huang (Zhejiang University, P.R. China)
pp. 138-144

AHSN03: Wireless Sensor Network Routing, 1

Optimal Distributed Relay Selection for Duty-Cycling Wireless Sensor Networks

Mohammed-Amine Koulali (University Mohammed I & ENSAO, Morocco); Abdellatif Kobbane (ENSIAS, University Mohammed V-Souissi & ENSIAS, Morocco); Mohammed El Koutbi (University Mohamed V - Souissi & ENSIAS, Morocco); Jalel Ben-Othman (University of Paris 13, France)
pp. 145-150

Consensus Based Distributed Joint Power and Routing Optimization in Wireless Sensor Networks

Markus Leinonen (University of Oulu & Centre for Wireless Communications (CWC), Finland); Marian Codreanu (University of Oulu, Finland); Markku Juntti (University of Oulu, Finland)
pp. 151-156

Hands on IRIS: Lessons learned from implementing a cross layer protocol stack for WSNs

Alessandro Camillò (University of Rome "La Sapienza", Italy); Chiara Petrioli (University of Rome "La Sapienza", Italy)
pp. 157-163

Fast Convergence in Stochastic Routing for Wireless Sensor Networks: An Analytical Perspective

Udara Sadathana Wijetunge (University of South Australia, Australia); Sylvie Perreau (University of South Australia, Australia); André Pollok (University of South Australia, Australia)
pp. 164-170

Improving Learning Automata-based Routing in Wireless Sensor Networks

Ehsan Ahvar (Payame Noor University, Iran); Marcelo Yannuzzi (Technical University of Catalonia (UPC), Spain); René Serral-Gracià (Technical University of Catalonia (UPC), Spain); Eva Marín-Tordera (Technical University of Catalonia UPC, Spain); Xavier Masip-Bruin (Universitat Politècnica de Catalunya & Advanced Network Architectures Lab (CRAAX), Spain); Shohreh Ahvar (Isfahan University of Technology, Iran)
pp. 171-176

AHSN12: VANETs, 2

A Hidden Markov Model based Scheme for Efficient and Fast Dissemination of Safety Messages in VANETs

Imane Horiya Brahmi (PEL, UCD, Ireland); Soufiane Djahel (Lero, UCD School of Computer Science and Informatics, Ireland); Yacine Ghamri-Doudane (ENSIEE & Université Paris-Est (LIGM Lab), France)
pp. 177-182

Stochastic Data Delivery Delay Analysis In Intermittently Connected Vehicular Networks

Maurice J. Khabbaz (Concordia University & Lebanese American University, Canada); Hamed M. K. Alazemi (Kuwait University, Kuwait); Chadi Assi (Concordia University, Canada)
pp. 183-188

A Road-based QoS-aware Multipath Routing for Urban Vehicular Ad Hoc Networks

Yi-Ling Hsieh (National Chiao Tung University, Taiwan); Kuochen Wang (National Chiao Tung University, Taiwan)
pp. 189-194

Routing in VANETs: A Fuzzy Constraint Q-Learning Approach

Celimuge Wu (University of Electro-Communications, Japan); Satoshi Ohzahata (The University of Electro-Communications & Graduate School of Information Systems, Japan); Toshihiko Kato (University of Electro-Communications, Japan)
pp. 195-200

A Distributed Advanced Analytical Trust Model for VANETs

Tahani Gazdar (University of Avignon & University of Manouba, Tunisia); Abderrezak Rachedi (University Paris-Est Marne-la-Vallée, France); Abderrahim Benslimane (University of Avignon & LIA/CERI, France); Abdelfettah Belghith (University of Manouba & National School of Computer Sciences ENSI, Tunisia)
pp. 201-206

Towards Guaranteed Delivery of Safety Messages in VANETs

Faisal Ahmad Khan (Georgia Institute of Technology, USA); Yusun Chang (Southern Polytechnic State University & The Georgia Institute of Technology, USA); Sung Jin Park (Georgia Institute of Technology, USA); John A. Copeland (Georgia Institute of Technology, USA)
pp. 207-213

AHSN04: Wireless Sensor Network Routing, 2**Pruned Adaptive Routing in the Heterogeneous Internet of Things**

Sharief M.A. Oteafy (Queen's University, Canada); Fadi M. Al-Turjman (Queen's University, Canada); Hossam S. Hassanein (Queen's University, Canada)
pp. 214-219

An Entropy Coding based Hybrid Routing Algorithm for Data Aggregation in Wireless Sensor Networks

ZhenZhong Huang (Southeast University, P.R. China); Jun Zheng (Southeast University, P.R. China)
pp. 220-224

A Simple Energy-Efficient Routing Algorithm for Wireless Sensor Networks based on Artificial Potential Field

Shichao Wang (Northwestern Polytechnical University, P.R. China); Ruonan Zhang (Northwestern Polytechnical University, P.R. China); Jianfeng Ma (Xidian University, P.R. China); Lin Cai (University of Victoria, Canada)
pp. 225-231

Delay minimum data collection in the low-duty-cycle wireless sensor networks

Shuyun Luo (Beijing University of Posts and Telecommunications, P.R. China); Xufei Mao (Tsinghua University, P.R. China); Yongmei Sun (Beijing University of Posts and Telecommunications, P.R. China); Ji Yuefeng (Beijing University of Posts and Telecommunications, P.R. China); Shaojie Tang (Illinois Institute of Technology, USA)
pp. 232-237

A Cross-Layer Approach for Context-Aware Data Gathering in Wireless Sensor Networks

Mohamed S Hefeeda (University of Illinois at Chicago, USA); Ashfaq Khokhar (University of Illinois at Chicago, USA)
pp. 238-243

Receiver-Based Heading: Towards On-Line Energy Efficient Duty Cycle Assignments

Yuqun Zhang (The University of Texas at Austin, USA); Chien-Liang Fok (The University of Texas at Austin, USA)
pp. 244-249

AHSN13: DTN and Opportunistic Networking**An SNMP-based Solution for Vehicular Delay-Tolerant Network Management**

Bruno Ferreira (Instituto de Telecomunicações, University of Beira Interior, Portugal); João Isento (Instituto de Telecomunicações, University of Beira Interior, Portugal); João Dias (Instituto de Telecomunicações, University of Beira Interior, Portugal); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal); Liang Zhou (Nanjing University of Posts and Telecommunications, P.R. China)
pp. 250-255

Come-Stop-Leave (CSL): A Geographic Routing for Intermittently Connected Networks Using Delegation Replication Approach

Yue Cao (University of Surrey, United Kingdom); Yingmin Wang (CATT, P.R. China); Shaoli Kang (CATT, P.R. China); Zhili Sun (University of Surrey, United Kingdom)
pp. 256-261

Energy Efficient Scheduling for Delay Constrained Communication in Wireless Body Area Networks

Qinghua Shen (University of Waterloo, Canada); Weihua Zhuang (University of Waterloo, Canada)
pp. 262-267

TicTac: From Transfer-Incapable Carpooling to Transfer-Allowed Carpooling

Yunfei Hou (State University of New York at Buffalo, USA); Xu Li (State University of New York at Buffalo, USA); Chunming Qiao (State University of New York at Buffalo, USA)
pp. 268-273

A Distributed Opportunistic Scheduling Protocol for Multi-Channel Wireless Ad-Hoc Networks

Hua Chen (University of Maryland, College Park, USA); John S. Baras (University of Maryland College Park, USA)
pp. 274-279

Ubiquitous Robust Data Delivery for Integrated RSNs in IoT

Ashraf E. Al-Fagih (Queen's University, Canada); Fadi M. Al-Turjman (Queen's University, Canada); Hossam S. Hassanein (Queen's University, Canada)
pp. 280-285

AHSN05: Localization and Tracking

Angle of Departure Aided Sensor Localization Technique under Multipath Environment

Bobin Yao (Xi'an Jiaotong University, P.R. China); Wenjie Wang (Xi'an Jiaotong University, P.R. China); Qinye Yin (Xi'an Jiaotong University, P.R. China)
pp. 286-290

Acoustic Ranging and Communication via Microphone Channel

Kaikai Liu (University of Florida, USA); Xinxin Liu (University of Florida, USA); Xiaolin Li (University of Florida, USA)
pp. 291-296

Device-Free Object Tracking with Wireless Sensors

Ying Zhu (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, P.R. China); Lixia Chen (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, P.R. China); Wei Zhang (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, P.R. China); Ai Chen (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, P.R. China); Xiaoxia Huang (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, P.R. China)
pp. 297-302

RSS Based Indoor Localization with Limited Deployment Load

Sameh Sorour (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Yves Lostanlen (SIRADEL & University of Toronto, Canada); Shahrokh Valaee (University of Toronto, Canada)
pp. 303-308

Multilateration Localization in the Presence of Anchor Location Uncertainties

Yifeng Zhou (Communications Research Centre, Canada); Jun Li (Communications Research Centre of Canada, Canada); Louise Lamont (Communications Research Centre Canada, Canada)
pp. 309-314

Indoor Positioning and Distance-aware Graph-based Semi-supervised Learning Method

Vahid Pourahmadi (University of Toronto, Canada); Shahrokh Valaee (University of Toronto, Canada)
pp. 315-320

AHSN14: Security Issues

On Sleep-wakeup Scheduling of Non-penetrable Barrier-coverage of Wireless Sensors

Donghyun Kim (North Carolina Central University, USA); Jiwoong Kim (North Carolina Central University, USA); Deying Li (Renmin University of China, P.R. China); Sung-Sik Kwon (North Carolina Central University, USA); Alade Tokuta (North Carolina Central University, USA)
pp. 321-327

Privacy- and Integrity-Preserving Range Query in Wireless Sensor Networks

Yao-Tung Tsou (National Taiwan University, Taiwan); Chun-Shien Lu (Institute of Information Science, Academia Sinica, Taiwan); Sy-Yen Kuo (National Taiwan University, Taiwan)

pp. 328-334

Privacy-preserving and Secure Top-k Query in Two-tier Wireless Sensor Network

Xiaojing Liao (Georgia Institute of Technology, USA); Jianzhong Li (Harbin Institute of Technology, P.R. China)
pp. 335-341

A new 'Direction' for Source Location Privacy in Wireless Sensor Networks

Shehla Rana (University of Illinois Urbana Champaign, USA); Nitin Vaidya (University of Illinois at Urbana-Champaign, USA)
pp. 342-347

VSLP: Voronoi-Socialspot-Aided Packet Forwarding Protocol with Receiver Location Privacy in MSNs

Kuan Zhang (University of Waterloo, Canada); Xiaohui Liang (University of Waterloo, Canada); Rongxing Lu (University of Waterloo, Canada); Sherman Shen (University of Waterloo, Canada); Hai Zhao (Northeastern University, P.R. China)
pp. 348-353

A new Method to Secure RA-OLSR using IBE

Jalel Ben-Othman (University of Paris 13, France); Yesica Imelda Saavedra Benitez (University of Versailles, France)
pp. 354-358

P-AHSN: Posters, 1

Long-Term Clock Synchronization in Wireless Sensor Networks with Arbitrary Delay Distributions

Wanlu Sun (Chalmers University of Technology, Sweden); Erik G Ström (Chalmers University of Technology, Sweden); Fredrik Bränström (Chalmers University of Technology, Sweden); Debarati Sen (Samsung Electronics, Bangalore & Indian Institute of Technology Kharagpur, G. S. S. School of Telecommunications, India)
pp. 359-364

Dynamic Flooding Time Synchronisation Protocol

Jonathan Shannon (National University of Ireland, Galway, Ireland); Hugh Melvin (National University of Ireland, Galway, Ireland); Antonio G. Ruzzelli (University College Dublin & CLARITY centre, School of Computer Science and Informatics, Ireland)
pp. 365-371

An Efficient Hybrid Localization Scheme for Heterogeneous Wireless Networks

Zimu Yuan (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Wei Li (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Adam C. Champion (The Ohio State University, USA); Wei Zhao (University of Macau, Macao)
pp. 372-378

A Cellular Pulse Switching Architecture for Binary Event Sensing

Qiong Huo (Michigan State University, USA); Bo Dong (Michigan State University, USA); Subir Biswas (Michigan State University, USA)
pp. 379-384

Analytical Modeling of RFID Generation-2 Protocol Using Absorbing Markov Chain Theorem

Ehsan Vahedi (University of British Columbia, Canada); Rabab Ward (University of British Columbia, Canada); Ian Blake (University of British Columbia, Canada)
pp. 385-390

Secure Gateway Localization and Communication System for Vehicular Ad hoc Networks

Kaouther Abrougui (University of Ottawa, Canada); Azzedine Boukerche (University of Ottawa, Canada); Yan Wang (University of Ottawa, Canada)
pp. 391-396

AHSN06: Cognitive Networking

A Dynamic Channel Allocation Scheme Using Spectrum Sensing for Mobile Ad Hoc Networks

Bora Karaoglu (University of Rochester, USA); Wendi Heinzelman (University of Rochester, USA)
pp. 397-402

Delay Minimization through Joint Routing and Resource Allocation in Cognitive Radio-Based Mesh Networks

Amr El-Sherif (Alexandria University, Egypt); Amr Mohamed (Qatar University & Qatar University Wireless Innovations Center, Qatar)
pp. 403-409

Rank-Optimal Channel Selection Strategy in Cognitive Networks

Narjes Torabi (University of British Columbia, Canada); Karim Rostamzadeh (University of British Columbia, Canada); Victor CM Leung (The University of British Columbia, Canada)
pp. 410-415

Energy-efficient Power Allocation in Cognitive Sensor Networks: A Game Theoretic Approach

Bo Chai (Zhejiang University, P.R. China); Ruilong Deng (Zhejiang University, P.R. China); Peng Cheng (Zhejiang University, P.R. China); Jiming Chen (Zhejiang University, P.R. China)
pp. 416-421

FCM: Frequency Domain Cooperative Sensing and Multi-channel Contention for CRAHNs

Lu Wang (Hong Kong University of Science and Technology, Hong Kong); Kaishun Wu (HKUST & Sun Yat-sen University, Hong Kong); Jiang Xiao (HKUST, Hong Kong); Mounir Hamdi (Hong Kong University of Science and Technology, P.R. China)
pp. 422-426

AHSN15: MAC

Non-saturated Performance Analysis of IEEE 802.11 Broadcast in 2-D Mobile Ad Hoc Networks

Mimming Ni (Beijing Jiaotong University, P.R. China); Zhangdui Zhong (Beijing Jiaotong University, P.R. China); Jianping Pan (University of Victoria, Canada); Dongmei Zhao (McMaster University, Canada); Rui Feng Chen (Beijing Jiaotong University, P.R. China)
pp. 427-432

An Energy Efficient Multi-channel MAC Protocol for Wireless Ad hoc Networks

Duc Ngoc Minh Dang (Kyung Hee University, Korea); Mui Van Nguyen (Kyung Hee University, Korea); Choong Seon Hong (Kyung Hee University, Korea); Sungwon Lee (Kyung Hee University, Korea); Kwangsue Chung (Kwangwoon University, Korea)
pp. 433-438

Automated MAC Protocol Generation for Dynamic Topologies

Jian Zhen (University of California, Santa Barbara, USA); Volkan Rodoplu (University of California, Santa Barbara, USA)
pp. 439-444

IEEE 802.11 Wireless LANs: Non-saturation Queueing and Delay Analysis

Ahed Alshanyour (Ericsson Canada Inc, Canada); Anjali Agarwal (Concordia University, Canada)
pp. 445-450

Toward MAC Protocol Service over the Air

Tae-Suk Kim (Samsung Advanced Institute of Technology, Korea); Tae Rim Park (Samsung Advanced Institute of Technology, Korea); Mo Sha (Washington University in St. Louis, USA); Chenyang Lu (Washington University in St. Louis, USA)
pp. 451-457

An upper bound on transmission capacity of wireless CSMA networks

Tao Yang (University of Sydney, Australia); Guoqiang Mao (The University of Sydney, Australia); Wei Zhang (The University of New South Wales, Australia)
pp. 458-463

P-AHSN: Posters, 2

A Two-layer Cache Replication Scheme for Dense Mobile Ad hoc Networks

Kassem Fawaz (American University of Beirut, Lebanon); Hassan A. Artail (American University of Beirut, Lebanon)
pp. 464-469

Discovering Influential Users in Micro-blog Marketing with Influence Maximization Mechanism

Fei Hao (Korea Advanced Institute of Science and Technology, Korea); Min Chen (Huazhong University of Science and Technology, P.R. China); Chunsheng Zhu (The University of British Columbia, Canada); Mohsen Guizani (QU, USA)
pp. 470-474

Leveraging Multiview Video Coding in Clustered Multimedia Sensor networks

Stefania Colonnese (Università "La Sapienza" di Roma, Italy); Francesca Cuomo (University of Rome Sapienza, Italy); Tommaso Melodia (State University of New York at Buffalo, USA)
pp. 475-480

RaFFD: Resource-aware Fast Foreground Detection in Embedded Smart Cameras

Qiang Wang (Shanghai Jiao Tong University, P.R. China); Pu Zhou (Shanghai Jiao Tong University, P.R. China); Jing Wu (Shanghai Jiao Tong University, P.R. China); Chengnian Long (Shanghai Jiao Tong University, P.R. China)
pp. 481-486

EasiPLED: Discriminating the Causes of Packet Losses and Errors in Indoor WSNs

Tingpei Huang (Institute of Computing Techonology, Chinese Academy of Sciences, P.R. China); Haiming Chen (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Zhaoliang Zhang (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Li Cui (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)
pp. 487-493

An analysis of intrinsic properties of stochastic node placement in sensor networks

Mustapha Reda Senouci (EMP, Algeria); Abdelhamid Mellouk (UPEC, University Paris-Est Creteil Val de Marne, France); Amar Aissani (USTHB, Algeria)
pp. 494-499

AHSN07: Network Connectivity and Relay Selection

On the Quality of Wireless Network Connectivity

Soura Dasgupta (The University of Iowa, USA); Guoqiang Mao (The University of Sydney, Australia)
pp. 500-505

Accurate Subgraph Probabilities in a Random Geometric Graph and Application to Cooperative Multi-hop Ad-hoc Networks

Thomas Bourgeois (Waseda University & Telecom Bretagne, Japan); Shigeru Shimamoto (Waseda University & Graduate School of Global Information and Telecommunication Studies, Japan)
pp. 506-511

Optimized Relay Node Placement for Establishing Connectivity in Sensor Networks

Fatih Senel (Antalya International University, Turkey); Mohamed Younis (University of Maryland Baltimore County, USA)
pp. 512-517

An Effective and Scalable Connectivity Restoration Heuristic for Mobile Sensor/Actor Networks

Izzet F Senturk (Southern Illinois University Carbondale, USA); Kemal Akkaya (Southern Illinois University Carbondale, USA); Fatih Senel (Antalya International University, Turkey)
pp. 518-523

Energy Saving and Network Connectivity Tradeoff in Opportunistic Mobile Networks

Huan Zhou (Zhejiang University, P.R. China); Hongyang Zhao (Zhejiang University, P.R. China); Jiming Chen (Zhejiang University, P.R. China)
pp. 524-529

AHSN16: MAC and Channel Modeling

Sensor-MAC with Dynamic Duty Cycle in Wireless Sensor Networks

Felipe Cunha (Federal University of Minas Gerais, Brazil); Raquel A. F. Mini (PUC Minas, Brazil); Antonio A.F. Loureiro (Federal University of Minas Gerais, Brazil)
pp. 530-536

A Cluster-based Energy Efficient MAC Protocol for Multi-hop Cognitive Radio Sensor Networks

Yanchao Xu (Shanghai Jiaotong University, P.R. China); Chengyu Wu (Shanghai Jiaotong University, P.R. China); Chen He (Shanghai Jiaotong University, P.R. China); Lingge Jiang (Shanghai Jiaotong University, P.R. China)
pp. 537-542

Terahertz Channel Modeling of Underground Sensor Networks in Oil Reservoirs

Mustafa Alper Akkaş (Ege University, Turkey); Ian F. Akyildiz (Georgia Institute of Technology, USA); Radosveta Sokullu (Ege University, Turkey)
pp. 543-548

Measurement-Based Analysis of Cooperative Relaying in an Industrial Wireless Sensor Network

Torsten Andre (University of Klagenfurt, Austria); Guenther Brandner (University of Klagenfurt, Austria); Nikolaj Marchenko (University of Klagenfurt & Lakeside Labs, Austria); Christian Bettstetter (University of Klagenfurt, Austria)
pp. 549-554

Asynchronous MAC Protocol with QoS Awareness in Wireless Sensor Networks

Kien Nguyen (National Institute of Informatics, Japan); Yusheng Ji (National Institute of Informatics, Japan)
pp. 555-559

On-Demand Radio Wave Sensor for Wireless Sensor Networks: Towards a Zero Idle Listening and Zero Sleep Delay MAC Protocol

Sang Hoon Lee (Korea University, Korea); Yong Soo Bae (Korea University, Korea); Lynn Choi (Korea University, Korea)
pp. 560-566

AHSN08: Power Control and Neighbor Discovery

QoS-Aware Autonomous Distributed Power Control in Co-Channel Femtocell Networks

Nessrine Chakchouk (Oregon State University, USA); Bechir Hamdaoui (Oregon State University, USA)
pp. 567-571

Experimental Study on Adaptive Power Control Based Routing in Multi-hop Wireless Body Area Networks

Liang Liang (University of Electronic Science and Technology of China, P.R. China); Yu Ge (Institute for Infocomm Research, Singapore); Gang Feng (University of Electronic Science and Technology of China, P.R. China); Wei Ni (Institute for Infocomm Research, Singapore); Aung Aung Phyo Wai (Institute for Infocomm Research, Singapore)
pp. 572-577

Energy Analysis of Distributed Neighbour Discovery Algorithms Based on Frame Slotted-ALOHA for Cooperative Networks

Francisco Vázquez (Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Spain); Jesus Alonso-Zarate (Centre Tecnologic de Telecomunicacions de Catalunya - CTTC, Spain); Luis Alonso (Universidad Politecnica de Catalunya, Spain)
pp. 578-583

PHED: Pre-Handshaking Neighbor Discovery Protocols in Full Duplex Wireless Ad Hoc Networks

Guobao Sun (Shanghai Jiao Tong University, P.R. China); Fan Wu (Shanghai Jiao Tong University, P.R. China); Xiaofeng Gao (Shanghai Jiao Tong University, P.R. China); Guihai Chen (Shanghai Jiao Tong University, P.R. China)
pp. 584-590

Energy-Efficient Probabilistic Full Coverage in Wireless Sensor Networks

Qianqian Yang (Zhejiang University, P.R. China); Shibo He (Arizona State University, USA); Junkun Li (Zhejiang University, P.R. China); Jiming Chen (Zhejiang University, P.R. China); Youxian Sun (Zhejiang University, P.R. China)
pp. 591-596

Analytical Transmit Power Adjustment in Cooperative Vehicle Safety Systems

Jihene Rezgui (Université de Sherbrooke, Canada); Soumaya Cherkaoui (Université de Sherbrooke, Canada)
pp. 597-602

AHSN17: Security and Monitoring***An Adaptive Deviation-tolerant Secure Scheme for Distributed Cooperative Spectrum Sensing***

Sheng Liu (Shanghai Jiao Tong University, P.R. China); Haojin Zhu (Shanghai Jiao Tong University, P.R. China); Shuai Li (Shanghai Jiao Tong University, P.R. China); Xu Li (INRIA Lille - Nord Europe, France); Cailian Chen (Shanghai Jiao Tong University, P.R. China); Xinping Guan (Shanghai Jiao Tong University, P.R. China)
pp. 603-608

Distributed TDMA for Privacy Sensitive Anonymous Networks

Debasmit Banerjee (Michigan State University, USA); Mahmoud Taghizadeh (Michigan State University, USA); Subir Biswas (Michigan State University, USA)
pp. 609-615

SIMAGE: Secure and Link-Quality Cognizant Image Distribution for Wireless Sensor Networks

Ramalingam K C (Georgia Institute of Technology, USA); Venkatachalam Subramanian (Georgia Institute of Technology, USA); Selcuk Uluagac (Georgia Institute of Technology & The School of ECE, USA); Raheem Beyah (Georgia Institute of Technology, USA)
pp. 616-621

A High Quality Event Capture Scheme for WSN-based Structural Health Monitoring

Chao Yang (Nanjing University, P.R. China); Jiannong Cao (Hong Kong Polytechnic Univ, Hong Kong); Xuefeng Liu (The Hong Kong Polytechnic University, Hong Kong); Li-jun Chen (Nanjing University, P.R. China); Daoxu Chen (Nanjing University, P.R. China)
pp. 622-627

Cooperative Data Reduction in Wireless Sensor Network

Qingquan Zhang (University of Minnesota, USA); Ting Zhu (State University of New York at Binghamton, USA); Ping Yi (Shanghai Jiao Tong University, P.R. China); Yu Gu (Singapore University of Technology and Design & Advanced Digital Sciences Center, Singapore)
pp. 628-633

A Distributed Bayesian Approach to Fault Detection in Sensor Networks

Giuseppe Lo Re (University of Palermo, Italy); Fabrizio Milazzo (University of Palermo, Italy); Marco Ortolani (University of Palermo, Italy)
pp. 634-639

AHSN09: Topology Control and Repair***HMRF-Based Distributed Fault Detection for Wireless Sensor Networks***

Jianliang Gao (Central South University, P.R. China); Jianxin Wang (Central South University, P.R. China); Xi Zhang (Texas A&M University, ECE Department, USA)
pp. 640-644

Topology Control with a Limited Number of Relays

Fei Che (University of Delaware, USA); Errol L. Lloyd (University of Delaware, USA); Jason O. Hallstrom (Clemson University, USA); S. s. Ravi (University at Albany -- State University of New York, USA)
pp. 645-651

Autonomous Recovery from Multi-node Failure in Wireless Sensor Network

Yatish K Joshi (University of Maryland Baltimore County, USA); Mohamed Younis (University of Maryland Baltimore County, USA)
pp. 652-657

Bio-inspired Low-Complexity Clustering in Large-scale Dense Wireless Sensor Networks

Qi Zhang (Aarhus University, Denmark); Rune H Jacobsen (Aarhus University & Electrical and Computer Engineering, Denmark); Thomas S. Toftegaard (Aarhus University, Denmark)
pp. 658-663

Load and Energy Aware Topology Control in Wireless Ad-hoc Networks

Tandra Chakraborty (Bangladesh University of Engineering and Technology & BUET, Bangladesh); Fazlay Rabbi (Bangladesh University of Engineering and Technology, Bangladesh); Aungon Nag Radon (Simon Fraser University, Canada); Ashikur Rahman (State University of New York, USA)
pp. 664-669

Design and Evaluation of Small-World Wireless Ad-Hoc Networks under Rayleigh Fading

Amir Ehsani Zonouz (University of Massachusetts Dartmouth, USA); Navid Tadayon (INRS-EMT, University of Quebec, Canada); Sonia Aissa (INRS, University of Quebec, Canada); Liudong Xing (University of Massachusetts Dartmouth, USA)
pp. 670-675

AHSN18: Management and Throughput Modeling

Deployment Framework for Mobile Underwater Wireless Networks with Node Reuse

Son N Le (University of Connecticut, USA); Michael Zuba (University of Connecticut, USA); Zheng Peng (University of Connecticut, USA); Jun-Hong Cui (University of Connecticut, USA); Jie Wang (University of Massachusetts, USA)
pp. 676-682

LRSA: A Multi-Component Wireless Sensor Network Management Framework

Lutful Karim (University de Moncton, Canada); Qusay Mahmoud (University of Guelph, Canada); Nidal Nasser (Alfaisal University, Saudi Arabia); Nargis Khan (Ryerson University, Canada)
pp. 683-688

Machine Learning Approach to Data Center Monitoring using Wireless Sensor Networks

Rahul Khanna (Intel, USA); Huaping Liu (Oregon State University, USA)
pp. 689-694

LPBT: An Energy-Aware Link Quality Metric for Wireless Mesh Networks

Asitha U Bandaranayake (University of Cincinnati & University of Peradeniya, USA); Vaibhav Pandit (University of Cincinnati, USA); Dharma P Agrawal (University of Cincinnati, USA)
pp. 695-701

Throughput Capacity in Mobile Ad-hoc Networks with Correlated Mobility and f-cast Relay

Chen Wang (Nanjing University, P.R. China); Baoliu Ye (Nanjing University, P.R. China); Xiaoliang Wang (Nanjing University, P.R. China); Sanglu Lu (Nanjing University, P.R. China)
pp. 702-707

Adaptive Battery Charge Scheduling with Bursty Workloads

Dylan Lexie (Temple University, USA); Shan Lin (Temple University, USA); Jie Wu (Temple University, USA)
pp. 708-713

GC12 CISS: Globecom 2012 - Communication and Information System Security Symposium - Program

CISS01: Social network security

Searching in the Dark: A Framework for Authenticating Unknown Users in Online Social Networks

Lingjun Li (Arizona State University, USA); Xinxin Zhao (Arizona State University, USA); Guoliang Xue (Arizona State University, USA)
pp. 714-719

Enabling Collaborative Data Sharing in Google+

Hongxin Hu (Delaware State University, USA); Gail-Joon Ahn (Arizona State University, USA); Jan Jorgensen (Arizona State University, USA)
pp. 720-725

Gmatch: Secure and Privacy-Preserving Group Matching in Social Networks

Boyang Wang (Xidian University & Utah State University, P.R. China); Baochun Li (University of Toronto, Canada); Hui Li (Xidian University, P.R. China)
pp. 726-731

User-Centric Private Matching for eHealth Networks - A Social Perspective

Linke Guo (University of Florida, USA); Xinxin Liu (University of Florida, USA); Yuguang Fang (University of Florida, USA); Xiaolin Li (University of Florida, USA)
pp. 732-737

PriMatch: Fairness-aware Secure Friend Discovery Protocol in Mobile Social Network

Muyuan Li (Shanghai Jiao Tong University, P.R. China); Zhaoyu Gao (Shanghai Jiaotong University, P.R. China); Suguo Du (Shanghai Jiao Tong University, P.R. China); Haojin Zhu (Shanghai Jiao Tong University, P.R. China); Mianxiong Dong (University of Aizu, Japan); Kaoru Ota (Tohoku University, Japan)
pp. 738-743

Digging up Social Structures from Documents on the Web

Eleni Gessiou (Polytechnic Institute of New York University, USA); Stamatis Volanis (University of Crete, Greece); Elias Athanasopoulos (Columbia University, US, USA); Evangelos Markatos (ICS-FORTH, Greece); Sotiris Ioannidis (Foundation for Research and Technology - Hellas, Greece)
pp. 744-750

CISS02: Security in cloud computing and storage

An Optimal Scheduling for File Dissemination under a Full Binary Tree of Trust Relationship

Chin-Fu Ku (Academia Sinica, Taiwan); Kai-Hsiang Yang (National Taipei University of Education, Taiwan); Jan-Ming Ho (Academia Sinica, Taiwan)
pp. 751-757

Using segmentation for confidentiality aware image storage and retrieval on clouds

Arash Nourian (McGill University, Canada); Muthucumaru Maheswaran (McGill University, Canada)
pp. 758-763

Encrypted Phrase Searching in the Cloud

Steven Zittrower (University of Central Florida, USA); Cliff Zou (University of Central Florida, USA)
pp. 764-770

Disk Storage Isolation and Verification in Cloud

Zhan Wang (George Mason University, USA); Kun Sun (George Mason University, USA); Sushil Jajodia (George Mason University, USA); Jiwu Jing (Graduate University of Chinese Academy of Sciences, P.R. China)
pp. 771-776

Verifying Cloud Service Level Agreement

Lin Ye (Harbin Institute of Technology, P.R. China); Hongli Zhang (Harbin Institute of Technology, P.R. China); Jiantao Shi (Harbin Institute of Technology, P.R. China); Xiaojiang Du (Temple University, USA)
pp. 777-782

CISS03: Physical Security

Precoding Strategy Based on SLR for Secure Communication in MUME Wiretap Systems

Kun Xie (Shanghai Jiao Tong University, P.R. China); Wen Chen (Shanghai Jiao Tong University, P.R. China)
pp. 783-788

Secure Transmission via Transmit Antenna Selection in MIMO Wiretap Channels

Nan Yang (University of New South Wales, Australia); Phee Lep Yeoh (University of Melbourne, Australia); Maged Elkashlan (Queen Mary, University of London, United Kingdom); Robert Schober (University of British Columbia, Canada); Iain B. Collings (CSIRO, Australia)
pp. 789-794

PHY Foundation for Multi-Factor ZigBee Node Authentication

Benjamin W. Ramsey (Air Force Institute of Technology, USA); Michael A Temple (Air Force Institute of Technology, USA); Barry E. Mullins (Air Force Institute of Technology, USA)
pp. 795-800

Enhanced Security of Random Seed DSSS Algorithms against Seed Jamming Attacks

Young-Hyun Oh (North Carolina State University, USA); David Thuente (North Carolina State University, USA)
pp. 801-806

Security Embedding on UWB-IR Physical Layer

Ahmed Benfarah (Insa Lyon & Orange Labs, France); Benoit Miscopein (France Telecom, France); Jean-Marie Gorce (INSA-Lyon, France)
pp. 807-812

Clock Skew Based Remote Device Fingerprinting Demystified

Fabian Lanze (University of Luxembourg, Luxembourg); Andriy Panchenko (University of Luxembourg, Luxembourg); Benjamin Braatz (University of Luxembourg, Luxembourg); Andreas Zinnen (University of Luxembourg, Luxembourg)
pp. 813-819

CISS04: Internet Security I

Pecan: A Circuit-less P2P Design for Anonymity

Gang Xu (Iowa State University, USA); Leonardo Aguilera (Iowa State University, USA); Yong Guan (Iowa State University, USA)
pp. 820-825

Real-World Sybil Attacks in BitTorrent Mainline DHT

Liang Wang (University of Helsinki, Finland); Jussi Kangasharju (University of Helsinki, Finland)
pp. 826-832

Relay Recommendation System (RRS) and Selective Anonymity for Tor

Chenglong Li (CNCERT/CC, P.R. China); Yibo Xue (Tsinghua university, P.R. China); Yingfei Dong (University of Hawaii, USA); Dongsheng Wang (Tsinghua University, P.R. China)
pp. 833-838

IRONSIDES: DNS With No Single-Packet Denial of Service or Remote Code Execution Vulnerabilities

Martin Carlisle (US Air Force Academy, USA); Barry Fagin (US Air Force Academy, USA)
pp. 839-844

Towards Active Measurement for DNS Query Behavior of Botnets

Xiaobo Ma (Xi'an Jiaotong University, P.R. China); Jianfeng Li (Xi'an Jiaotong University, P.R. China); Jing Tao (Xi'an Jiaotong University, P.R. China); Xiaohong Guan (Xi'an Jiaotong University & Tsinghua University, P.R. China)
pp. 845-849

Rabit: A Reputation Architecture for BitTorrent

Hani Ragab-Hassen (University of Kent, United Kingdom); Olga Jones (University of Kent, United Kingdom); Nikos Galanis (University of Kent, United Kingdom)
pp. 850-855

CISS10: Information Security and Cryptography

Linear Cryptanalysis Against Block Ciphered System Under Noisy Ciphertexts

Yahya Khiabani (Louisiana State University, USA); Shuangqing Wei (Louisiana State University, USA); Jian Yuan (Tsinghua University, P.R. China); Jian Wang (Tsinghua University, P.R. China)
pp. 856-861

Hash Function Mapping Design Utilizing Probability Distribution for Pre-image Resistance

Jianhua Mo (Shanghai Jiao Tong University, P.R. China); Xiwen Xiao (Nanchang University, P.R. China); Meixia Tao (Shanghai Jiao Tong University, P.R. China); Nanrun Zhou (Nanchang University, P.R. China)
pp. 862-867

A Hierarchical Two-Tier One-way Hash Chain Protocol for Secure Internet Transactions

Amerah Alabrah (University of Central Florida, USA); Mostafa Bassiouni (University of Central Florida, USA)
pp. 868-873

An Approach for Light-Weight Encryption Employing Dedicated Coding

Miodrag Mihaljević (Mathematical Institute, Serbian Academy of Sciences and Arts, Serbia)
pp. 874-880

Adaptive Angle Quantization Index Modulation for Robust Image Watermarking

Mohsen Zareian (Amirkabir University of Technology, Iran); Ali Daneshkhah (IUPUI, USA)
pp. 881-884

An Attribute Based Encryption Scheme with Fine-Grained Attribute Revocation

Qiang Li (State Key Laboratory of Information Security, Institute of Software Chinese Academy of Sciences, P.R. China); Dengguo Feng (Institute of Software, Chinese Academy of Sciences, P.R. China); Liwu Zhang (Institute of Software, Chinese Academy of Sciences, P.R. China)
pp. 885-890

CISS05: Internet Security II

Classification of malicious network streams using Honeynets

Fahim Abbasi (Massey University, New Zealand); Richard J Harris (Massey University, New Zealand); Giovanni Moretti (Massey University, New Zealand); Aun Haider (National Institute of Information and Communications Technology (NICT) & 1-33-16, Hakusan, Bunkyo-ku, Tokyo 174-0063, Japan); Nafees Anwar (Massey University, New Zealand)
pp. 891-897

Embedded Markov Process based Model for Performance Analysis of Intrusion Detection and Prevention Systems

Khalid Alsubhi (University of Waterloo, Canada); Mohamed Faten Zhani (University of Waterloo - Canada, Canada); Raouf Boutaba (University of Waterloo, Canada)
pp. 898-903

Backward Traffic Throttling to Mitigate Bandwidth Floods

Yehoshua Gev (Bar-Ilan University, Israel); Moti Geva (Bar Ilan University, Israel); Amir Herzberg (Bar-Ilan University, Israel)
pp. 904-910

Managing the Adoption of Asymmetric Bidirectional Firewalls: Seeding and Mandating

MHR (Arman) Khouzani (Ohio State University, USA); Soumya Sen (Princeton University, USA); Ness B. Shroff (The Ohio State University, USA)
pp. 911-916

Breaching location privacy in XMPP based messaging

Rui Ferreira (Instituto de Telecomunicações, Portugal); Rui L Aguiar (University of Aveiro & Instituto de Telecomunicações, Portugal)
pp. 917-922

Heterogeneity in Vulnerable Hosts Slows Down Worm Propagation

Zesheng Chen (Indiana University - Purdue University Fort Wayne, USA); Chao Chen (Indiana University Purdue University Fort Wayne, USA)
pp. 923-928

CISS06: Security in Cyber-Physical Systems

EDR: An Efficient Demand Response Scheme for Achieving Forward Secrecy in Smart Grid

Hongwei Li (University of Electronic Science and Technology of China, P.R. China); Xiaohui Liang (University of Waterloo, Canada); Rongxing Lu (University of Waterloo, Canada); Xiaodong Lin (University of Ontario Institute of Technology, Canada); Sherman Shen (University of Waterloo, Canada)
pp. 929-934

Load Distribution Vector Based Attack Strategies against Power Grid Systems

Yihai Zhu (University of Rhode Island & URI, USA); Yan Sun (University of Rhode Island, USA); Haibo He (University of Rhode Island, USA)
pp. 935-941

Securing Wireless Medical Devices

Asaad Kaadan (University of Oklahoma, USA); Hazem Refai (Oklahoma University, USA)
pp. 942-948

Secure and Efficient Constructions of Hash, MAC and PRF for Mobile Devices

Yan Zhu (Peking University & Institute of Computer Science and Technology, P.R. China); Shanbiao Wang (Peking University, P.R. China); Di Ma (University of Michigan-Dearborn, USA); Hongxin Hu (Delaware State University, USA); Gail-Joon Ahn (Arizona State University, USA)
pp. 949-954

Textact: A Text-Action based Web Authentication Scheme

Muhammad N Sakib (University of South Carolina, USA); Chin-Tser Huang (University of South Carolina, USA)
pp. 955-960

Behavior Spectrum: An Effective Method for User's WEB Access Behavior Monitoring and Measurement

Tao Qin (Xi'an Jiaotong University, P.R. China); Wei Li (Xi'an JiaoTong University, P.R. China); Xiaohong Guan (Xi'an Jiaotong University & Tsinghua University, P.R. China); Zhaoli Liu (Xi'an Jiaotong University, P.R. China)
pp. 961-966

CISSP: Miscellaneous Aspects in Communication Security

The measure of security in quantum cryptography

Marcin Niemiec (AGH University of Science and Technology, Poland); Andrzej R. Pach (AGH University of Science and Technology, Poland)
pp. 967-972

CISS07: Wireless Network Security I

Probabilistic Key Distribution in Vehicular Networks with Infrastructure Support

Joao Almeida (Faculdade de Engenharia da Universidade do Porto & Instituto de Telecomunicações, Portugal); Saurabh Shintre (Instituto de Telecomunicações, Universidade do Porto & Carnegie Mellon University, PA, India); Mate Boban (Carnegie Mellon University & University of Porto, USA); Joao Barros (University of Porto & Instituto de Telecomunicações, Portugal)
pp. 973-978

Distributed Data Survivability Schemes in Mobile Unattended Wireless Sensor Networks

Sasi Kiran Vepanjeri Lokanadha Reddy (University Of Ottawa, Canada); Sushmita Ruj (IIT-Indore, India); Amiya Nayak (SITE, University of Ottawa, Canada)
pp. 979-984

TIS: A Threshold Incentive Scheme for Secure and Reliable Data Forwarding in Vehicular Delay Tolerant Networks

Jun Zhou (Shanghai Jiao Tong University, P.R. China); Zhenfu Cao (Shanghai Jiao Tong University, P.R. China)
pp. 985-990

A Security Metric for VANET Content Delivery

Ikechukwu Azogu (University of Massachusetts Dartmouth, USA); Michael Ferreira (University of Massachusetts Dartmouth, USA); Hong Liu (University of Massachusetts Dartmouth, USA)
pp. 991-996

Threat Mitigation in Tactical-Level Disruption Tolerant Networks

Weihuan Goh (Nanyang Technological University, Singapore); Chai Kiat Yeo (Nanyang Technological University, Singapore)
pp. 997-1003

A Link-layer Authentication and Key Agreement Scheme for Mobile Public Hotspots in NEMO based VANET

Sanaa Taha (University of Waterloo & Cairo University, Canada); Sherman Shen (University of Waterloo, Canada)
pp. 1004-1009

CISS08: Wireless Network Security II

Towards a Trustworthy PF Scheduler for Cellular Data Networks

Konstantinos Pelechrinis (University of Pittsburgh, USA); Prashant Krishnamurthy (University of Pittsburgh, USA); Christos Gkantsidis (Microsoft Research, United Kingdom)
pp. 1010-1016

A Group-based Authentication and Key Agreement for MTC in LTE Networks

Jin Cao (Xidian University, P.R. China); Maode Ma (Nanyang Technological University, Singapore); Hui Li (Xidian University, P.R. China)
pp. 1017-1022

Towards a Secure Fair MAC in Wireless Ad Hoc Networks Using Trusted Computing Technology

Andrew Cheng (Carnegie Mellon University, USA); Qiao Li (Carnegie Mellon University, USA); Rohit Negi (Carnegie Mellon University, USA)
pp. 1023-1028

A Lightweight Roaming Authentication Protocol for Anonymous Wireless Communication

Xiaowei Li (Xidian University, P.R. China); Yuqing Zhang (Graduate University of Chinese Academy of Sciences, P.R. China); Xuefeng Liu (Xidian University, P.R. China); Jin Cao (Xidian University, P.R. China); Qianqian Zhao (Xidian University, P.R. China)
pp. 1029-1034

An Efficient WLAN Initial Access Authentication Protocol

Xinghua Li (Xidian University, P.R. China); Jianfeng Ma (Xidian University, P.R. China); Yulong Shen (Xidian University & Wayne State University, USA)
pp. 1035-1040

ISP Offload Infrastructure to minimize cost and time deployment

Daniel Migault (Orange Labs, France); Daniel Palomares (Orange Labs, France); Emmanuel Herbert (Orange, France); Wei You (Orange Labs, France); Gabriel Ganne (Orange, USA); Ghada Arfaoui (Institut Telecom, France); Maryline Laurent (Institut Mines-Télécom, Télécom SudParis, France)
pp. 1041-1047

CISS09: Wireless Network Security III***Jamming-Resistant Rate Control in Wi-Fi Networks***

Cankut Orakcal (Boston University, USA); David Starobinski (Boston University, USA)
pp. 1048-1053

Dependence of Optimal Monitoring Strategy on the Application to be Protected

Andrey Garnaev (St.-Petersburg State University, Russia); Wade Trappe (WINLAB, Rutgers University, USA); Chun-Ta Kung (WINLAB, Rutgers University, USA)
pp. 1054-1059

Thwarting Diversity Attacks in Wireless Network Coding Using Threshold Signatures and a Sender-Centered Approach

Juan Camilo Corena (Keio University, Japan); Tomoaki Ohtsuki (Keio University, Japan)
pp. 1060-1065

Characterization of Linear Network Coding for Pollution Detection

Jian Li (Michigan State University, USA); Chao Yang (Xidian University & Michigan State University, USA); Di Tang (Michigan State University, USA); Tongtong Li (Michigan State University, USA); Jian Ren (Michigan State University, USA)
pp. 1066-1071

Secure communications with untrusted secondary users in cognitive radio networks

Hyungsuk Jeon (Georgia Institute of Technology, USA); Steven McLaughlin (Georgia Institute of Technology, USA); Jeongseok Ha (KAIST, Korea)
pp. 1072-1078

DDoS Attack on WAVE-enabled VANET Through Synchronization

Subir Biswas (University of Manitoba, Canada); Jelena Mišić (Ryerson University, Canada); Vojislav B. Mišić (Ryerson University, Canada)
pp. 1079-1084

GC12 CogRN: Globecom 2012 - Cognitive Radio and Networks Symposium - Program

CogRN01: CRN Applications and Implementation

Multicast Throughput Optimization and Fair Spectrum Sharing in Cognitive Radio Networks

Miao Pan (Texas Southern University, USA); Yan Long (Xidian University, P.R. China); Hao Yue (University of Florida, USA); Yuguang Fang (University of Florida, USA); Hongyan Li (Xidian University, P.R. China)
pp. 1085-1089

Rateless Code Based Opportunistic Multicasting over Cognitive Radio Networks

Pavol Polacek (National Central University, Taiwan); Chih-Wei Huang (National Central University, Taiwan)
pp. 1090-1096

Multi-path Routing In Cognitive Radio Networks For Multimedia Communication using Sample Division Multiplexing

Ansuman Bhattacharya (Indian Statistical Institute, Kolkata, India); Sasthi Ghosh (Indian Statistical Institute, India); Bhabani Sinha (Indian Statistical Institute, India)
pp. 1097-1102

Procedure to Build Interference Map in Peer to Peer IEEE 802.22 Networks

Huaizhou Shi (Delft University of Technology, The Netherlands); Venkatesha Prasad (Delft University of Technology, The Netherlands); Vijay Sathyanarayana Rao (Delft University of Technology, The Netherlands); Ignas G.M.M. Niemegeers (Delft University of Technology, The Netherlands)
pp. 1103-1108

Concept Design and Performance Evaluation of a Parametrizable Cognitive Radio Engine

Christian Kocks (Universität Duisburg-Essen, Germany); Alexander Viessmann (Universität Duisburg-Essen, Germany); Guido Bruck (University of Duisburg Essen, Germany); Peter Jung (Universität Duisburg-Essen, Germany)
pp. 1109-1113

A Polarization Enabled Cooperation Framework for Cognitive Radio Networking

Bin Cao (Harbin Institute of Technology Shenzhen Graduate School & University of Waterloo, P.R. China); Jon Mark (University of Waterloo, Canada); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, P.R. China)
pp. 1114-1119

CogRN02: Energy Management of Cognitive Radio Networks

Optimal Energy-Delay Tradeoff Policies in Cognitive Radio Networks

Habachi Oussama (LIA, France); Yezekael Hayel (LIA, University of Avignon, France); Rachid El-Azouzi (LIA/CERI University of Avignon, France)
pp. 1120-1125

Performance Analysis of Joint Power Control, Rate Adaptation, and Channel Selection Strategies for Cognitive Radio Networks

Ala Abu Alkheir (Queen's University, Canada); Mohamed Ibnkahla (Queen's University, Canada)
pp. 1126-1131

Distributed Optimal Power Control for Multicarrier Cognitive Systems

Guanying Ru (University of Louisville, USA); Hongxiang Li (University of Louisville, USA); Tuan T. Tran (University of Louisville, USA); Weiyao Lin (Shanghai Jiao Tong University, P.R. China); Lingjia Liu (University of Kansas, USA); Huasen Wu (Beihang University, Beijing, P.R. China)
pp. 1132-1137

Sensing Time and Power Optimization in MIMO Cognitive Radio Networks

Farzad Moghimi (University of British Columbia, Canada); Ranjan K. Mallik (Indian Institute of Technology - Delhi, India); Robert Schober (University of British Columbia, Canada)
pp. 1138-1143

A Family of Power Allocation Schemes Achieving High Secondary User Rates in Spectrum Sharing OFDM Cognitive Radio

Mainak Chowdhury (Stanford University, USA); Anubhav Singla (Stanford University, USA); Ajit K. Chaturvedi (Indian Institute of Technology Kanpur, India)
pp. 1144-1149

CogRN03: Resource Allocation

Rank Minimization Designs for Underlay MIMO Cognitive Radio Networks with Completely Unknown Primary CSI

Minyan Pei (National University of Defense Technology, P.R. China); Amitav Mukherjee (Hitachi America Ltd, USA); Lee Swindlehurst (University of California at Irvine, USA); Ji-Bo Wei (National University of Defense Technology, P.R. China)
pp. 1150-1155

Two-dimensional Contract Theory in Cognitive Radio Networks

Yanming Cao (Shanghai Jiao Tong University, P.R. China); Qi Shi (Shanghai Jiao Tong University, P.R. China); Xinbing Wang (Shanghai Jiaotong University, P.R. China); Xiaohua Tian (Shanghai Jiaotong University, P.R. China); Yu Cheng (Illinois Institute of Technology, USA)
pp. 1156-1161

Fair Channel Allocation and Access Design for Cognitive Ad Hoc Networks

Tan Thanh Le (University of Quebec, Canada); Long Bao Le (INRS, University of Quebec, Canada)
pp. 1162-1167

Coordinated Optimization of Underlay Network Communication for Efficient Use of Spectrum

Amber Silva (BAE Systems & Worcester Polytechnic Institute, USA); Joshua Niedzwiecki (BAE Systems, USA); Alexander M. Wyglinski (Worcester Polytechnic Institute, USA); Brandon Hombs (BAE Systems, USA)
pp. 1168-1173

Game theory based resource allocation for cognitive radio networks

Omar El Ferkouss (Université du Québec à Montréal, Canada); Wessam Ajib (Université du Québec à Montréal, Canada)
pp. 1174-1179

Joint Spectrum Sensing and Resource Allocation for Multi-band Cognitive Radio Systems with Heterogeneous Services

Cong Shi (Beijing University of Posts and Telecommunications, P.R. China); Ying Wang (Beijing University of Posts and Telecommunications, P.R. China); Ping Zhang (WTI-BUPT, P.R. China)
pp. 1180-1185

CogRN09: Spectrum Sharing

Profit-Robust Policies for Dynamic Sharing of Radio Spectrum

Ashraf Al Daoud (German Jordanian University & Boston University, Jordan); Murat Alanyali (Boston University, USA); David Starobinski (Boston University, USA)
pp. 1186-1191

Exploiting Channel Correlation and PU Traffic Memory for Opportunistic Spectrum Scheduling

Shanshan Wang (Arizona State University, USA); Sugumar Murugesan (ASSIA, Inc., USA); Junshan Zhang (Arizona State University, USA)
pp. 1192-1197

Bargaining-based Spectrum Sharing for Cognitive Radio Networks With Incomplete Information

Xuesong Jonathan Tan (University of Electronic Science and Technology of China, P.R. China); Liang Li (University of Electronic Science and Technology of China, P.R. China); Guo Wei (National Communication Technology Key LAB, P.R. China)
pp. 1198-1204

On-Demand Spectrum Sharing By Flexible Time-Slotted Cognitive Radio Networks

Shimin Gong (Nanyang Technological University, Singapore); Xu Chen (Arizona State University, USA); Jianwei Huang (The Chinese University of Hong Kong, Hong Kong); Ping Wang (Nanyang Technological University, Singapore)
pp. 1205-1210

Joint Multiuser Switched Diversity and Adaptive Modulation Schemes for Spectrum Sharing Systems

Marwa Qaraqe (Texas A&M University, USA); Mohamed M. Abdallah (Texas A&M University at Qatar & Cairo University, Cairo, Qatar); Erchin Serpedin (Texas A&M University, USA); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Hussein Alnuweiri (Texas A&M University, Qatar)
pp. 1211-1217

Spectrum Sharing with Primary and Secondary Limited Feedback in Cognitive Radio Networks

Zhe Wang (University of New South Wales, Australia); Wei Zhang (The University of New South Wales, Australia)
pp. 1218-1222

CogRN04: MIMO and Cooperative Relaying Cognitive Radio Networks

Blind Null-space Tracking for MIMO Underlay Cognitive Radio Networks

Alexandros Manolakos (Stanford University, USA); Yair Noam (Stanford University, USA); Konstantinos D Dimou (Ericsson Research, Sweden); Andrea Goldsmith (Stanford University, USA)
pp. 1223-1229

Incremental Relaying Transmissions with Relay Selection in Cognitive Radio Networks

Wael Jaafar (Ecole Polytechnique de Montréal, Canada); Wessam Ajib (Université du Québec à Montréal, Canada); David Haccoun (Ecole Polytechnique de Montréal, Canada)
pp. 1230-1235

Secure MISO Cognitive Radio System with Perfect and Imperfect CSI

Taesoo Kwon (University of British Columbia, Canada); Vincent W.S. Wong (University of British Columbia, Canada); Robert Schober (University of British Columbia, Canada)
pp. 1236-1241

On The User Scheduling In Cognitive Radio MIMO Networks

Elmahdi Driouch (Université du Québec à Montréal, Canada); Wessam Ajib (Université du Québec à Montréal, Canada)
pp. 1242-1247

Outage Analysis for Underlay relay-assisted Cognitive Networks

Kamel Tourki (Texas A&M University at Qatar, Qatar); Khalid A. Qaraqe (Texas A&M University at Qatar, USA); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)
pp. 1248-1253

A Novel Secondary User Assisted Relay Mechanism in Cognitive Radio Networks with Multiple Primary Users

Song He (Shanghai Jiao Tong University, P.R. China); Lingge Jiang (Shanghai Jiaotong University, P.R. China); Chen He (Shanghai Jiaotong University, P.R. China)
pp. 1254-1259

CogRN05: Spectrum Sensing 1

Pattern Classification Techniques for Cooperative Spectrum Sensing in Cognitive Radio Networks: SVM and W-KNN Approaches

Karaputugala Gamacharige Madushan Thilina (University of Manitoba, Canada); Kaewon Choi (University of Manitoba, Canada); Nazmus Saquib (University of Manitoba, Canada); Ekram Hossain (University of Manitoba, Canada)
pp. 1260-1265

A Cooperative DoA-based Algorithm for Localization of Multiple Primary-Users in Cognitive Radio Networks

Jun Wang (UCLA, USA); Danijela Cabric (University of California Los Angeles, USA)
pp. 1266-1270

A Spectrum Sensing Prototype for Japanese Digital Television Signals

Chunyi Song (National Institute of Information and Communications Technology, Japan); Hiroshi Harada (National Institute of Information & Communications Technology (NICT), Japan)
pp. 1271-1276

A Rollout-based Joint Spectrum Sensing and Access Policy for Cognitive Radio Networks with Hardware Limitations

Lingcen Wu (Zhejiang University, P.R. China); Wei Wang (Zhejiang University, P.R. China); Zhaoyang Zhang (Zhejiang University, P.R. China); Lin Chen (The University of Paris-Sud 11, France)
pp. 1277-1282

Three Regions for Space-Time Spectrum Sensing and Access in Cognitive Radio Networks

Zhiqing Wei (Beijing University of Posts and Telecommunications, P.R. China); Zhiyong Feng (Beijing University of Posts and Telecommunications, P.R. China); Qixun Zhang (Beijing University of Posts and Telecommunications, P.R. China); Wei Li (University of Victoria, Canada)
pp. 1283-1288

Spectrum Sensing Algorithms for Cognitive Radio Based on Polarization Vector's Orientation

Caili Guo (Beijing University of Posts and Telecommunications, P.R. China)
pp. 1289-1294

CogRN06: Modeling and Analysis of Cognitive Radio Networks

Complexity Analysis of Spectrum Access Strategies with Channel Aggregation in CR Networks

Indika A. M. Balapuwaduge (University of Agder, Norway); Lei Jiao (University of Agder, Norway); Frank Y. Li (University of Agder, Norway)
pp. 1295-1301

TV White Space Availability in Japan Estimated Using D/U-based and I/N-based Protection Rules

Teppei Oyama (Fujitsu Laboratories Ltd., Japan); Tsuyoshi Shimomura (Fujitsu Laboratories Ltd., Japan); Hiroyuki Seki (Fujitsu Laboratories Ltd., Japan)
pp. 1302-1307

Primary User Behavior Estimation with Adaptive Length of the Sample Sequence

Xiaoyuan Li (University of Florida, USA); Xiang Mao (University of Florida, USA); Dexiang Wang (Juniper Networks, USA); Janise McNair (University of Florida, USA); Jianmin Chen (University of Florida, USA)
pp. 1308-1313

Enhancing the Performance of Spectrum-Sharing Systems via Collaborative Distributed Beamforming and AF Relaying

Ali Afana (Concordia University, Canada); Vahid Asghari (University of Quebec, INRS-EMT, Canada); Ali Ghayeb (Concordia University, Canada); Sofiene Affes (INRS-EMT, Canada)
pp. 1314-1319

Minimum BER Analysis in Cognitive Radio

Mohammad Robat Mili (University of Manchester, United Kingdom); Khairi A. Hamdi (University of Manchester, United Kingdom)
pp. 1320-1325

Performance Modeling of Secondary Users in CRNs with Heterogeneous Channels

Sharhabeel H. Alnabelsi (Al-Balqa Applied University, USA); Ahmed E. Kamal (Iowa State University, USA)
pp. 1326-1331

P-CogRN12: Poster Session

A Minimum-Delay Cross-Layer Transmission Policy for Cognitive Multi-Access Networks with Imperfect Sensing

Ghada Saleh (Nile University, Egypt); Amr El-Keyi (Nile University, Egypt); Mohammed Nafie (Nile University & Cairo University, Egypt)
pp. 1332-1338

Optimal D2D User Allocation over Multi-Bands under Heterogeneous Networks

Ziyang Liu (Beijing University of Post and Telecommunication, P.R. China); Tao Peng (Beijing University of Posts & Telecommunications, P.R. China); Hao Chen (Beijing University of Posts and Telecommunications, P.R. China); Wenbo Wang (Beijing University of Posts and Telecommunications, P.R. China)
pp. 1339-1344

Energy-based Cooperative Spectrum Sensing for Emergency Communications over Fading Channels in Cognitive Radio Public Safety Networks

Chihkai Chen (University of California, Los Angeles, USA); Ralph Hudson (UCLA, USA); Kung Yao (UCLA, USA)
pp. 1345-1350

Asymptotically Optimal Likelihood Detector for Cyclostationary Signature Induced by Cyclic Delay Diversity

Yonglei Jiang (Shanghai Institute of Microsystem and Information Technology, CAS & Shanghai Research Center for Wireless Communications, P.R. China); Huaxia Chen (Shanghai Research Center for Wireless Communications, P.R. China); Honglin Hu (Shanghai Research Center for Wireless Communications, P.R. China)
pp. 1351-1355

QoS-Aware User Cohabitation Coordinator in Cognitive Radio Networks

Berk Canberk (Istanbul Technical University, Turkey); Ian F. Akyildiz (Georgia Institute of Technology, USA); Sema Oktug (Istanbul Technical University, Turkey)
pp. 1356-1361

Optimal Number of Utilized Channels for Throughput Maximization in Cognitive Radio Networks

Yuh-Ren Tsai (National Tsing Hua University, Taiwan); Yung-Cheng Chao (Industrial Technology Research Institute, Taiwan)
pp. 1362-1367

Joint Strategic Spectrum Sensing and Opportunistic Access for Cognitive Radio Networks

Essaid Sabir (University of Hassan II & ENSEM, Morocco); Majed Haddad (INRIA, France); Hamidou Tembine (Supelec, France)
pp. 1368-1373

Test of Independence for Cooperative Spectrum Sensing with Uncalibrated Receivers

Andrea Mariani (University of Bologna, Italy); Andrea Giorgetti (University of Bologna, Italy); Marco Chiani (University of Bologna, Italy)
pp. 1374-1379

POMDP-based Cross-layer Power Adaptation Techniques in Cognitive Radio Networks

Ashok K Karmokar (Ryerson University, Canada); Sivasothy Senthuran (Ryerson University, Canada); Alagan Anpalagan (Ryerson University, Canada)
pp. 1380-1385

CogRN07: Multiuser Access

Intelligent CSMA-based Opportunistic Spectrum Access: Competition and Cooperation

Mahsa Derakhshani (McGill University, Canada); Tho Le-Ngoc (McGill University, Canada)
pp. 1386-1390

REM Based Approach for Hidden Node Detection and Avoidance in Cognitive Radio Networks

Tim D Farnham (Toshiba Research Europe Ltd., United Kingdom)
pp. 1391-1397

Optimal Queue Scheduling for Hybrid Cognitive Radio Maintaining Maximum Average Service Rate Under Delay Constraints

Jie Hu (University of Southampton, United Kingdom); Lie-Liang Yang (University of Southampton, United Kingdom); Lajos Hanzo (University of Southampton, United Kingdom)
pp. 1398-1403

Learning and Decision Making with Negative Externality for Opportunistic Spectrum Access

Biling Zhang (Beijing University of Posts and Telecommunications, P.R. China); Yan Chen (University of Maryland, College Park, USA); Chih-Yu Wang (National Taiwan University, Taiwan); K. J. Ray Liu (University of Maryland, USA)
pp. 1404-1409

Proactive Channel Gain Estimation for Coexistence between Cognitive and Primary Users

Lin Zhang (University of Electronic Science and Technology of China, P.R. China); Guodong Zhao (The Hong Kong University of Science and Technology, Hong Kong); Gang Wu (University of Electronic Science and Technology of China, P.R. China); Zhi Chen (University of Electronic Science and Technology of China & University of California, Riverside, P.R. China)
pp. 1410-1415

Cooperative Cognitive Relaying with Ordered Cognitive Multiple Access

Ahmed El Shafie (Wireless Intelligent Networks Center (WINC), Nile University, Egypt); Ahmed Sultan (Alexandria University, Egypt)
pp. 1416-1421

CogRN08: Spectrum Access

A Renewal-Theoretical Framework for Dynamic Spectrum Access with Unknown Primary Behavior

Chunxiao Jiang (Tsinghua University, P.R. China); Yan Chen (University of Maryland, College Park, USA); K. J. Ray Liu (University of Maryland, USA)
pp. 1422-1427

Impact of Measurement Configurations on the Accuracy of Propagation Model Estimation with Applications to Dynamic Spectrum Access

Jad Nasreddine (RWTH Aachen University, Germany); Janne Riihijärvi (RWTH Aachen University, Germany); Petri Mähönen (RWTH Aachen University, Germany)
pp. 1428-1434

Fairness and Network capacity Trade-off in P2P IEEE 802.22 networks

Huizhou Shi (Delft University of Technology, The Netherlands); Venkatesha Prasad (Delft University of Technology, The Netherlands); Vijay Sathyanarayana Rao (Delft University of Technology, The Netherlands); Ignas G.M.M. Niemegeers (Delft University of Technology, The Netherlands)
pp. 1435-1440

Prediction of Exponentially Distributed Primary User Traffic for Dynamic Spectrum Access

Chun-Hao Liu (University of California, Los Angeles, USA); Wesam R. Gabran (University of California, Los Angeles, USA); Danijela Cabric (University of California Los Angeles, USA)
pp. 1441-1446

Optimal Decentralized Sensing-Orders in Multi-User Cognitive Radio Networks

Rakesh Misra (Stanford University, USA); Arun Pachai Kannu (IIT Madras, India)
pp. 1447-1452

Distributed Sensing of Spectrum Occupancy and Interference in Outdoor 2.4 GHz Wi-Fi Networks

Salim Hanna (Communications Research Center Canada, Canada)
pp. 1453-1459

CogRN11: Waveform Design and Modulation

Improved Active Interference Cancellation for Sidelobe Suppression in Cognitive OFDM Systems

Ehsan Haj Mirza Alian (University of Waterloo, Canada); Patrick Mitran (University of Waterloo, Canada)
pp. 1460-1465

Multiband Maximum Likelihood signal detection based on compressive measurement

Jonathan Verlant-Chenet (Universit  Libre de Bruxelles, Belgium); Jonathan Bodart (Universit  Libre de Bruxelles, Belgium); Andre Bourdoux (IMEC, Belgium); Philippe De Doncker (ULB, Belgium); Jean-Michel Dricot (Universit  Libre de Bruxelles, Belgium); Fran ois Horlin (Universit  Libre de Bruxelles, Belgium)
pp. 1466-1470

Interference Alignment-Like Precoder Design in Multi-Pair Two-Way Relay Cognitive Radio Networks

Hua Mu (Auburn University, USA); Jitendra Tugnait (Auburn University, USA)
pp. 1471-1476

Suppressing the Out-of-band Power Radiation in Multi-carrier Systems: A Comparative Study

Wei Jiang (University of Duisburg-Essen & Huawei Technologies Co. Ltd., Germany); Malte Schellmann (Huawei Technologies Duesseldorf GmbH, Germany)
pp. 1477-1482

A Quadrature Signaling based Cooperative Scheme for Cognitive Radio Networks

Yujie Tang (University of Waterloo, Canada); Jon Mark (University of Waterloo, Canada)
pp. 1483-1487

Enhanced Spectrum Awareness with Extended Information Carried on Embedded Cyclostationary Signatures for Cognitive Radio

Hanwen Cao (Leibniz University Hannover, Germany); Jo o Paulo C. L. Miranda (Leibniz University of Hannover, Germany); J rgen Peissig (Leibniz Universit t Hannover, Germany)
pp. 1488-1494

CogRN10: Spectrum Sensing 2

Real-time Cyclostationary Analysis for Cognitive Radio via Software Defined Radio

Ruolin Zhou (Western New England University & IEEE Student Member, USA); Xue Li (Wright State University & IEEE Student Member, Member of Society of Women Engineers, USA); T Yang (National Sun Yat-Sen University, Taiwan); Zhiqiang Liu (Naval Research Laboratory, USA); Zhiqiang Wu (Wright State University, USA)
pp. 1495-1500

Eigenvalue-based Cyclostationary Spectrum Sensing Using Multiple Antennas

Paulo Isagani M Urriza (University of California Los Angeles, USA); Eric Rebeiz (UCLA, USA); Danijela Cabric (University of California Los Angeles, USA)
pp. 1501-1506

Spectrum Sensing via Universal Source Coding

Jithin K. Sreedharan (Indian Institute of Science & ECE Dept, India); Vinod Sharma (Indian Institute of Science, India)
pp. 1507-1512

Comparison of Cooperative Spectrum Sensing Strategies in Distributed Cognitive Radio Networks

Jin Lai (Macquarie University, Australia); Eryk Dutkiewicz (Macquarie University, Australia); Ren Ping Liu (CSIRO, Australia); Rein Vesilo (Macquarie University, Australia)
pp. 1513-1518

The Effect of Additional Statistical Side Information on Multiple Antenna Spectrum Sensing

Amirhossein Tabesh (Imam Khomeini International University, Iran); Abbas Taherpour (Imam Khomeini International University, Iran); Tamer Khattab (Qatar University, Qatar)
pp. 1519-1525

A Group Testing Based Spectrum Hole Search Using a Simple Sub-Nyquist Sampling Scheme

Abhay Sharma (Indian Institute of Science, India); Chandra R Murthy (Indian Institute of Science, India)

pp. 1526-1531

GC12 CQRM: Globecom 2012 - Communications QoS, Reliability and Modelling Symposium - Program

CQ01: Energy Saving in Communication Networks and Equipment

Dynamic Energy Efficient Distance-Aware Base Station Switch On/Off Scheme for LTE-Advanced

Alexandra Bousia (UPC, Spain); Elli Kartsakli (Universitat Politècnica de Catalunya (UPC), Spain); Luis Alonso (Universidad Politecnica de Catalunya, Spain); Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)
pp. 1532-1537

Modeling and Performance Analysis of Device Discovery in Bluetooth Low Energy Networks

Jia Liu (Nokia & Beijing University of Posts and Telecommunications, P.R. China); Canfeng Chen (Nokia Research Center, P.R. China); Yan Ma (Beijing University of Posts and Telecommunications, P.R. China)
pp. 1538-1543

QoS-Aware BS Switching and Cell Zooming Design for OFDMA Green Cellular Networks

Long Bao Le (INRS, University of Quebec, Canada)
pp. 1544-1549

Improved Energy Detection with Interference Cancellation in Heterogeneous Cognitive Wireless Networks

Zeyang Dai (University of Electronic Science and Technology of China (UESTC), P.R. China); Jian Liu (University of Electronic Science and Technology of China, P.R. China); Keping Long (University of Science and Technology Beijing, P.R. China)
pp. 1550-1555

Energy Saving through a Learning Framework in Greener Cellular Radio Access Networks

Rongpeng Li (Zhejiang University, P.R. China); Zhifeng Zhao (Zhejiang University, P.R. China); Xianfu Chen (VTT Technical Research Centre of Finland, Finland); Honggang Zhang (Université Européenne de Bretagne (UEB) and Supelec/IETR & Zhejiang University, France)
pp. 1556-1561

Energy-Efficient Peer Selection Mechanism for BitTorrent Content Distribution

Ahmed Lawey (University of Leeds, United Kingdom); Taisir El-Gorashi (University of Leeds, United Kingdom); Jaafar Elmirghani (University of Leeds, United Kingdom)
pp. 1562-1567

CQ02: Network Layer Modeling and Design

On Path Selection and Wavelength Assignment in Inter-Domain Lightpath Provisioning

Alisson S. L. Pontes (State University of Campinas, Brazil); Nelson L. S. da Fonseca (State University of Campinas, Brazil); André C Drummond (University of Brasilia, Brazil)
pp. 1568-1573

A Congestion Level Based End-to-end Acknowledgement Mechanism for Delay Tolerant Networks

Ying An (Central South University, P.R. China); Jiawei Huang (Central South University, P.R. China); Hong Song (Central South University, P.R. China); Jianxin Wang (Central South University, P.R. China)
pp. 1574-1579

A Robust WiMAX Scheduler for EPON-WiMAX Networks

Mariana Dias (State University of Campinas, Brazil); Nelson L. S. da Fonseca (State University of Campinas, Brazil)
pp. 1580-1585

Impact of Relay Station positioning on LTE uplink performance at flow level

Harm Hennepe (University of Twente, The Netherlands); Hans van den Berg (University of Twente, The Netherlands); Georgios Karagiannis (University of Twente, The Netherlands)
pp. 1586-1592

On Adaptive Routing in Urban Vehicular Networks

Yanmin Zhu (Shanghai Jiao Tong University, P.R. China); YongKang Qiu (Shanghai Jiao Tong University, P.R. China); Yuchen Wu (Shanghai Jiao Tong University, P.R. China); Bo Li (Hong Kong University of Science and Technology, Hong Kong)
pp. 1593-1598

CQ03: Cloud Computing and Communication Technology**An Effective Auditing Scheme for Cloud Computing**

Ryan Houlihan (Temple University, USA); Xiaojiang Du (Temple University, USA)
pp. 1599-1604

A Self-Evolving Anomaly Detection Framework for Developing Highly Dependable Utility Clouds

Husanbir S Pannu (University of North Texas, USA); Jianguo Liu (University of North Texas, USA); Song Fu (University of North Texas, USA)
pp. 1605-1610

D²ENDIST: Dynamic and Disjoint ENDIST-based Layer-2 Routing Algorithm for Cloud Datacenters

Gen-Hen Liu (National Chiao Tung University, Taiwan); Hung-Pin Wen (National Chiao Tung University, Taiwan); Li-Chun Wang (National Chiao Tung University, Taiwan)
pp. 1611-1616

Adaptive Provisioning for Evolving Virtual Network Request in Cloud-based Datacenters

Gang Sun (University of Electronic Science and Technology of China, P.R. China); Vishal Anand (The College at Brockport, State University of New York, USA); Hong-Fang Yu (University of Electronic Science and Technology of China, P.R. China); Dan Liao (University of Electronic Science and Technology of China, P.R. China); Yanyang Cai (University of Electronic Science and Technology of China, P.R. China); Le Min Li (University of Electronic Science and Technology of China, P.R. China)
pp. 1617-1622

Impact of Communication Uncertainties on Workflow Scheduling in Hybrid Clouds

Luiz F. Bittencourt (University of Campinas, Brazil); Edmundo Madeira (State University of Campinas, Brazil); Nelson L. S. da Fonseca (State University of Campinas, Brazil)
pp. 1623-1628

On the Integrated Control of Virtual Machine Live Migration and Traffic Engineering for Cloud Computing

Hirofumi Ichihara (Osaka University, Japan); Yuki Koizumi (Osaka University, Japan); Hiroyuki Ohsaki (Osaka University, Japan); Kunio Hato (NTT, Japan); Junichi Murayama (NTT Corporation, Japan); Makoto Imase (Osaka University, Japan)
pp. 1629-1634

CQ04: Service and Application on Communication Networks**Double Auction-based Optimal Relay Assignment for Many-to-Many Cooperative Wireless Networks**

Yong Wang (University of Electronic Science and Technology & Chongqing University of Education, P.R. China); Yun Li (ChongQing University of Posts and Telecommunications of China, P.R. China); Xiaolong Yang (University of Science and Technology Beijing, P.R. China); Chao Liao (Chongqing University of Posts and Telecommunications, P.R. China); Quan Chen (Chongqing University of Posts and Telecommunications, P.R. China)
pp. 1635-1640

Resource Contention-Aware Virtual Machine Management for Enterprise Applications

Andrew Fox (Carnegie Mellon University, USA); Andrew Turner (Carnegie Mellon University, USA); Hyong Kim (Carnegie Mellon University, USA)
pp. 1641-1646

Community Detection in an Integrated Internet of Things and Social Network Architecture

Sudip Misra (Indian Institute of Technology-Kharagpur, India); Romil Barthwal (Indian Institute of Technology- Kharagpur, India); Mohammad S. Obaidat (Monmouth University, USA)
pp. 1647-1652

Multidimensional Resource Allocation Strategy for High-Speed Railway MIMO-OFDM System

Yisheng Zhao (Beijing University of Posts and Telecommunications, P.R. China); Xi Li (Beijing University of Posts and Telecommunications, P.R. China); Xiaoliang Zhang (Beijing University of Posts and Telecommunications, P.R. China); Yi Li (Beijing University of Posts and Telecommunications, P.R. China); Hong Ji (Beijing University of Posts and Telecommunications, P.R. China)
pp. 1653-1657

A Case Study of Listening Quality of Temporally Interrupted VoIP Service

Sofiene Jelassi (INRIA Rennes - Bretagne Atlantique & Rennes, France); Gerardo Rubino (INRIA, France)
pp. 1658-1663

Performance Evaluation of Cooperation Mechanisms for mHealth Applications

Tiago Machado (Instituto de Telecomunicações, University of Beira Interior, Portugal); Ivo Lopes (Instituto de Telecomunicações, University of Beira Interior, Portugal); Bruno Silva (Instituto de Telecomunicações, University of Beira Interior, Portugal); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal); Jaime Lloret (Universidad Politécnica de Valencia, Spain)
pp. 1664-1669

CQ05: Traffic Modeling and Performance Evaluation

GROOV: A Geographic Routing Over VANETs and Its Performance Evaluation

Sanjay Kumar Dhurandher (Netaji Subhas Institute of Technology, India); Mohammad S. Obaidat (Monmouth University, USA); Deepti Bhardwaj (University of Delhi, India); Ankush Garg (University of Delhi, India)
pp. 1670-1675

Performance of Channel Bonding for Opportunistic Spectrum Access Networks

Shaunak Joshi (University of California, Los Angeles & Cisco Systems, Inc., USA); Przemyslaw Pawełczak (Delft University of Technology, The Netherlands); Danijela Cabric (University of California Los Angeles, USA); John Villasenor (University of California, Los Angeles, USA)
pp. 1676-1681

Statistical Characteristics of Wireless Link in Opportunistic Networks

Yun Li (Chongqing University of Posts and Telecommunications of China, P.R. China); Yaozhang Guo (CQUPT, P.R. China); Weiliang Zhao (Chongqing University of Posts and Telecommunications, P.R. China); Jihong Yu (CQUPT, P.R. China); Mahmoud Daneshmand (AT&T, USA)
pp. 1682-1686

Queueing Model and Optimization of Packet Dropping in Real-Time Wireless Sensor Networks

Antonios Argyriou (University of Thessaly & CERTH, Greece); Marc Aoun (Philips Research, The Netherlands)
pp. 1687-1691

Packet Loss Bounds for Asynchronous Bufferless Optical Packet Switches with Limited Range Wavelength Converters

Shuna Yang (ITEM, Norwegian University of Science and Technology, Norway); Norvald Stol (Norwegian University of Science and Technology, Norway)
pp. 1692-1697

A Game-theoretic Approach for Cooperative Transmission Strategy in Wireless Networks

Bin Cao (University of Electronic Science and Technology of China, P.R. China); Gang Feng (University of Electronic Science and Technology of China, P.R. China); Yun Li (Chongqing University of Posts and Telecommunications of China, P.R. China)
pp. 1698-1703

CQ10P: Topics in QoS, Reliability and Modeling

Robust Bandwidth Allocation in Wireless Mesh Network

Kien Thuc Tran (Nanyang Technological University, Singapore); Sudarshan Guruacharya (Nanyang Technological University, Singapore); Dusit Niyato (Nanyang Technological University, Singapore)
pp. 1704-1709

Service Provisioning in Virtualization-based Cloud Computing: Modeling and Optimization

Jun Huang (Chongqing University of Posts and Telecomm, P.R. China); Yanbing Liu (The Chongqing University of Posts and Telcomm, P.R. China); Qiang Duan (The Pennsylvania State University, USA)
pp. 1710-1715

Analysis of a Hurst Parameter Estimator Based on the Modified Allan Variance

Alessandra Bianchi (University of Bologna, Italy); Stefano Bregni (Politecnico di Milano, Italy); Irene Crimaldi (IMT - Institute for Advanced Studies, Italy); Marco Ferrari (CNR-IEIIT - Politecnico di Milano, Italy)
pp. 1716-1721

Cooperative Communications: from Theory to Experimental Implementation

Jesus Alonso-Zarate (Centre Tecnologic de Telecomunicacions de Catalunya - CTTC, Spain); Javier Sanchez Recacha (Universitat Politècnica de Catalunya, Spain); Nizar Zorba (QMIC, Qatar); Ana Perez-Neira (UPC, Spain); Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)
pp. 1722-1727

ANFIS-based Quality Prediction Models for AMR Telephony in Public 2G/3G Mobile Networks

Charalampos N. Pitas (National Technical University of Athens & Mobile Radiocommunications Laboratory, Greece); Dimitris Charilas (National Technical University of Athens, Greece); Athanasios D. Panagopoulos (National Technical University of Athens, Greece); Periklis Chatzimisios (Alexander TEI of Thessaloniki, Greece); Philip Constantinou (National Technical University of Athens, Greece)
pp. 1728-1732

Delay-Stable Communications in Simultaneous Multicast Networks

David A Miller (Iowa State University, USA); Ahmed E. Kamal (Iowa State University, USA)
pp. 1733-1738

Opportunistic Network and Erasure Coding for Asynchronous Two-Way Relay Networks

Scott H Melvin (Dalhousie University, Canada); Jacek Ilow (Dalhousie University, Canada)
pp. 1739-1744

Design and Analysis for Reliable Broadcast Transmission in Energy Harvesting Networks

Ching-Chun Kuan (National Taiwan University, Taiwan); Hung-Yu Wei (National Taiwan University, Taiwan)
pp. 1745-1750

Intelligent Routing in Congested Approximate Flow-Aware Networks

Jerzy Domżał (AGH University of Science and Technology, Poland)
pp. 1751-1756

CQ06: Traffic Control

IPTV QoS and QoE Measurements in Wired and Wireless Networks

Georgios Baltoglou (KTH - Royal Institute of Technology, Sweden); Eirini Karapistoli (University of Macedonia, Greece); Periklis Chatzimisios (Alexander TEI of Thessaloniki, Greece)
pp. 1757-1762

Benchmarking of Compressed DFAs for Traffic Identification: Decoupling Data Structures from Models

Wesley Melo (Federal University of Pernambuco, Brazil); Stenio Fernandes (Federal University of Pernambuco, Brazil); Rafael T Antonello (Instituto Federal de Alagoas, Brazil); Djamel Hadj Sadok

(Federal University of Pernambuco, Brazil); Judith Kelner (Federal University of Pernambuco, Brazil); Géza Szabó (Ericsson Research, Hungary)
pp. 1763-1769

An Empirical Study of Effective Capacity Throughputs in 802.11 Wireless Networks

Alan Davy (Waterford Institute of Technology, Ireland); Brian Meskill (Waterford Institute of Technology, Ireland); Jordi Domingo-Pascual (Universitat Politècnica de Catalunya (UPC) BarcelonaTECH) & Technical University of Catalonia (UPC) Advanced Broadband Communications Center, Spain)
pp. 1770-1775

Efficient DFA Grouping for Traffic Identification

Rafael T Antonello (Instituto Federal de Alagoas, Brazil); Stenio Fernandes (Federal University of Pernambuco, Brazil); Alysson Feitoza Santos (UFPE & GPRT, Brazil); Djamel Hadj Sadok (Federal University of Pernambuco, Brazil); Géza Szabó (Ericsson Research, Hungary)
pp. 1776-1782

QoS-aware Cross-layer Design in Multirate Wireless Networks with ARQ Feedback Delay

Peng Jisheng (Graduate University of Chinese Academy of Sciences, P.R. China); Lin Tian (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Yiqing Zhou (Chinese Academy of Science, P.R. China)
pp. 1783-1788

A Weight-Optimized Source Rate Optimization Approach in Energy Harvesting Wireless Sensor Networks

Runan Yao (South Dakota State University, USA); Wei Wang (South Dakota State University, USA); Kazeem Sohraby (South Dakota School of Mines and Technology, USA); Shi Jin (Southeast University, P.R. China); Sunho Lim (Texas Tech University, USA); Zhu Hongbo (Nanjing University of Post and Telecommunications, P.R. China)
pp. 1789-1793

CQ07: Resource Allocation

Effective Capacity Region in a Wireless Multiuser OFDMA Network

Xiao Han (Zhejiang University, P.R. China); Huifang Chen (Zhejiang University, P.R. China); Lei Xie (Zhejiang University, P.R. China); Kuang Wang (Zhejiang University, P.R. China)
pp. 1794-1799

A Bankruptcy Game Approach for Resource Allocation in Cooperative Femtocell Networks

Sahar Hoteit (Université Paris 6, France); Stefano Secci (University Pierre et Marie Curie - Paris 6, France); Rami Langar (UPMC - University of Paris 6, France); Guy Pujolle (University Pierre et Marie Curie - Paris 6, France); Raouf Boutaba (University of Waterloo, Canada)
pp. 1800-1805

Sensor and Channel Selection for Cooperative Sensing in Multichannel Cognitive Radio Systems

Yan Xin (NEC Laboratories America Inc., USA); Kyungtae Kim (NEC Labs America, Inc., USA); Sampath Rangarajan (NEC Labs America, USA)
pp. 1806-1811

Relay Power Allocation in Auction-based Game Approach

Dan Wu (Institute of Communications Engineering, PLAUST, P.R. China); Cai Yueming (Institute of Communications Engineering, PLAUST, P.R. China); Liang Zhou (Nanjing University of Posts and Telecommunications, P.R. China); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal)
pp. 1812-1817

Coalition Graph Game for Joint Relay Selection and Resource Allocation in Cooperative Cognitive Radio Networks

Lanjie Zhai (Beijing University of Posts and Telecommunications, P.R. China); Hong Ji (Beijing University of Posts and Telecommunications, P.R. China); Xi Li (Beijing University of Posts and Telecommunications, P.R. China); Yiwen Tang (Beijing University of Posts and Telecommunications, P.R. China)
pp. 1818-1823

Multihop Relay-Aided Multicast Scheduling for Cellular Wireless Networks

Izhak Rubin (University of California at Los Angeles, USA); Hung-Bin Chang (University of California, Los Angeles, USA); Reuven Cohen (Technion, Israel)
pp. 1824-1829

CQ08: Network Design and Management

ANGEL: Analog Network-Coded Game Theoretic Energy Efficient Layout for Data Dissemination

Angelos Antonopoulos (Telecommunications Technological Centre of Catalonia (CTTC), Spain); Harry Skianis (University of the Aegean, Greece); Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)
pp. 1830-1834

Link Adaptation Algorithms for Channel Estimation Error Mitigation in LTE systems

Huiling Dai (Beijing University of Posts and Telecommunications, P.R. China); Ying Wang (Beijing University of Posts and Telecommunications, P.R. China); Ke Zhang (Beijing University of Posts and Telecommunications, P.R. China); Cong Shi (Beijing University of Posts and Telecommunications, P.R. China)
pp. 1835-1840

QoS provisioning and policy management in a broker-based CR network architecture

Athina Bourdema (University of the Aegean, Greece); Evangelos Pallis (Technological Educational Institute of Crete, Greece); Georgios Kormentzas (University of the Aegean, Greece); Harry Skianis (University of the Aegean, Greece); George Mastorakis (Technological Educational Institute of Crete, Greece)
pp. 1841-1846

Traffic generator using Perlin Noise

Iria Prieto (Public University of Navarre & GRSST, Spain); Mikel Izal (Public University of Navarra (UPNA), Spain); Daniel Morato (Universidad Publica de Navarra, Spain); Eduardo Magaña (Universidad Publica de Navarra, Spain)
pp. 1847-1852

Cooperative On-Demand Delivery for IPTV Networks

Aytac Azgin (Georgia Institute of Technology, USA); Ghassan AlRegib (Georgia Institute of Technology, USA); Yucel Altunbasak (Georgia Institute of Technology, USA)
pp. 1853-1858

Resource Management for Macrocell Users in Hybrid Access Femtocells

Elena Bernal-Mor (Universidad Politécnica de Valencia, Spain); Vicent Pla (Universitat Politècnica de Valencia, Spain); David M Gutierrez-Estevez (Georgia Institute of Technology, USA); Jorge Martínez-Bauset (Universidad Politécnica de Valencia, Spain)
pp. 1859-1864

CQ09: Robustness in Communication Networks

SDRE: Selective Data Redundancy Elimination for Resource Constrained Hosts

Yan Zhang (NJIT, USA); Nirwan Ansari (NJIT, USA); Mingquan Wu (Huawei Technologies, USA); Heather Yu (Huawei Technologies, USA)
pp. 1865-1870

Quantifying and Mitigating IGMP Filtering in Topology Discovery

Pietro Marchetta (University of Napoli, Italy); Pascal Mérindol (Université de Strasbourg, France); Benoit Donnet (Université de Liège (ULg), Belgium); Antonio Pescapé (University of Napoli Federico II, Italy); Jean-Jacques Pansiot (LSIIT - University of Strasbourg, France)
pp. 1871-1876

Optimal Algorithms for Near-Hitless Network Restoration via Diversity Coding

Serhat N Avci (University of California, Irvine, USA); Ender Ayanoglu (University of California, Irvine, USA)
pp. 1877-1883

Resource Constrained Failure Management in Networked Computing Systems

Praveen Bommanavar (Stanford University, USA); Nicholas Bambos (Stanford University, USA)
pp. 1884-1889

A Reliability Analysis of Datacenter Topologies

Rodrigo S. Couto (Federal University of Rio de Janeiro, Brazil); Miguel Elias Mitre Campista (Federal University of Rio de Janeiro & GTA, Brazil); Luis Henrique M. K. Costa (Federal University of Rio de Janeiro, Brazil)
pp. 1890-1895

Multiplexing-Diversity Balanced Cooperative Wireless Cellular Networks Based on Alamouti Space Time Code for Multimedia Transmission

Kun Hua (Lawrence Technological University, USA); Wei Wang (South Dakota State University, USA); Honggang Wang (University of Massachusetts, Dartmouth & College of Engineering, USA); Ali S Alghamdi (Saudi Red Crescent Authority & Oakland University, USA)
pp. 1896-1900

GC12 CSSM: Globecom 2012 - Communications Software, Services and Multimedia Symposium - Program

CSSM01: Multimedia Quality of Service

Bandwidth Management for Mobile Media Delivery

Sanjeev Mehrotra (Microsoft Research, USA); Hua Chen (University of Maryland, College Park, USA); Sourabh Jain (University of Minnesota, Twin cities, USA); Jin Li (Microsoft, USA); Baochun Li (University of Toronto, Canada); Minghua Chen (The Chinese University of Hong Kong, P.R. China)
pp. 1901-1907

Achieving Quality of Service via Packet Distribution Shaping

Duong Nguyen-Huu (Oregon State University, USA); Thai Duong (Oregon State University, USA); Thinh Nguyen (Oregon State, USA)
pp. 1908-1913

Quality-optimized Downlink Scheduling for Video Streaming Applications in LTE Networks

Xiaolin Cheng (University of California at Davis, USA); Prasant Mohapatra (University of California, Davis, USA)
pp. 1914-1919

Optimizing Content Retrieval Delay for LT-based Distributed Cloud Storage Systems

Haifeng Lu (Nanyang Technological University, Singapore); Chuan Heng Foh (Nanyang Technological University, Singapore); Yonggang Wen (Nanyang Technological University, Singapore); Jianfei Cai (Nanyang Technological University, Singapore)
pp. 1920-1925

On Multi-stream Multi-source Multicast Routing

Yuh-Rong Chen (University of Oklahoma, USA); Sridhar Radhakrishnan (University of Oklahoma, USA); Sudarshan Dhall (University of Oklahoma, USA); Suleyman Karabuk (University of Oklahoma, USA)
pp. 1926-1931

Achieving Quality of Service with Adaptation-based Programming for Medium Access Protocols

Pingan Zhu (Oregon State University, USA); Jervis Pinto (Oregon State University, USA); Thinh Nguyen (Oregon State, USA); Alan Fern (Oregon State University, USA)
pp. 1932-1937

CSSM02: Multimedia Quality of Experience

Improving QoE for Skype Video Call in Mobile Broadband Network

Jing Zhu (Intel, USA); Rath Vannithamby (Intel, USA); Christoffer Rodbro (Skype, Sweden); Mingyu Chen (Skype, Sweden); Soren Andersen (Skype, Luxemburg)
pp. 1938-1943

Adaptive Video Pacing Method Based on the Prediction of Stochastic TCP Throughput

Kozo Satoda (NEC Corporation, Japan); Hiroshi Yoshida (NEC Corporation, Japan); Hironori Ito (NEC Corporation, Japan); Kazunori Ozawa (NEC Corporation, Japan)
pp. 1944-1950

QoE-Driven Cache Management for HTTP Adaptive Bit Rate (ABR) Streaming over Wireless Networks

Weiwen Zhang (Nanyang Technological University, Singapore); Yonggang Wen (Nanyang Technological University, Singapore); Zhenzhong Chen (MediaTek USA Inc., USA); Ashish Khisti (University of Toronto, Canada)
pp. 1951-1956

Availability Analysis of Cloud Computing Centers

Hamzeh Khazaei (University of Manitoba, Canada); Jelena Mišić (Ryerson University, Canada); Vojislav B. Mišić (Ryerson University, Canada); Nasim Beigi Mohammadi (Ryerson University, Canada)
pp. 1957-1962

Empirical QoE/QoS Correlation Model based on Multiple Parameters for VoD flows

Aroussi Sana (National High School of Computer Science, Algeria); Thouraya Bouabana-Tebibel (National School of Computer Science, Algeria); Abdelhamid Mellouk (UPEC, University Paris-Est Creteil Val de Marne, France)
pp. 1963-1968

CSSM03: Peer-to-Peer Service

Toward continuous push-based P2P live streaming

Dongni Ren (HKUST, Hong Kong); Wangkit Wong (The Hong Kong University of Science and Technology, Hong Kong); Gary Chan (The Hong Kong University of Science and Technology, P.R. China)
pp. 1969-1974

A Study on Peer Startup Process and Initial Offset Placement in P2P Live Streaming Systems

Chunxi Li (Beijing Jiaotong University, P.R. China); Yishuai Chen (Graduate University of the Chinese Academy of Sciences, P.R. China); Baoxian Zhang (Graduate University of the Chinese Academy of Sciences, P.R. China); Cheng Li (Memorial University of Newfoundland, Canada); Changjia Chen (North JiaoTong university, P.R. China)
pp. 1975-1980

Peer Selection in P2P File Sharing Systems over Mobile Cellular Networks with Consideration of Downlink Bandwidth Limitation

Yan Zhang (Institute of Acoustics, Chinese Academy of Sciences, P.R. China); Xu Zhou (Institute of Acoustics, Chinese Academy of Science, P.R. China); Xuezhen Zhang (Institute of Acoustics, Chinese Academy of Sciences, P.R. China); Shuhao Liu (University of Electronic Science and Technology of China, P.R. China); Dan Liao (University of Electronic Science and Technology of China, P.R. China)
pp. 1981-1987

On Providing Bounded Delay Service to Subscribers in P2P Live Streaming Systems

Zhipeng Ouyang (OPNET, USA); Miao Wang (A10networks Inc., USA); Lisong Xu (University of Nebraska-Lincoln, USA); Byrav Ramamurthy (University of Nebraska-Lincoln, USA)
pp. 1988-1993

Understanding the Topologies of BitTorrent Networks: A Measurement View

Majing Su (Harbin Institute of Technology, P.R. China); Hongli Zhang (Harbin Institute of Technology, P.R. China); Xiaojiang Du (Temple University, USA); Binxing Fang (Harbin Institute of Technology, P.R. China); Mohsen Guizani (QU, USA)
pp. 1994-1999

A Playback Length Changeable Chunk Scheduling Algorithm for SVC based P2P Streaming Systems

Junping Song (Institute of Acoustics, Chinese Academy of Sciences, P.R. China); Xu Zhou (Institute of Acoustics, Chinese Academy of Science, P.R. China); Yan Zhang (Institute of Acoustics, Chinese Academy of Sciences, P.R. China); Hui Tang (IOA, Chinese Academy of Sciences, USA); Fan Bai (Institute of Acoustics, Chinese Academy of Sciences, P.R. China); Song Ci (University of Nebraska-Lincoln, USA)
pp. 2000-2005

CSSM04: Mobile Service and Service Platform

Mobile Applications Tracking Wireless User Location

Sara Motahari (Sprint, USA); Hui Zang (Sprint, USA); Soshant Bali (AT&T Labs, USA); Phyllis Reuther (Sprint, USA)
pp. 2006-2011

A Trust Calculating Algorithm Based on Mobile Phone Data

Yancui Shi (Beijing University of Posts and Telecommunications, P.R. China); Xiangwu Meng (Beijing University of Posts and Telecommunications, P.R. China); Yujie Zhang (Beijing University of Posts and Telecommunications, P.R. China); Mi Xiao (Beijing University of Posts and Telecommunications, P.R. China)

pp. 2012-2017

Multi-entity Device-Free WLAN Localization

Ibrahim Sabek (Alexandria University, Egypt); Moustafa Youssef (Egypt-Japan University of Science and Technology (EJUST), USA)
pp. 2018-2023

CONT: A Contention-based Time Division Scheme for Handoff Support in Single-radio Wireless Mesh Networks

Haopeng Li (University of North Carolina at Charlotte, USA); Linda Jiang Xie (University of North Carolina at Charlotte, USA)
pp. 2024-2029

A SIP-SHIM6 Based Solution for Seamless Intra-Domain Mobility in IMS Networks

Amel Achour (University of PARIS6, France); Kamel Haddadou (Gandi SAS, France); Brigitte Kervella (LIP6, France); Guy Pujolle (Laboratoire d'Informatique de Paris 6, France)
pp. 2030-2035

deStress: Mobile and Remote Stress Monitoring, Alleviation, and Management Platform

Jin Zhang (Hong Kong University of Science and Technology, P.R. China); Hao Tang (Shenzhen New Element Medical Equipment Technology Development Co., P.R. China); Dawei Chen (HKUST, Hong Kong); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong)
pp. 2036-2041

CSSM05: Cloud and Social Networking

AMVSC: A Framework of Adaptive Mobile Video Streaming in the Cloud

Min Chen (Huazhong University of Science and Technology, P.R. China)
pp. 2042-2047

Building Cloud-ready Video Transcoding Systems for Content Delivery Networks (CDNs)

Zhenyun Zhuang (Oracle Corporation & Georgia Institute of Technology, USA); Chun Guo (IeWare Technologies & Ying-Da-Ji Technologies, USA)
pp. 2048-2053

ITS-Cloud: Cloud Computing for Intelligent Transportation System

Salim Bitam (University of Biskra & LESIA Laboratory, Algeria); Abdelhamid Mellouk (UPEC, University Paris-Est Creteil Val de Marne, France)
pp. 2054-2059

Measurement-driven Temporal Analysis of Information Diffusion in Online Social Networks

Guolin Niu (The University of Hong Kong, P.R. China); Victor O. K. Li (University of Hong Kong, P.R. China); Yi Long (The University of Hong Kong, Hong Kong); Kuang Xu (The University of Hong Kong, P.R. China)
pp. 2060-2065

Blind Spots: Unveiling Users' True Willingness in Online Social Networks

Di Wang (University of Florida, USA); Xinxin Liu (University of Florida, USA); Xiaolin Li (University of Florida, USA)
pp. 2066-2071

Diffusion of Real-Time Information in Social-Physical Networks

Dajun Qian (Arizona State University, USA); Osman Yağan (Carnegie Mellon University & CyLab, USA); Lei Yang (Arizona State University, USA); Junshan Zhang (Arizona State University, USA)
pp. 2072-2077

P-CSSM: Communications and Multimedia Service

An Economic Framework for Information Platform

Yanjiao Chen (Hong Kong University of Science and Technology, Hong Kong); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong)
pp. 2078-2082

Who Are Active? An In-depth Measurement on User Activity Characteristics in Sina Microblogging

Chenxu Wang (Xi'an Jiaotong University, P.R. China); Xiaohong Guan (Xi'an Jiaotong University & Tsinghua University, P.R. China); Tao Qin (Xi'an Jiaotong University, P.R. China); Wei Li (Xi'an Jiaotong University, P.R. China)
pp. 2083-2088

CSSM06: Security and Multimedia Streaming

Secure and Traceable Online Image Sharing

Kohei Sugiyama (KDDI R&D Laboratories, Inc., Japan); Masaki Fukushima (KDDI R&D Laboratories Inc., Japan); Atsushi Tagami (KDDI R&D Laboratories, Japan); Teruyuki Hasegawa (KDDI R&D Laboratories Inc., Japan)
pp. 2089-2094

Finding Out the Liars: Fighting Against False Channel Information Exchange Attacks in Cognitive Radio Ad Hoc Networks

Yi Song (University of North Carolina at Charlotte, USA); Linda Jiang Xie (University of North Carolina at Charlotte, USA)
pp. 2095-2100

Modeling an NGN authentication solution and improving its performance through clustering

Songbo Song (France Telecom, France); Hassnaa Moustafa (Intel, USA); Hossam Afifi (Institut Telecom & Paris South, France)
pp. 2101-2106

Traffic Models for H.264 Video Using Hierarchical Prediction Structures

Akshay Pulipaka (Arizona State University, USA); Patrick Seeling (Central Michigan University, USA); Martin Reisslein (Arizona State University, USA)
pp. 2107-2112

Inter-Layer FEC Decoded Multi-Layer Video Streaming

Yongkai Huo (University of Southampton, United Kingdom); Xin Zuo (University of Southampton, United Kingdom); Robert G Moulder (University of Southampton, United Kingdom); Lajos Hanzo (University of Southampton, United Kingdom)
pp. 2113-2118

Optimal Joint Base Station and User Equipment (BS-UE) Admission Control for Energy-Efficient Green Wireless Cellular Networks

Qingmin Wang (Dalian University of Technology, P.R. China); F. Richard Yu (Carleton University, Canada); Yi Sun (Dalian University of Technology, P.R. China)
pp. 2119-2124

CSSM07: Multimedia Application and Service

Popularity-Based Caching for IPTV Services

Sajal K. Das (University of Texas at Arlington, USA); Mayank Raj (University of Texas at Arlington & Center for Research in Wireless Mobility and Networking (CREWMAN), USA); Zohar Naor (University of Haifa, Israel)
pp. 2125-2130

Content Routing and Lookup Schemes using Global Bloom Filter for Content-Delivery-as-a-Service

Yichao Jin (Nanyang Technological University, Singapore); Yonggang Wen (Nanyang Technological University, Singapore)
pp. 2131-2136

LP-based Optimization of Storage and Retrieval for Distributed Video-on-Demand

Zhuolin Fannie Xu (The Hong Kong University of Science and Technology, Hong Kong); Gary Chan (The Hong Kong University of Science and Technology, P.R. China)
pp. 2137-2142

Design of Small Rate, Close to Ideal, GLDPC-Staircase AL-FEC Codes for the Erasure Channel

Ferdaouss Mattoussi (INRIA, France); Vincent Roca (INRIA Rhône-Alpes, France); Bessem Sayadi (Alcatel-Lucent Bell-Labs, France)
pp. 2143-2149

Multiple Description Coding of Free Viewpoint Video for Multi-Path Network Streaming

Zhi Liu (National Institute of Informatics, The Graduate University for Advanced Studies, Japan);
Gene Cheung (National Institute of Informatics, Japan); Jacob Chakareski (EPFL, Switzerland);
Yusheng Ji (National Institute of Informatics, Japan)
pp. 2150-2155

GC12 CT: Globecom 2012 - Communication Theory Symposium - Program

CT01: Theoretical Aspects of Communication Systems

General BER Expression for One-Dimensional Constellations

Mikhail Ivanov (Chalmers University of Technology, Sweden); Fredrik Bränström (Chalmers University of Technology, Sweden); Alex Alvarado (University of Cambridge, United Kingdom); Erik Agrell (Chalmers University of Technology, Sweden)
pp. 2162-2167

New Approximations to the Lognormal Characteristic Function

Seyed Ali SaberAli (University of Alberta, Canada); Norman C. Beaulieu (University of Alberta, Canada)
pp. 2168-2172

On the Outage Throughput Capacity of Hybrid Wireless Networks over Fading Channels

Xin Wang (University of Texas at Arlington, USA); Qilian Liang (University of Texas at Arlington, USA)
pp. 2173-2178

Coverage Probability of Uplink Cellular Networks

Harpreet S Dhillon (The University of Texas at Austin & WNCG, USA); Thomas Novlan (The University of Texas at Austin, USA); Jeffrey Andrews (The University of Texas at Austin, USA)
pp. 2179-2184

Transmission Capacities for Overlaid Wireless Networks with Spatial Multiplexing

Xianling Wang (Beijing University of Posts and Telecommunications, P.R. China); Xin Zhang (Beijing University of Posts and Telecommunications, P.R. China); Jian Geng (Beijing University of Posts and Telecommunications, P.R. China); Xiaoyi Liu (University of California, Irvine, USA); Dacheng Yang (Beijing University of Posts and Telecommunications, P.R. China)
pp. 2185-2190

Outage Minimization in Fading Channels: Optimal Power Allocation with Channel Distribution Information Known at Transmitter

Chuan Huang (Texas A&M University, USA); Rui Zhang (National University of Singapore, Singapore); Shuguang Cui (Texas A&M University, USA)
pp. 2191-2195

CT08: Cognitive Radio

Asymptotically Optimal Channel Feedback Protocol Design for Cognitive Multiple Access Channels

Ehsan Nekouei (University of Melbourne, Australia); Hazer Inaltekin (Antalya International University, Turkey); Subhrakanti Dey (University of Melbourne, Australia)
pp. 2196-2202

Interference Alignment with Rate Splitting in a Three-user Interference Channel with a Cognitive Transmitter

Myunggil Kang (KAIST, Korea); Wan Choi (KAIST, Korea)
pp. 2203-2208

Flexible Duplex for Cognitive Femtocells in Two-Tier Networks

Yong Sheng Soh (California Institute of Technology, USA); Tony Q. S. Quek (Singapore University of Technology and Design (SUTD) & Institute for Infocomm Research, Singapore); Marios Kountouris (Supélec, France); Giuseppe Caire (University of Southern California, USA)
pp. 2209-2214

Phase Asynchronous Cognitive Interference Channels: Lossless Source-Channel Separation Theorems

Hamidreza Ebrahimzadeh Saffar (University of Waterloo, Canada); Patrick Mitran (University of Waterloo, Canada)
pp. 2215-2221

SEP-Optimal Antenna Selection for Average Interference Constrained Underlay Cognitive Radios

Rimalapudi Sarvendranath (IISc, India); Neelesh B. Mehta (Indian Institute of Science, India)
pp. 2222-2227

CT02: Pilot Design and Channel Estimation

Impact of Imperfect Channel State Information on the Performance of Wireless Sensor Networks

Giorgio Taricco (Politecnico di Torino, Italy)
pp. 2228-2233

Training Sequence Design for Data-Aided Synchronization of Burst-Mode CPM

Ehsan Hosseini (University of Kansas, USA); Erik S. Perrins (University of Kansas, USA)
pp. 2234-2239

Pilot Design and Channel Estimation for Uplink Block Spread CDMA

Gillian Huang (MStar Semiconductor Ltd, United Kingdom); Yue Wang (Toshiba Research Europe Limited, United Kingdom); Justin Coon (Toshiba TRL, United Kingdom); Mohammud Z Bocus (Toshiba Research Europe Limited, United Kingdom); Joe McGeehan (University of Bristol, United Kingdom)
pp. 2240-2245

Orthogonal Training Signal Relaying for Channel Estimation in Dual-Hop AF Relay Networks

Gillian Huang (MStar Semiconductor Ltd, United Kingdom); Yue Wang (Toshiba Research Europe Limited, United Kingdom); Justin Coon (Toshiba TRL, United Kingdom); Mohammud Z Bocus (Toshiba Research Europe Limited, United Kingdom)
pp. 2246-2250

How Useful is Adaptive Action?

Chiranjib Choudhuri (University of Southern California, USA); Urbashi Mitra (University of Southern California, USA)
pp. 2251-2255

A Rate-Maximizing Channel-Shortening Detector with Soft Feedback Side Information

Fredrik Rusek (Lund University, Sweden); Naofal Al-Dhahir (University of Texas at Dallas, USA); Ahmad Abdulrahman Gomaa (University of Texas at Dallas & Erik Jonsson School of Engineering, USA)
pp. 2256-2261

CT03: Network Coding

On Analysis of Wireless Uplink using Analog Network Coding with Non-Coherent Modulations

Wei Guan (University of Maryland, College Park, USA); K. J. Ray Liu (University of Maryland, USA)
pp. 2262-2267

A Simple Non-Coherent Physical-Layer Network Coding for Transmissions Over Two-Way Relay Channels

Kai Zhu (University of York, United Kingdom); Alister G. Burr (University of York, United Kingdom)
pp. 2268-2273

On the Feasibility of Network Alignment for Three-Source Three-Destination Multiple Unicast Networks with Delays

Abhinav Ganesan (Indian Institute of Science, Bangalore, India); Teja Damodaram Bavirisetti (Broadcom Communications Technologies Pvt Ltd, India); B. Sundar Rajan (Indian Institute of Science, India)
pp. 2274-2279

Precoder Design for Weighted Sum Delay Minimization in MIMO Physical Layer Multicasting

Hao Zhu (University of Minnesota, USA); Narayan Prasad (NEC Labs America, Princeton, USA); Sampath Rangarajan (NEC Labs America, USA)
pp. 2280-2285

Physical Layer Network Coding for Two-Way Relaying with QAM and Latin Squares

Vishnu Namboodiri (Indian Institute of Science, India); B. Sundar Rajan (Indian Institute of Science, India)
pp. 2286-2292

Finding Three Transmissions is Hard

Arash Saber Tehrani (University of Southern California, USA); Alex Dimakis (University of Southern California, USA)
pp. 2293-2298

CT04: Interference Management

Throughput Regions for Fading Interference Channels under Statistical QoS Constraints

Deli Qiao (Huawei Technologies, Inc., P.R. China); M. Cenk Gursoy (Syracuse University, USA);
Senem Velipasalar (Syracuse University, USA)
pp. 2299-2304

Analog Multitone with Interference Suppression: Relieving the ADC Bottleneck for Wideband 60 GHz Systems

Hong Zhang (University of California, at Santa Barbara, USA); Sriram Venkateswaran (University of California, Santa Barbara, USA); Upamanyu Madhow (University of California, Santa Barbara, USA)
pp. 2305-2310

On Optimal Ergodic Interference Alignment

Chunhua Geng (University of California, Irvine, USA); Syed Ali Jafar (University of California Irvine, USA)
pp. 2311-2316

The Performance of Successive Interference Cancellation in Random Wireless Networks

Xinchen Zhang (University of Notre Dame, USA); Martin Haenggi (University of Notre Dame, USA)
pp. 2317-2321

Uplink Multicell Processing with Limited Backhaul via Successive Interference Cancellation

Lei Zhou (University of Toronto, Canada); Wei Yu (University of Toronto, Canada)
pp. 2322-2327

Towards the Feasibility Conditions for Linear Interference Alignment with Symbol Extensions: A Diversity Constraint

Liangbin Li (University of California, Irvine, USA); Hamid Jafarkhani (University of California, Irvine, USA); Syed Ali Jafar (University of California Irvine, USA)
pp. 2328-2333

CT05: Coding Techniques

Wireless Index Coding

Syed Ali Jafar (University of California Irvine, USA)
pp. 2334-2339

Joint Compute and Forward for the Two Way Relay Channel With Spatially Coupled LDPC Codes

Brett Hern (Texas A&M University, USA); Krishna Narayanan (Texas A&M University, USA)
pp. 2340-2345

Superposition Modulation with Irregular Convolutional Coding

Meelis Noemm (University of Kiel, Germany); Alaa Mourad (University of Kiel, Germany); Peter A. Hoeher (University of Kiel, Germany)
pp. 2346-2350

Cross-Layer Design of Energy Efficient Coded ARQ Systems

Gang Wang (University of Arkansas, USA); Jingxian Wu (University of Arkansas, USA); Yahong Rosa Zheng (Missouri University of Science and Technology, USA)
pp. 2351-2355

New PMEPR Bounding Analysis for Coded OFDM Transmitters

Scott CH Huang (National Tsing Hua University, Taiwan); Hsiao-Chun Wu (Louisiana State University, USA)
pp. 2356-2360

Efficient Concatenated Coding Schemes for Error Floor Reduction of LDPC and Turbo Product Codes

Damián Morero (National University of Cordoba, Argentina); Mario R Hueda (National University of Cordoba & CONICET, Argentina)
pp. 2361-2366

CT10: Poster Session

Strategies for Distributed Sensor Selection Using Convex Optimization

Fabian Altenbach (RWTH Aachen University, Germany); Steven Corroy (RWTH Aachen University, Germany); Georg Böcherer (Technische Universität München, Germany); Rudolf Mathar (RWTH Aachen University, Germany)
pp. 2367-2372

Semidefinite Relaxation and Randomization for Dynamic Cell Association in Heterogeneous Networks

Steven Corroy (RWTH Aachen University, Germany); Rudolf Mathar (RWTH Aachen University, Germany)
pp. 2373-2378

Capacity of Scale Free Wireless Networks

Bita Azimdoost (University of California Santa Cruz, USA); Hamid Sadadpour (University of California, Santa Cruz, USA)
pp. 2379-2384

On the Capacity Region of the Gaussian MAC with Batteryless Energy Harvesting Transmitters

Omur Ozel (University of Maryland, College Park, USA); Sennur Ulukus (University of Maryland, USA)
pp. 2385-2390

CT06: Cooperative Communications (I)

Coordinated Multi-Point Transmission with Quantized and Delayed Feedback

Daniel Jaramillo-Ramirez (France Telecom, Research & Development Division & Supélec, France); Marios Kountouris (Supélec, France); Eric Hardouin (Orange Labs, France)
pp. 2391-2396

Device-to-Device Collaboration through Distributed Storage

Negin Golrezaei (University of Southern California, USA); Alex Dimakis (University of Southern California, USA); Andreas Molisch (University of Southern California, USA)
pp. 2397-2402

Spatio-Temporal Information Coupling in Cooperative Network Navigation

Santiago Mazuelas (Massachusetts Institute of Technology, USA); Yuan Shen (Massachusetts Institute of Technology, USA); Moe Win (Massachusetts Institute of Technology, USA)
pp. 2403-2407

Coordinated Relay Beamforming for Amplify-and-Forward Two-Hop Interference Networks

Yuanming Shi (The Hong Kong University of Science and Technology, Hong Kong); Jun Zhang (The Hong Kong University of Science and Technology, Hong Kong); Khaled Letaief (The Hong Kong University of Science and Technology, Hong Kong)
pp. 2408-2413

Exchanging Third-Party Information with Minimum Transmission Cost

Xiumin Wang (Singapore University of Technology and Design, Singapore); Wentu Song (Peking University, P.R. China); Chau Yuen (Singapore University of Technology and Design, Singapore); Tiffany Jing Li (Lehigh University, USA)
pp. 2414-2419

Degrees of Freedom of MIMO Two-Way X Relay Channel

Zhengzheng Xiang (Shanghai Jiao Tong University, P.R. China); Jianhua Mo (Shanghai Jiao Tong University, P.R. China); Meixia Tao (Shanghai Jiao Tong University, P.R. China)
pp. 2420-2425

CT07: Cooperative Communications (II)**Performance of Pico-Cell Clusters with Cooperative Receivers**

Khalid Zeineddine (Northwestern University & Nokia Siemens Networks, USA); Michael Honig (Northwestern University, USA); Shirish Nagaraj (Nokia Siemens Networks, USA); Philip J Fleming (Nokia Siemens Networks USA, USA)
pp. 2426-2431

Secret Key Agreement for Cooperative Wireless Communications: Bounds and Efficient Protocol Design

Ning Wang (University of Victoria, Canada); Ning Zhang (Xidian University, P.R. China); T. Aaron Gulliver (University of Victoria, Canada)
pp. 2432-2437

Outage Secrecy Rate in Wireless Relay Channels Using Cooperative Jamming

Jiangyuan Li (Rutgers-The State University of New Jersey, USA); Shuangyu Luo (Rutgers, The State University of New Jersey, USA); Athina Petropulu (Rutgers, The State University of New Jersey, USA)
pp. 2438-2443

Power Assignment in Multi-relay Adaptive DF Cooperative Networks

Jules Merlin Mouatcho 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)
pp. 2444-2449

On the Achievable Degrees of Freedom of Partially Cooperative X Networks with 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)
pp. 2450-2454

Distributed Space Time Coding for Wireless Two-way Relaying

Vijayvaradharaj Muralidharan (Indian Institute of Science, India); B. Sundar Rajan (Indian Institute of Science, India)
pp. 2455-2461

CT09: MIMO System Design and Analysis**Degrees of Freedom of 2-user and 3-User Rank-Deficient MIMO Interference Channels**

Sundar Rajan Krishnamurthy (University of California Irvine, USA); Syed Ali Jafar (University of California Irvine, USA)
pp. 2462-2467

Performance Analysis of Distributed MIMO Systems in Rayleigh/Inverse-Gaussian Fading Channels

Vetri Selvam Gopal (Chalmers University of Technology, Sweden); Michail Matthaiou (Chalmers University of Technology, Sweden); Caijun Zhong (Zhejiang University, P.R. China)
pp. 2468-2474

On the Asymptotic Sum-Rate of Uplink MIMO Cellular Systems in the Presence of Non-Gaussian Inter-Cell Interference

Maksym A. Girnyk (KTH Royal Institute of Technology, Sweden); Mikko Vehkaperä (Aalto University & KTH Royal Institute of Technology, Finland); Lars K. Rasmussen (KTH Royal Institute of Technology, Sweden)
pp. 2475-2480

A Receiver Design for MIMO Systems over Rayleigh Fading Channels with Correlated Impulse Noise

Khodr A. Saaifan (Jacobs University Bremen, Germany); Werner Henkel (Jacobs University Bremen, Germany)
pp. 2481-2486

Sum Rate Maximization Antenna Selection via Discrete Stochastic Approximation in MIMO Two-Way AF Relay with Imperfect CSI

Gang Liu (Beijing University of Posts and Telecommunications, P.R. China); Hong Ji (Beijing University of Posts and Telecommunications, P.R. China); Yi Li (Beijing University of Posts and Telecommunications, P.R. China); Xiaoliang Zhang (Beijing University of Posts and Telecommunications, P.R. China)
pp. 2487-2492

Optimal MIMO Transmission with Per-antenna Power Constraints

Zhouyue Pi (Samsung Telecommunications America, USA)
pp. 2493-2498

GC12 NGNI: Globecom 2012 - Next Generation Networking and Internet Symposium - Program

NGNI01: Data Centers and Cloud Computing

FlatNet: Towards A Flatter Data Center Network

Dong Lin (Hong Kong University of Science & Technology, Hong Kong); Yang Liu (Hong Kong University of Science & Technology, Hong Kong); Mounir Hamdi (Hong Kong University of Science and Technology, P.R. China); Jogesh Muppala (The Hong Kong University of Science and Technology, Hong Kong)
pp. 2499-2504

Efficient VM Placement with Multiple Deterministic and Stochastic Resources in Data Centers

Hao Jin (Florida International University, USA); Deng Pan (Florida International University, USA); Jing Xu (University of Florida, USA); Niki Pissinou (Florida International University, USA)
pp. 2505-2510

Network Resource Allocation in Data Center Interconnection with Anycast Service Provisioning

Molka Gharbaoui (Scuola Superiore Sant'Anna, Italy); Barbara Martini (CNIT, Italy); Walter Cerroni (University of Bologna, Italy); Piero Castoldi (Scuola Superiore Sant'Anna, Italy); Franco Callegati (Universita di Bologna, Italy)
pp. 2511-2516

Optimal Provisioning for Elastic Service Oriented Virtual Network Request in Cloud Computing

Gang Sun (University of Electronic Science and Technology of China, P.R. China); Vishal Anand (The College at Brockport, State University of New York, USA); Hong-Fang Yu (University of Electronic Science and Technology of China, P.R. China); Dan Liao (University of Electronic Science and Technology of China, P.R. China); Le Min Li (University of Electronic Science and Technology of China, P.R. China)
pp. 2517-2522

Torii-HLMAC: A Distributed, Fault-tolerant, Zero Configuration Fat Tree Data Center Architecture with Multiple Tree-based Addressing and Forwarding

Elisa Rojas (Universidad de Alcal (UAH) Madrid, Spain); Guillermo Ib (lez (Universidad de Alcal Escuela Politcnica Superior, Spain)
pp. 2523-2528

Energy Models driven Green Routing for Data Centers

Shivashis Saha (University of Nebraska-Lincoln, USA); Jitender Singh Deogun (University of Nebraska-Lincoln, USA); Lisong Xu (University of Nebraska-Lincoln, USA)
pp. 2529-2534

NGNI02: Router Architecture & Switch Design

On-line Power Savings in a Distributed Multi-stage Router Architecture

Andrea Bianco (Politecnico di Torino, Italy); Fikru Getachew Debele (Politecnico di Torino, Italy); Luca Giraudo (Politecnico di Torino, Italy)
pp. 2535-2540

FTMS: An Efficient Multicast Scheduling Algorithm for Feedback-based Two-stage Switch

Chunzhi He (The University of Hong Kong, Hong Kong); Bing Hu (Zhejiang University, P.R. China); Kwan Yeung (University of Hong Kong, Hong Kong)
pp. 2541-2546

A Port-Configuration Assisted NIC IRQ Affinitization Scheme for Multi-Core Packet Forwarding Applications

Tsai Wen-Yen (National Tsing Hua University, Taiwan); Nen-Fu Huang (National Tsing Hua University, Taiwan); Hsien-Wei Hung (National Tsing Hua University, Taiwan)
pp. 2547-2552

Efficient Memory Layout for Packet Classification System on Multi-Core Architecture

Shariful H Shaikot (Washington State University, USA); Min Sik Kim (Washington State University, USA)

pp. 2553-2559

Statistical Adapting RED in Dynamic Networks

Wu Chen (ZTE Corporation, P.R. China); Geyong Min (University of Bradford, United Kingdom); Honggang Zhang (Suffolk University, USA)
pp. 2560-2565

NGNI03: Mobile and Wireless Networks

Clique Partition Based Relay Placement in WiMAX Mesh Networks

Zhuofan Liao (Central South University, P.R. China); Jianxin Wang (Central South University, P.R. China); Shigeng Zhang (Central South University, P.R. China); Jiannong Cao (Hong Kong Polytechnic Univ, Hong Kong)
pp. 2566-2571

Proposal of Seamless IP mobility schemes: Network traversal with Mobility (NTMobile)

Katsuhiro Naito (Mie University, Japan); Kazuma Kamienoo (Meijo University, Japan); Takuya Nishio (Mie University, Japan); Hidekazu Suzuki (Meijo University, Japan); Akira Watanabe (Meijo University, Japan); Kazuo Mori (Mie University, Japan); Hideo Kobayashi (Mie University, Japan)
pp. 2572-2577

A Novel User-centric Handoff Cost Framework Applied to the Virtual Mobility Domains and IPv6-based Mobility Protocols

Hasan Tuncer (Rochester Institute of Technology, USA); Nirmala Shenoy (University of Rochester, USA); Andres Kwasinski (Rochester Institute of Technology, USA); John Hamilton (Rochester Institute of Technology, USA); Sumita Mishra (Rochester Institute of Technology, USA)
pp. 2578-2584

Benchmarking Message Authentication Code Functions for Mobile Computing

Abdulmonem Mohammad Rashwan (Queen's University, Canada); Abd-Elhamid M. Taha (Alfaisal University, Saudi Arabia); Hossam S. Hassanein (Queen's University, Canada)
pp. 2585-2590

Spatial Spectrum Sharing-based Carrier Aggregation for Heterogeneous Networks

Yong Xiao (Massachusetts Institute of Technology, USA); Timothy K. Forde (University of Dublin, Trinity College, Ireland); Irene Macaluso (Trinity College Dublin, Ireland); Luiz A. DaSilva (Virginia Polytechnic Institute and State University & Trinity College Dublin, Ireland); Linda Doyle (Trinity College Dublin, Ireland)
pp. 2591-2596

Inter-Operator Spectrum Sharing in Future Cellular Systems

Yu-Ting Lin (National Taiwan University, Graduate Institute of Communication Engineering, Taiwan); Hamidou Tembine (Supelec, France); Kwang-Cheng Chen (National Taiwan University, Taiwan)
pp. 2597-2602

NGNI04: Network Virtualization

Virtual Network Embedding by Exploiting Topological Information

Zihou Wang (Institute of Acoustics, Chinese Academy of Sciences, P.R. China); Yanni Han (Institute of Acoustics, Chinese Academy of Sciences, P.R. China); Tao Lin (Institute of Acoustics, Chinese Academy of Sciences, P.R. China); Hui Tang (IOA, Chinese Academy of Sciences, USA); Song Ci (University of Nebraska-Lincoln, USA)
pp. 2603-2608

Minimizing Electricity Cost in Geographical Virtual Network Embedding

Zhongbao Zhang (Beijing University of Posts and Telecommunications, P.R. China); Sen Su (Beijing University of Posts & Telecommunications (BUPT), P.R. China); Xinli Niu (Beijing University of Posts and Telecommunications, P.R. China); Jiao Ma (BUPT, P.R. China); Xiang Cheng (Beijing University of Posts and Telecommunications, P.R. China); Kai Shuang (Beijing University of Posts and Telecommunications, P.R. China)
pp. 2609-2614

Virtual Network Embedding with Substrate Support for Parallelization

Sheng Zhang (Nanjing University, P.R. China); Jie Wu (Temple University, USA); Sanglu Lu (Nanjing University, P.R. China)
pp. 2615-2620

Topology-aware Virtual Network Embedding through Bayesian Network Analysis

Sude Qing (Beijing University of Posts and Telecommunications & EBUPT Information Technology Co., Ltd., P.R. China); Qi Qi (Beijing University of Posts and Telecommunications, P.R. China); Jingyu Wang (Beijing University of Posts and Telecommunications, P.R. China); Tong Xu (Beijing University of Posts and Telecommunications, P.R. China); Jianxin Liao (Beijing University of Posts and Telecommunications, P.R. China)
pp. 2621-2627

On the Problem of Mapping Virtual Machines to Physical Machines for Delay Sensitive Services

Bedhiaf Ilimam Imen (UQAM, Canada); Racha Ben Ali (École Polytechnique de Montréal, Canada); Cherkaoui Omar (University of Quebec in Montreal, Canada)
pp. 2628-2633

Scalability Aspects of Centralized Control of MPLS Access/Aggregation Network

David Jocha (Ericsson, Hungary); András Kern (Ericsson, Hungary); Kiran Yedavalli (Cisco Systems, USA)
pp. 2634-2639

NGNI05: Resource Allocation and Routing in Next Generation Networks

Adaptive-VNE: A Flexible Resource Allocation For Virtual Network Embedding Algorithm

Ilhem Fajjari (Ginkgo Networks & University Pierre et Marie Curie, France); Nadjib Aitsaadi (University of Paris-Est Creteil - UPEC, France); Guy Pujolle (University Pierre et Marie Curie - Paris 6, France); Hubert Zimmermann (Ginkgo Networks, France)
pp. 2640-2646

A Simple and Cost-Effective EPON-Based 4G Mobile Backhaul RAN Architecture

Syed Rashid Zaidi (City University Of New York, USA); Shahab Hussain (The City University of New York & Alcatel-Lucent, USA); ASM Delowar Hossain (City University, USA); Georgios Ellinas (University of Cyprus, Cyprus); Roger Dorsinville (City University of NY, USA); Mohamed A Ali (City University of New York, USA)
pp. 2647-2652

Performance Comparison of Scheduling Algorithms for Multipath Transfer

Amanpreet Singh (University of Bremen, Germany); Carmelita Goerg (University of Bremen, Germany); Andreas Timm-Giel (Hamburg University of Technology, Germany); Michael Scharf (Alcatel-Lucent Bell Labs, Germany); Thomas-Rolf Banniza (Alcatel-Lucent Bell Labs, Germany)
pp. 2653-2658

A Novel Incrementally-Deployable Multi-granularity Multihomming Framework for the Future Internet

Jianli Pan (Washington University in Saint Louis, USA); Raj Jain (Washington University in St. Louis, USA); Subbarthi Paul (Washington University in St. Louis, USA)
pp. 2659-2664

Fast Failover for Control Traffic in Software-defined Networks

Neda Beheshti (Ericsson Research, USA); Ying Zhang (Ericsson Research, USA)
pp. 2665-2670

A Novel Medium Access Control Protocol for Radio-Over-Fiber Access Networks

Georgios Vasileiou (Aristotle University, Greece); Georgios Papadimitriou (Aristotle University, Greece); Petros Nicopolitidis (Aristotle University, Greece); Panagiotis Sarigiannis (University of Western Macedonia, Greece); Malamati Louta (University of Western Macedonia, Greece); Mohammad S. Obaidat (Monmouth University, USA)
pp. 2671-2676

NGNI06: P2P and Content Centric Networks

Content-Based Route Lookup using CAM

Yan Sun (Broadcom, USA); Norbert Egi (Huawei Technologies Inc., USA); Guangyu Shi (Huawei, USA); Jianming Wu (Huawei, USA)
pp. 2677-2682

Rarest-first and Coding Are Not Enough

Dinh Nguyen (Waseda University, Japan); Hidenori Nakazato (Waseda University, Japan)
pp. 2683-2688

Modeling and Analysis of PeerTrust-Like Trust Mechanisms in P2P Networks

Miao Wang (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Zhijun Xu (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Yujun Zhang (Institute of Computing Tech. Chinese Academy of Sciences, P.R. China); Hongmei Zhang (Institute of High Physics, Chinese Academy of Sciences, P.R. China)
pp. 2689-2694

Efficient Query Bundling Mechanism in a DHT Network

Kimihiro Mizutani (NTT Network Innovation Labs., Japan); Toru Mano (NTT Network Innovation Labs., Japan); Osamu Akashi (NTT Network Innovation Labs., Japan); Kensuke Fukuda (National Institute of Informatics, Japan)
pp. 2695-2700

Route discovery and caching: a way to improve the scalability of Information-Centric Networking

Nicola Blefari-Melazzi (University of Rome □or Vergata□ Italy); Andrea Detti (University of Rome □or Vergata□ Italy); Matteo Pomposini (University of Roma Tor Vergata, Italy); Stefano Salsano (University of Rome □or Vergata□ Italy)
pp. 2701-2707

Improving Content Availability by Request-Adaptive Incentive in Private Peer-to-Peer Communities

Honglei Jiang (Huazhong University of Science and Technology, P.R. China); Song Guo (The University of Aizu, Japan); Deze Zeng (School of Computer Science and Engineering, The University of Aizu & School of Computer Science and Engineering, Huazhong University of Science and Technology, Japan); Hai Jin (Huazhong University of Science and Technology, P.R. China)
pp. 2708-2713

NGNI07: Traffic Engineering and Congestion Control

Classification of SIP Messages by a Syntax Filter and SVMs

Raihana Ferdous (University of Trento, Italy); Renato Lo Cigno (University of Trento, Italy); Alessandro Zorat (University of Trento, Italy)
pp. 2714-2719

Proposal of New Steiner Tree Algorithm Applied to P2MP Traffic Engineering

Hiroshi Matsuura (NTT & Network Technology Laboratories, Japan)
pp. 2720-2726

Progressive Caching in CCN

Jason Min Wang (The Hong Kong University of Science and Technology, Hong Kong); Brahim Bensaou (The Hong Kong University of Science and Technology, Hong Kong)
pp. 2727-2732

Improving Service Availability In ERP Based Mesh Networks

Mohammad Nurujjaman (Concordia University, Canada); Samir Sebbah (Concordia University, Canada); Chadi Assi (Concordia University, Canada)
pp. 2733-2739

A Hierarchical and Multi-criteria Knowledge Dissemination In Autonomic Networks

Sami Souihi (University Paris Est UPEC, France); Said Hoceini (UPEC, University Paris-Est Creteil Val de Marne, France); Abdelhamid Mellouk (UPEC, University Paris-Est Creteil Val de Marne, France); Nadjib Aitsaadi (University of Paris-Est Creteil - UPEC, France)
pp. 2740-2745

Cooperation Incentives Based Load Balancing in UCN: A Probabilistic Approach

Mursel Yildiz (TU Berlin, Germany); Manzoor Ahmed Khan (TU Berlin, Germany); Fikret Sivrikaya (Technische Universität Berlin, Germany); Sahin Albayrak (Technische Universität Berlin, Germany)
pp. 2746-2752

NGNI08: Topics in Next Generation Networking & Internet I

Unveiling technical challenges for the governance of end-to-end service delivery and autonomic infrastructures

Kostas Tsagkaris (University of Piraeus, Greece); Panagiotis Demestichas (University of Piraeus, Greece); Gerard Nguengang (Thales Communications & Security SA, France); Imen Grida Ben Yahia (Orange Labs, France); Pierre Peloso (Alcatel-Lucent, France)
pp. 2753-2759

An open hardware implementation of CUSUM based Network Anomaly Detection

Gianni Antichi (University of Pisa, Italy); Christian Callegari (University of Pisa, Italy); Stefano Giordano (University of Pisa, Italy)
pp. 2760-2765

Performance Evaluation of Packet Classification on FPGA-based TCAM Emulation Architectures

Carlos Zerbini (National Technological University, Argentina); Jorge M Finocchietto (National University of Córdoba & CONICET, Argentina)
pp. 2766-2771

Implementing a BGP-Free ISP Core with LISP

Florin Coras (Universitat Politècnica de Catalunya (UPC), Spain); Damien Saucez (INRIA, France); Lorand Jakab (Universitat Politècnica de Catalunya, Spain); Albert Cabellos-Aparicio (Universitat Politècnica de Catalunya, Spain); Jordi Domingo-Pascual (Universitat Politècnica de Catalunya (UPC) BarcelonaTECH) & Technical University of Catalonia (UPC) Advanced Broadband Communications Center, Spain)
pp. 2772-2778

Towards the Improvement of Diagnostic Metrics Fault Diagnosis for DSL-Based IPTV Networks using the Renyi Entropy

Angelos K. Marnerides (Lancaster University, United Kingdom); Simon Malinowski (INESC Porto, France); Ricardo Morla (INESC Porto and Faculty of Engineering, University of Porto, Portugal); Miguel Rodrigues (University College London, United Kingdom); Hyong Kim (Carnegie Mellon University, USA)
pp. 2779-2784

Energy Efficient Multi-Topology Routing Configurations for Fast Failure Reroute in IP Networks

Steven S. W. Lee (National Chung Cheng University, Taiwan); Kuang-Yi Li (National Chung Cheng University, Taiwan); Alice Chen (ITRI, Taiwan)
pp. 2785-2790

NGNI09: Routing

On Energy Efficient Routing Using Cooperative Physical Layer Network Coding

Auon Muhammad Akhtar (King's College London, United Kingdom); Mohammad Reza Nakhai (King's College London, United Kingdom); Hamid Aghvami (King's College London, United Kingdom)
pp. 2791-2796

Stateless Multi-Stage Dissemination of Information: Source Routing Revisited

János Tapolcai (Budapest University of Technology and Economics, Hungary); András Gulyás (Budapest University of Technology and Economics, Hungary); Zalan Heszberger (Budapest University of Technology and Economics, Hungary); József Biro (Budapest University of Technology and Economics, Hungary); Péter Babarczi (Budapest University of Technology and Economics, Hungary); Dirk Trossen (University of Cambridge, United Kingdom)
pp. 2797-2802

QoS-aware Multi-Plane Routing for Future IP-based Access Networks

Alexandre Jaron (King's College London, United Kingdom); Matthieu Danel (King's College London, United Kingdom); Paul Faucheuix (King's College London, United Kingdom); Andrej Mihailovic (King's College London, United Kingdom); Hamid Aghvami (King's College London, United Kingdom)
pp. 2803-2808

Delay Constrained Multicast Routing: What can we learn from an exact approach?

Gang Feng (University of Wisconsin, Platteville, USA)
pp. 2809-2814

A Two-layer Intra-domain Routing Scheme for Named Data Networking

Huichen Dai (Tsinghua University, P.R. China); Jianyuan Lu (Tsinghua University, P.R. China); Yi Wang (Tsinghua University, P.R. China); Bin Liu (Tsinghua University, P.R. China)
pp. 2815-2820

Depth-First Worst-Fit Search based Multipath Routing for Data Center Networks

Tosmate Cheochernngarn (Florida International University, USA); Hao Jin (Florida International University, USA); Jean Andrian (Florida International University, USA); Deng Pan (Florida International University, USA); Jason Liu (Florida International University, USA)
pp. 2821-2826

NGNI10: Topics in Next Generation Networking & Internet II

IBTrack: An ICMP Black holes Tracker

Ludovic Jacquin (INRIA, France); Vincent Roca (INRIA Rhône-Alpes, France); Mohamed Ali Kaafar (Inria France & National ICT Australia, France); Fabrice Schuler (INRIA, France); Jean-Louis Roch (University of Grenoble, France)
pp. 2827-2833

Influence Maximization in Noncooperative Social Networks

Yile Yang (University of Hong Kong, Hong Kong); Victor O. K. Li (University of Hong Kong, P.R. China); Kuang Xu (The University of Hong Kong, P.R. China)
pp. 2834-2839

Evaluation of the socio-economic implications of contractual mobility in roaming architectures

Gabriele Corliano (BT, United Kingdom); Christopher Edwards (Lancaster University, United Kingdom); Nicholas Race (Lancaster University, United Kingdom)
pp. 2840-2845

Automatic Originator Regulation of IMS Multiple Traffic by Stateless Signaling Prioritization

Wei Zhu (The University of Tokyo, Japan); Ahmad Kamil Abdul Hamid (The University of Tokyo & Telekom Malaysia Berhad, Japan); Yoshihiro Kawahara (The University of Tokyo, Japan); Tohru Asami (The University of Tokyo, Japan); Yoshitoshi Murata (Iwate Prefectural University, Japan)
pp. 2846-2851

Neighborhood Search and Admission Control in Cooperative Caching Networks

Walter Wong (State University of Campinas, Brazil); Liang Wang (University of Helsinki, Finland); Jussi Kangasharju (University of Helsinki, Finland)
pp. 2852-2858

Performance evaluation of security routing strategies to avoid DoS attacks in WSN

Lynda Mokdad (Université de Paris 12 & Laboratoire LACL, France); Jalel Ben-Othman (University of Paris 13, France)
pp. 2859-2863

GC12 ONS: Globecom 2012 - Optical Networks and Systems Symposium - Program

ONS01: Physical Layer Issues & Technologies

Error Rate Analysis of Subcarrier Intensity Modulation Using Rectangular QAM in Gamma-Gamma Turbulence

Md. Zoheb Hassan (School of Engineering, University of British Columbia, Canada); Xuegui Song (University of British Columbia, Canada); Julian Cheng (University of British Columbia, Canada)
pp. 2864-2869

Constellation Optimization for Coherent Optical Channels Distorted by Nonlinear Phase Noise

Christian Häger (Chalmers University of Technology, Sweden); Alexandre Graell i Amat (Chalmers University of Technology, Sweden); Alex Alvarado (University of Cambridge, United Kingdom); Erik Agrell (Chalmers University of Technology, Sweden)
pp. 2870-2875

Experimenting Push-Pull Defragmentation in Flexible Optical Networks with Direct Detection

Filippo Cugini (CNIT, Italy); Francesco Paolucci (Scuola Superiore Sant'Anna, Italy); Gianluca Berrettini (Scuola Superiore Sant'Anna, Italy); Marco Secondini (Scuola Superiore Sant'Anna, Italy); Francesco Fresi (Scuola Superiore Sant'Anna, Italy); Gianluca Meloni (Scuola Superiore Sant'Anna CEIICP, Italy); Nicola Sambo (Scuola Superiore Sant'Anna, Italy); Luca Potì (Consorzio Nazionale Interuniversitario per le Telecomunicazioni, Italy); Piero Castoldi (Scuola Superiore Sant'Anna, Italy)
pp. 2876-2881

Contention Resolution Using Parametric Wavelength Converters: Performance and Cost Analysis

Michele Savi (Norwegian University of Science and Technology, Norway); Harald Øverby (Norwegian University of Science and Technology, Norway); Norvald Stol (Norwegian University of Science and Technology, Norway); Carla Raffaelli (University of Bologna, Italy)
pp. 2882-2888

Cross-Layer Enabled Translucent Optical Network with Real-time Impairment Awareness

Oscar Pedrola (Universitat Politècnica de Catalunya, Spain); Balagangadhar G Bathula (AT&T Labs - Research, USA); Michael Wang (Columbia University, USA); Atiyah Ahsan (Columbia University, USA); Davide Careglio (Universitat Politecnica de Catalunya, Spain); Keren Bergman (Columbia University, USA)
pp. 2889-2895

Spectrum-Efficient Coherent Optical Zero Padding OFDM for Future High-Speed Transport Networks

Linglong Dai (Tsinghua University, P.R. China); Zhaocheng Wang (Tsinghua University, P.R. China)
pp. 2896-2900

ONS03: Optical Spectrum Management

Spectrum and Waveband Assignment in Elastic Optical Waveband Networks

Saket Varma (University of Texas at Dallas, USA); Jason P. Jue (University of Texas at Dallas, USA)
pp. 2901-2906

Spectrum Management in Heterogeneous Bandwidth Networks

Rui Wang (University of California, Davis, USA); Biswanath Mukherjee (- University of California Davis, USA)
pp. 2907-2911

Dynamic RMSA in Elastic Optical Networks with an Adaptive Genetic Algorithm

Xiang Zhou (University of Science and Technology of China, P.R. China); Wei Lu (University of Science and Technology of China, P.R. China); Long Gong (University of Science and Technology of China, P.R. China); Zuqing Zhu (University of Science and Technology of China, P.R. China)
pp. 2912-2917

Optimal Relocation of Excess Capacity in Optical WDM Backbone Networks

Ferhat Dikbiyik (U. C. Davis, USA); Massimo Tornatore (Politecnico di Milano & University of California, Davis, Italy); Biswanath Mukherjee (- University of California Davis, USA)
pp. 2918-2923

Distributed Management of Energy-Efficient Lightpaths for Computational Grids

Daniele Tafani (Dublin City University, Ireland); Burak Kantarci (University of Ottawa & School of Electrical Engineering and Computer Science, Canada); Hussein T Mouftah (University of Ottawa, Canada); Conor J McArdle (Dublin City University, Ireland); Liam Barry (Dublin City University, Ireland)
pp. 2924-2929

ONS02: Wireless Optical Communications and Networks***Multilevel Pulse-Position Modulation Based on Balanced Incomplete Block Designs***

Mohammad Noshad (University of Virginia, USA); Maite Brandt-Pearce (University of Virginia, USA)
pp. 2930-2935

Alamouti-Type STBC for Subcarrier Intensity Modulated Wireless Optical Communications

Xuegui Song (University of British Columbia, Canada); Julian Cheng (University of British Columbia, Canada)
pp. 2936-2940

Hybrid FSO/RF Symbol Mappings: Merging High Speed FSO with Low Speed RF through BICM-ID

Kuldeep Kumar (New Mexico State University, USA); Deva K. Borah (New Mexico State University, USA)
pp. 2941-2946

Improving Hybrid FSO/RF Network Reliability Through Transceiver Reconfiguration

Farshad Ahdi (George Washington University, USA); Suresh Subramaniam (The George Washington University, USA)
pp. 2947-2952

Throughput Maximization Approach for O-MIMO Systems using MGDM Technique

Mazen Awad (Concordia University, Canada); Walaa Hamouda (Concordia University, Canada);
Iyad Dayoub (University Lille Nord de France IEMN-DOAE CNRS UMR 8520 UVHC & Concordia University Montreal, France)
pp. 2953-2958

Theoretical and Experimental Design of an Alternative System to 2x2 MIMO for LTE over 60 km Directly Modulated RoF Link

Thavamaran Kanesan (University of Northumbria, United Kingdom); Wai Pang Ng (Northumbria University, United Kingdom); Zabih Ghassemlooy (Northumbria University, United Kingdom); Chao Lu (The Hong Kong Polytechnic University, Hong Kong)
pp. 2959-2964

P-ONS05: Miscelaneous Topics in Optical Networks & Systems***Batch Scheduling in Optical Networks with Feedback/Feed-forward Fiber Delay Lines***

Yang Wang (Georgia State University, USA); Xiaojun Cao (Georgia State University, USA); Adrian Caciula (Georgia State University, USA); Qian Hu (Georgia State University, USA)
pp. 2965-2970

Wavelength Management in Time and Wavelength Division Multiplexed Passive Optical Networks (TWDM-PONs)

Yuanqiu Luo (Huawei Technologies USA, USA); Meng Sui (Huawei, USA); Frank Effenberger (HUAWEI, United Kingdom)
pp. 2971-2976

A p-Center Optimization Scheme for the Design and Dimensioning of a Set of WDM PONs

Rejaul Chowdhury (Concordia University, Canada); Brigitte Jaumard (Concordia University, Canada)

pp. 2977-2983

Combined Constrained Code and LDPC Code for Long-Haul Fiber-Optic Communication Systems

Houbing Song (West Virginia University Institute of Technology, USA); Maite Brandt-Pearce (University of Virginia, USA); Tingjun Xie (University of Virginia, USA); Stephen G. Wilson (University of Virginia, USA)

pp. 2984-2989

ONS04: Grooming, RWA, Dimensioning, and Survivability

A Fast Path-Based ILP Formulation for Offline RWA in Mesh Optical Networks

Zeyu Liu (North Carolina State University, USA); George N. Rouskas (North Carolina State University, USA)

pp. 2990-2995

Dynamic Grooming and RWA in Translucent Optical Networks Using a Time-Slotted ILP

Xu Wang (University of Virginia, USA); Maite Brandt-Pearce (University of Virginia, USA); Suresh Subramaniam (The George Washington University, USA)

pp. 2996-3001

Dimensioning Optical WDM Backbone Networks with Mixed Line Rates

Chaitanya S. K. Vadrevu (University of California, Davis, USA); Avishek Nag (University of California Davis, USA); Charles Martel (University of California, Davis, USA); Biswanath Mukherjee (- University of California Davis, USA)

pp. 3002-3006

Dynamic Advance Reservation Multicast Overlay for Slotted Optical WDM Networks

Tim Entel (University of Massachusetts Dartmouth, USA); Arush G Gadkar (University of Massachusetts, Dartmouth, USA); Vinod M. Vokkarane (University of Massachusetts Dartmouth / Massachusetts Institute of Technology (MIT), USA)

pp. 3007-3012

Survivable Inter-Domain Routing Based on Topology Aggregation with Disjointness Information in Multi-Domain Optical Networks

Chengyi Gao (University of Texas at Dallas, USA); Hakki Candan Cankaya (Fujitsu Network Communications & Southern Methodist University, USA); Jason P. Jue (University of Texas at Dallas, USA)

pp. 3013-3018

A Distributed p-Cycle Protection Scheme in Multi-Domain Optical Networks

Brigitte Jaumard (Concordia University, Canada); Kien Do Trung (Universite de Montreal, Canada); Michel Toulouse (Oklahoma State University, USA)

pp. 3019-3025

GC12 SAC: Globecom 2012 - Symposium on Selected Areas in Communications - Program

SAC-GNCS1: Green Systems, Designs and Applications

Risk-aware Day-ahead Scheduling and Real-time Dispatch for Plug-in Electric Vehicles

Lei Yang (Arizona State University, USA); Junshan Zhang (Arizona State University, USA); Dajun Qian (Arizona State University, USA)
pp. 3026-3031

Dynamic Energy-Efficient Resource Allocation in Cognitive Heterogeneous Wireless Networks with the Smart Grid

Shengrong Bu (Carleton University, Canada); F. Richard Yu (Carleton University, Canada)
pp. 3032-3036

Green Firewall: an Energy-Efficient Intrusion Prevention Mechanism in Wireless Sensor Network

Ping Yi (Shanghai Jiao Tong University, P.R. China); Ting Zhu (State University of New York at Binghamton, USA); Qingquan Zhang (University of Minnesota, USA); Yue Wu (Shanghai Jiaotong University, P.R. China); Jianhua Li (Shanghai Jiao Tong University, P.R. China)
pp. 3037-3042

N-player Medium Access Game for Wireless Data Dissemination

Angelos Antonopoulos (Telecommunications Technological Centre of Catalonia (CTTC), Spain); Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)
pp. 3043-3048

Energy-Aware Planning and Management of Wireless Mesh Networks

Silvia Boiardi (Politecnico di Milano, Italy); Antonio Capone (Politecnico di Milano, Italy); Brunilde Sansò (Ecole Polytechnique de Montreal, Canada)
pp. 3049-3055

An Efficient Energy Curtailment Scheme For Outage Management in Smart Grid

Wayes Tushar (Australian National University, Australia); Jian (Andrew) Zhang (CSIRO ICT Centre, Australia); David B Smith (National ICT Australia, Australia); H. Vincent Poor (Princeton University, USA); Glenn Platt (CSIRO Energy Technology, Australia); Salman Durrani (The Australian National University, Australia)
pp. 3056-3061

SAC-GNCS2: Green Hardware and Chip Designs

Measuring and modeling Energy Consumption to design a Green NetFPGA Giga-Router

Alfio Lombardo (University of Catania, Italy); Carla Panarello (DIEEI - University of Catania, Italy); Diego Reforgiato (University of Catania, Italy); Giovanni Schembra (University of Catania, Italy)
pp. 3062-3067

Designing Optimal Energy Profiles for Network Hardware

Raffaele Bolla (University of Genoa, Italy); Roberto Bruschi (CNIT, Italy); Franco R. Davoli (University of Genoa & National Inter-University Consortium for Telecommunications (CNIT), Italy)
pp. 3068-3073

Potential on energy saving in a modular base station

Wieslawa Wajda (Research, Germany)
pp. 3074-3079

Exploiting Space Diversity and Dynamic Voltage Frequency Scaling in Multiplane Network-on-Chips

Andrea Bianco (Politecnico di Torino, Italy); Paolo Giaccone (Politecnico di Torino, Italy); Mario Roberto Casu (Politecnico di Torino, Italy); Nanfang Li (Politecnico di Torino, Italy)
pp. 3080-3085

SAC ASN1: DSL, RoF & Misc.

DSL, Radio Over Fiber and Other topics.

On the Achievable Bit Rates of DSL Vectoring Techniques in the Presence of Alien Crosstalkers

Amir R. Forouzan (University of Isfahan, Iran); Marc Moonen (Katholieke Universiteit Leuven, Belgium); Michael Timmers (Alcatel-Lucent Bell Labs, Belgium); Mamoun Guenach (Bell Laboratories, Alcatel-Lucent, Antwerp, Belgium); Jochen Maes (Alcatel-Lucent Bell Labs, Belgium)
pp. 3086-3091

Interference Alignment for DSL

Sean Huberman (McGill University, Canada); Tho Le-Ngoc (McGill University, Canada)
pp. 3092-3097

Study of Complex-Envelope Behavioral Models for Radio-over-Fiber Link Nonlinearities

Luis C. Vieira (University of Kent, United Kingdom); Nathan J Gomes (University of Kent, United Kingdom); Anthony Nkansah (University of Kent, United Kingdom); Frédéric Van Dijk (Alcatel Thales III-V Lab, France)
pp. 3098-3103

Development and Implementation of a Feature-Based Automatic Classification Algorithm for Communication Standards in the 868 MHz Band

Matthias Kuba (Fraunhofer Institute for Integrated Circuits IIS, Germany); Karlheinz Ronge (Fraunhofer IIS, Germany); Robert Weigel (University of Erlangen-Nuremberg, Germany)
pp. 3104-3109

Expert System based on Wavelets and DELT Measurements for VDSL System

Claudomiro Jr. (Federal University of Para, Brazil); Vinicius Lima (UFPA, Brazil); Joao Crisostomo Weyl Costa (UFPA, Brazil); Aldebaro Klautau (Universidade Federal do Para, Brazil); Roberto Menezes Rodrigues (Federal University of Para, Brazil); Klas Ericsson (Ericsson AB, Sweden); Gustavo Ikeda (UFPA, Brazil)
pp. 3110-3115

SAC-GNCS3: Green Wireline Communications

Analysis of ONT Buffer and Power Management Performances for XG-PON Cyclic Sleep Mode

Hakjeon Bang (Gwangju Institute of Science and Technology (GIST), Korea); Jongdeog Kim (Gwangju Institute of Science and Technology (GIST), Korea); Youngjun Shin (Gwangju Institute of Science and Technology, Korea); Chang-Soo Park (Gwangju Institute of Science and Technology, Singapore)
pp. 3116-3121

How to Slice the Day: Optimal Time Quantization for Energy Saving in the Internet Backbone Networks

Marcel Caria (Technische Universität Carolo-Wilhelmina zu Braunschweig, Germany); Anna Engelmann (Technische Universität Carolo-Wilhelmina zu Braunschweig, Germany); Admela Jukan (Technische Universität Carolo-Wilhelmina zu Braunschweig, Germany); Beate H. Konrad (Nokia Siemens Networks, Germany)
pp. 3122-3127

Energy Efficient DSL via Heterogeneous Sleeping States: Optimization Structures and Operation Guidelines

Ioannis Kamitsos (Princeton University, USA); Paschalis Tsiaflakis (Katholieke Universiteit Leuven, Belgium); Kenneth Kerpez (ASSIA Inc, USA); Sangtae Ha (Princeton University, USA); Mung Chiang (Princeton University, USA)
pp. 3128-3134

Power Saving Protocol for 10G- EPON Systems: A Proposal and Performance Evaluations

Nga Dinh (Bell Labs Seoul, Korea); Anwar Walid (Bell-labs, Alcatel Lucent, USA)
pp. 3135-3140

SAC-PL 1: Power Line Communications and Smart Grid I

Decentralized Power System State Estimation

Vassilis Kekatos (University of Minnesota & University of Patras, USA); Georgios B. Giannakis (University of Minnesota, USA)
pp. 3141-3146

Attack Against Electricity Market-Attacker and Defender Gaming

Mohammad Esmalifalak (University of Houston, USA); Ge Shi (Peking University, P.R. China); Zhu Han (University of Houston, USA); Lingyang Song (Peking University, P.R. China)
pp. 3147-3152

False Data Injection Attacks with Incomplete Information Against Smart Power Grids

Md Ashfaqur Rahman (Texas Tech University, USA); Hamed Mohsenian-Rad (University of California at Riverside, USA)
pp. 3153-3158

Tackling Co-existence and Fairness Challenges in Autonomous Demand Side Management

Zahra Baharlouei (Isfahan University of Technology, Iran); Hamed Narimani (Isfahan University of Technology, Iran); Hamed Mohsenian-Rad (University of California at Riverside, USA)
pp. 3159-3164

Lightweight Powerline Communications for Smart Grid applications with standard RFID tags

Joerg Huettner (Siemens AG, Germany); Fabian Kurz (Siemens AG, Germany); Gerhard Metz (Siemens AG, Germany); Andreas Ziroff (Siemens, Germany)
pp. 3165-3170

SAC-GNCS4: Analysis for Green Wireless Communications

Traffic-Aware Power Adaptation and Base Station Sleep Control for Energy-Delay Tradeoffs in Green Cellular Networks

Jian Wu (University of Tsinghua, P.R. China); Yiqun Wu (Huawei, P.R. China); Sheng Zhou (Tsinghua University, P.R. China); Zhisheng Niu (Tsinghua University, P.R. China)
pp. 3171-3176

Energy Consumption Analysis of Wireless Networks using Stochastic Deployment Models

Vinay Suryaprakash (Technische Universität Dresden & Vodafone Chair Mobile Communication Systems, Germany); André Fonseca dos Santos (Bell Labs, Alcatel-Lucent, Germany); Albrecht J Fehske (Technische Universität Dresden, Germany); Gerhard Fettweis (Technische Universität Dresden, Germany)
pp. 3177-3182

Energy Efficiency Analysis of a Cooperative Scheme for Wireless Local Area Networks

Tatjana Predojev (Centre Tecnològic de Telecommunications de Catalunya (CTTC), Spain); Jesus Alonso-Zarate (Centre Tecnologic de Telecomunicacions de Catalunya - CTTC, Spain); Luis Alonso (Universidad Politecnica de Catalunya, Spain); Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)
pp. 3183-3188

Energy Efficiency and Deployment 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)
pp. 3189-3194

Analysis of Spectral Efficiency and Energy Efficiency Interrelationship in Cellular Networks with Outage Constraint

Jaya B Rao (University of Calgary, Canada); Abraham O Fapojuwo (University of Calgary, Canada)
pp. 3195-3200

SAC-DS01: Coding and Signal Processing for Data Storage

Numerical Issues Affecting LDPC Error Floors

Brian K Butler (University of California, San Diego, USA); Paul H. Siegel (University of California, San Diego, USA)
pp. 3201-3207

On the Soft Information Extraction from Hard-Decision Outputs in MLC NAND Flash Memory

Daesung Kim (KAIST, Korea); Jinho Choi (Swansea University, United Kingdom); Jeongseok Ha (KAIST, Korea)
pp. 3208-3213

Write-Margin Improvement of Non-Binary LDPC Coding and Iterative Decoding System in BPM R/W Channel with Write-Errors

Yasuaki Nakamura (Ehime University, Japan); Yoshihiro Okamoto (Ehime University, Japan); Hisashi Osawa (Ehime University, Japan); Hajime Aoi (Tohoku University, Japan); Hiroaki Muraoka (Tohoku University, Japan)
pp. 3214-3218

Towards minimizing read time for NAND Flash

Borja Peleato (Stanford University, USA); Rajiv Agarwal (Stanford University, USA); John Cioffi (Stanford University, USA); Minghai Qin (University of California, San Diego & Center for Magnetic Recording Research, USA); Paul H. Siegel (University of California, San Diego, USA)
pp. 3219-3224

WOM Codes Reduce Write Amplification in NAND Flash Memory

Xiang Luojie (Purdue University at West Lafayette, P.R. China); Brian Michael Kurkoski (Japan Advanced Institute of Science and Technology (JAIST), Japan); Eitan Yaakobi (Caltech, USA)
pp. 3225-3230

Two-Dimensional Cyclic Codes Correcting Known Error Patterns

Sung Whan Yoon (Korea Advanced Institute of Science and Technology, Korea); Jaekyun Moon (KAIST, Korea)
pp. 3231-3236

SAC-GNCS5: Green Data Centers and Cloud Computing

A Survey of Research on Greening Data Centers

Derya Çavdar (Boğaziçi University, Turkey); Fatih Alagoz (Bogazici University, Turkey)
pp. 3237-3242

Energy-aware Virtual Machine Placement in Data Centers

Daochao Huang (Beijing Jiaotong University, P.R. China); Dong Yang (Beijing Jiaotong University, P.R. China); Lei Wu (IBM China Development Laboratory, Beijing, P.R. China); Hongke Zhang (Beijing University of Posts and Telecommunications, P.R. China)
pp. 3243-3249

The Impact of Time of Use (ToU)-Awareness in Energy and Opex Performance of a Cloud Backbone

Burak Kantarci (University of Ottawa & School of Electrical Engineering and Computer Science, Canada); Hussein T Mouftah (University of Ottawa, Canada)
pp. 3250-3255

Energy Optimizations for Data Center Network: Formulation and its Solution

Shuo Fang (Nanyang Technological University, Singapore); Hui Li (Nanyang Technological University, Singapore); Chuan Heng Foh (Nanyang Technological University, Singapore); Yonggang Wen (Nanyang Technological University, Singapore); Khin Mi Mi Aung (A*STAR, Data Storage Institute, Singapore)
pp. 3256-3261

Unveiling the Resource Consumption Overhead of Virtual Machine Consolidation in Data Centers

Mingfu Li (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Wei Liang (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Jingping Bi

(Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Zhongcheng Li
(Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)
pp. 3262-3267

SAC-GNCS6: Physical Layer Designs for Green Communications

Peak Power Reduction of SC-FDMA Signals Based on Trellis Shaping

Taewoo Lee (Yokohama National University, Japan); Hideki Ochiai (Yokohama National University, Japan)
pp. 3268-3273

Tradeoff of Spectral and Energy Efficiencies: Impact of Power Amplifier on OFDM Systems

Jingon Joung (Institute for Infocomm Research, Singapore); Chin Keong Ho (Institute for Infocomm Research, A*STAR, Singapore); Sumei Sun (Institute for Infocomm Research, Singapore)
pp. 3274-3279

A Stackelberg Approach for Energy Efficient Multicarrier Systems

Yezekael Hayel (LIA, University of Avignon, France); Majed Haddad (INRIA, France)
pp. 3280-3285

Choosing "green" codes by simulation-based modeling of implementations

Karthik Ganesan (University of California - Berkeley, USA); Yang Wen (UC Berkeley, USA); Pulkit Grover (Carnegie Mellon University, USA); Andrea Goldsmith (Stanford University, USA); Jan Rabaeij (UC Berkeley, USA)
pp. 3286-3292

On Energy Efficient Transceivers Equipped with a Compact Antenna Array

Jinhui Chen (Alcatel-Lucent Shanghai Bell, P.R. China); Jinsong Wu (Bell Laboratories & Alcatel-Lucent, P.R. China)
pp. 3293-3298

SAC-SSC01: Satellite & Space Networking

Advanced Transport Satellite Protocol

Muhammad Muhammad (German Aerospace Center (DLR), Germany); Firat Kasmis (DLR, Germany); Tomaso De Cola (German Aerospace Center (DLR), Germany)
pp. 3299-3304

Sliding Window-Based Contention Resolution Diversity Slotted ALOHA

Alessio Meloni (University of Cagliari, Italy); Maurizio Murroni (University of Cagliari, Italy); Christian Kissling (German Aerospace Center (DLR), Germany); Matteo Berioli (German Aerospace Center (DLR), Germany)
pp. 3305-3310

Capacity Bound of MOP-based Allocation with Packet Loss and Power Metrics in Satellite Communications Systems

Igor Bisio (University of Genoa, Italy); Stefano Delucchi (University of Genoa, Italy); Fabio Lavagetto (University of Genoa, Italy); Mario Marchese (DIST- University of Genoa, Italy)
pp. 3311-3316

Energy Efficient CPM Waveforms for Satellite Mesh Networks

Rosalba Suffritti (Mavigex, Italy); Francesco Lombardo (University of Bologna, Italy); Amina Piemontese (University of Parma, Italy); Alessandro Vanelli-Coralli (University of Bologna, Italy); Enzo Alberto Candreva (University of Bologna, Italy); Giulio Colavolpe (University of Parma, Italy); Riccardo Baroni (University of Bologna, Italy); Stefano Andrenacci (University of Bologna, Italy); Giovanni Emanuele Corazza (University of Bologna, Italy); Nader Alagha (European Space Agency, The Netherlands)
pp. 3317-3321

Impact of Scheduling in the Return-Link of Multi-Beam Satellite MIMO Systems

Vincent Boussemaert (German Aerospace Center (DLR), Germany); Loris Marini (German Aerospace Centre, Germany); Matteo Berioli (German Aerospace Center (DLR), Germany)
pp. 3322-3327

SAC ASN2: System, Architectures & Algorithms

System Issues, Network Architectures & Algorithms

State Aware Enhancement in DCCP for Multimedia Handovers

Zawar Shah (School of Electrical Engineering and Computer Science (SEECS), NUST, Pakistan); Adeel Baig (National University of Sciences and Technology, Pakistan); Hira Samir (School of Electrical Engineering and Computer Science, Pakistan); Imdad Ullah (School of Electrical Engineering and Computer Science (SEECS), NUST, Pakistan)
pp. 3328-3333

Data Traffic Scheduling for Cyber Physical Systems with Application in Voltage Control of Microgrids

Husheng Li (University of Tennessee, USA)
pp. 3334-3339

Analog Bloom Filter: Efficient Simultaneous Query for Wireless Networks

Zhenghao Zhang (Florida State University, USA)
pp. 3340-3346

A Two Phase Hybrid RSS/AoA Algorithm for Indoor Device Localization using Visible Light

Gregory B Prince (Boston University & NSF Smart Lighting ERC, USA); Thomas DC Little (Boston University & NSF Smart Lighting ERC, USA)
pp. 3347-3352

CacheQuery: A Practical Asymmetric Communication Algorithm

Yu-Sian Li (National Tsing Hua University, Taiwan); Trang Minh Cao (Universitat Pompeu Fabra, Spain); Xin Huang (Deutsche Telekom R&D Lab USA, USA); Cheng-Hsin Hsu (National Tsing Hua University, Taiwan); Po-Ching Lin (National Chung Cheng University, Taiwan)
pp. 3353-3359

VoIP over Realistic IEEE 802.16e System Scenarios: The Uplink Direction

Doru Calin (Bell Labs, Alcatel-Lucent, USA)
pp. 3360-3364

SAC-GNCS7: Green Cognitive Radio and Energy harvesting

Training Optimization for Energy Harvesting Communication Systems

Yaming Luo (HKUST, Hong Kong); Jun Zhang (The Hong Kong University of Science and Technology, Hong Kong); Khaled Letaief (The Hong Kong University of Science and Technology, Hong Kong)
pp. 3365-3370

Cross-layer Dynamic Rate Adaptations for Green Cognitive Radio Networks

Ashok K Karmokar (Ryerson University, Canada); Alagan Anpalagan (Ryerson University, Canada)
pp. 3371-3376

Low Complexity Energy Efficient Power Allocation for Green Cognitive Radio with Rate Constraints

Kandasamy Illango (Ryerson University, Canada); Muhammad Naeem (Ryerson University, Canada); Alagan Anpalagan (Ryerson University, Canada); Dimitri Androulacos (Ryerson University, Canada)
pp. 3377-3382

On The Reduction of Power Loss Caused by Imperfect Spectrum Sensing in OFDMA-Based Cognitive Radio Access

Saud Althunibat (University of Trento, Italy); Fabrizio Granelli (University of Trento, Italy)
pp. 3383-3387

Transmit Power Control with ARQ in Energy Harvesting Sensors: A Decision-Theoretic Approach

Anup Aprem (Indian Institute of Science, India); Chandra R Murthy (Indian Institute of Science, India); Neelesh B. Mehta (Indian Institute of Science, India)
pp. 3388-3393

Modeling the Residual Energy and Lifetime of Energy Harvesting Sensor Nodes

M. Yousof Naderi (Northeastern University, USA); Stefano Basagni (Northeastern University, USA); Kaushik Chowdhury (Northeastern University, USA)
pp. 3394-3400

SAC-SSC02: Satellite & Space Communications

Constellation Design for Transmission over Nonlinear Satellite Channels

Farbod Kayhan (Politecnico di Torino, Italy); Guido Montorsi (Politecnico di Torino, Italy)
pp. 3401-3406

Autologous Spectrum Regeneration Optimization on Sub-spectrum Suppressed Transmission for Single-Carrier Satellite Modem

Jun Mashino (NTT, Japan); Jun-ichi Abe (Nippon Telegraph and Telephone Corporation, Japan); Takatoshi Sugiyama (NTT, Japan)
pp. 3407-3412

Multi-Carrier-Code-Shift-Keying Modulation

Clement Dusal (University of Toulouse & IRIT, TéSA, Thales Alenia Space, France); Nathalie Thomas (University of Toulouse, France); Mathieu Dervin (Thales Alenia Space, France); Marie-Laure Boucheret (University of Toulouse IRIT Enseeiht, France); Marco Lops (University of Cassino, Italy)
pp. 3413-3418

Spectrum Sensing in Dual Polarized Fading Channels for Cognitive SatComs

Shree Krishna Sharma (University of Luxembourg, Luxembourg); Symeon Chatzinotas (University of Luxembourg, Luxembourg); Björn Ottersten (KTH Royal Institute of Technology, Sweden)
pp. 3419-3424

Multi-Gateway Interference Cancellation techniques for the Return Link of Multi-Beam Broadband Satellite Systems

Francesco Lombardo (University of Bologna, Italy); Alessandro Vanelli-Coralli (University of Bologna, Italy); Enzo Alberto Candreva (University of Bologna, Italy); Giovanni Emanuele Corazza (University of Bologna, Italy)
pp. 3425-3430

Operator Calculus Approach to Minimal Paths: Precomputed routing in a Store and Forward Satellite Constellation

Hugo Cruz-Sanchez (INRIA-LORIA & ESOME, France); George Stacey Staples (Southern Illinois University Edwardsville, USA); Rene Schott (LORIA-Nancy University, France); YeQiong Song (LORIA - Nancy University - INPL, France)
pp. 3431-3436

SAC ASN3: Energy Efficiency in Access Networks

Energy-Efficient Uplink Multi-User MIMO with Dynamic Antenna Management

Guowang Miao (KTH, Royal Institute of Technology & Department of Communications Systems, USA)
pp. 3437-3442

Dynamic and Static Base Station Management Schemes for Cellular Networks

Stefanos Kokkinogenis (University of Western Macedonia, Greece); George Koutitas (University of Thessaly, Greece)
pp. 3443-3448

Achievable Energy Efficiency in Cooperative Transmission System with Frequency-Selective Power Allocation

Chen Xin (Beijing University of Posts and Telecommunications, P.R. China); Xiaodong Xu (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, P.R. China); Hongjia Li (Institute of Acoustics, Chinese Academy of Sciences & Beijing University of Posts and Telecommunications, P.R. China); Xiaofeng Tao (Beijing University of Posts and Telecommunications, P.R. China)
pp. 3449-3454

QoS-aware Sleep Mode Controller in "Energy Efficient Ethernet"

Patrizia Testa (CoRiTcL, Italy); Angelo Germoni (Co. Ri. Tel., Italy); Marco Listanti (University of Rome "La Sapienza", Italy)
pp. 3455-3459

An Intelligent Power Save Mode Mechanism for IEEE 802.11 WLAN

Haleh Tabrizi (Stanford, USA); Golnaz Farhadi (Fujitsu Laboratories of America, USA); John Cioffi (Stanford University, USA)
pp. 3460-3464

Scalability and Power Consumption of Static Optical Core Networks

Slavisa Aleksic (Vienna University of Technology, Austria); Ward Van Heddeghem (Ghent University, Belgium); Mario Pickavet (Ghent University, Belgium)
pp. 3465-3471

SAC-GNCS8: Green Cellular Wireless Communications***Energy Efficient Power Control and Beamforming in Multi-Antenna enabled Femtocells***

Kapuruhamy Badalge Shashika Manosha (Centre for Wireless Communications, Department of Communications Engineering, University of Oulu, Finland); Satya Joshi (CWC, University of Oulu, Finland); Nandana Rajatheva (University of Oulu, Finland); Matti Latva-aho (UoOulu, Finland)
pp. 3472-3477

Energy-Efficient Power Optimization for Two-Tier Femtocell Networks Using Fictitious Game

Tao Su (Beijing University of Posts and Telecommunications, P.R. China); Wei Li (Beijing University of Posts and Telecommunications, P.R. China); Wei Zheng (BUPT, P.R. China); Xiangming Wen (Beijing University of Posts and Telecommunication, P.R. China); Zhen Liu (Beijing University of Posts and Telecommunications, P.R. China)
pp. 3478-3483

A Stochastic Geometry Approach to Energy Efficiency in Relay-Assisted Cellular Networks

Na Deng (University of Science and Technology of China, P.R. China); Sihai Zhang (University of Science and Technology of China, P.R. China); Wuyang Zhou (University of Science and Technology of China, P.R. China); Jinkang Zhu (University of Science and Technology of China, P.R. China)
pp. 3484-3489

Energy Efficiency Optimization in Multi-user Cellular Systems with Radio Resource Constraints

Xiao Xiao (Tsinghua University, P.R. China); Xiaoming Tao (Tsinghua University, P.R. China); Jianhua Lu (Tsinghua University, P.R. China)
pp. 3490-3495

On the Coverage Preservation Problem in Green Cellular Networks

Chen-Yi Chang (National Taiwan University, Taiwan); Wanjiun Liao (National Taiwan University, Taiwan); Da-shan Shiu (National Taiwan University, Taiwan)
pp. 3496-3501

Dynamic Bandwidth Management for Energy Savings in Wireless Base Stations

Anton Ambrosy (Alcatel-Lucent, Bell Labs, Germany); Michael Wilhelm (Alcatel-Lucent Deutschland AG, Germany); Wieslawa Wajda (Research, Germany); Oliver Blume (Alcatel-Lucent Bell Labs, Germany)
pp. 3502-3507

SAC-PL 2: Power Line Communications and SmartGrid II***Performance of a PLC System in Impulsive Noise with Selection Combining***

Ankit Dubey (Indian Institute of Technology Delhi, India); R. K. Mallik (Indian Institute of Technology - Delhi, India); Robert Schober (University of British Columbia, Canada)
pp. 3508-3512

Stabilizing the Power Supply in Microgrid Using Sensor Selection

Xin Wang (University of Texas at Arlington, USA); Qilian Liang (University of Texas at Arlington, USA)
pp. 3513-3518

A Flocking-Based Model for DoS-Resilient Communication Routing in Smart Grid

Jin Wei (Texas A&M University, USA); Deepa Kundur (University of Toronto, Canada)
pp. 3519-3524

PLC Channel Characterization up to 300 MHz: Frequency Response and Line Impedance

Fabio Versolatto (University of Udine, Italy); Andrea M Tonello (University of Udine, Italy)
pp. 3525-3530

SAC-GNCS9: Green Communications Under Quality of Service Constraints**Energy Efficient Multiuser Scheduling: Exploiting the Loss Tolerance of the Application**

Muhammad Majid Butt (University of Luxembourg, Luxembourg); Eduard Jorswieck (Dresden University of Technology, Germany)
pp. 3531-3536

An Energy Efficient Multicast Transmission Scheme with Patching Stream Exploiting User Behavior in Wireless Networks

Yu Huang (Beijing University of Posts and Telecommunications, P.R. China); Wenbo Wang (Beijing University of Posts and Telecommunications, P.R. China); Xing Zhang (Beijing University of Posts and Telecommunications, P.R. China); Wei Yao (Beijing University of Posts and Telecommunications, P.R. China)
pp. 3537-3541

Energy-Efficient Scheduling and Energy-Delay Tradeoff in Green Hybrid Fiber-Coaxial Networks

Ping Lu (University of Science and Technology of China, P.R. China); Yabo Yuan (University of Science and Technology of China, P.R. China); Farid Farahmand (Sonoma State University, USA); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal); Zuqing Zhu (University of Science and Technology of China, P.R. China)
pp. 3542-3547

Streaming Server Management Scheme for Reducing Power Consumption

Kimihiro Mizutani (NTT Network Innovation Labs., Japan); Toru Mano (NTT Network Innovation Labs., Japan); Osamu Akashi (NTT Network Innovation Labs., Japan); Tetsuo Kawano (NTT, Japan); Hiroshi Shimizu (NICT, Japan)
pp. 3548-3553

Energy-Efficient Power Allocation for Delay-Constrained Systems

Leila Musavian (McGill University, Canada); Tho Le-Ngoc (McGill University, Canada)
pp. 3554-3559

GC12 SPC: Globecom 2012 - Signal Processing for Communications Symposium - Program

SPC01: MIMO I

Integer-Forcing Linear Receiver Design over MIMO Channels

Lili Wei (Shanghai Jiao Tong University, P.R. China); Wen Chen (Shanghai Jiao Tong University, P.R. China)
pp. 3560-3565

Error Resilient MIMO Detector for Memory-Dominated Wireless Communication Systems

Muhammad S Khairy (University of California, Irvine, USA); Chung-An Shen (National Taiwan University of Science and Technology, Taiwan); Ahmed M. Eltawil (University of California, Irvine, USA); Fadi J Kurdahi (University of California, Irvine, USA)
pp. 3566-3571

Enhanced QRD-M Algorithm for Soft-Output MIMO Detection

Tae-Kyoung Kim (POSTECH, Korea); Hyun-Myung Kim (Pohang University of Science and Technology, Korea); Gi-Hong Im (POSTECH, Korea)
pp. 3572-3576

Modeling and Performance Evaluation for Dual-Polarized Ricean MIMO Channels

Adrian Ispas (RWTH Aachen University, Germany); Xitao Gong (RWTH Aachen University, Germany); Christian Schneider (Ilmenau University of Technology, Germany); Gerd H. Ascheid (RWTH Aachen University, Germany); Reiner S. Thomä (Ilmenau University of Technology, Germany)
pp. 3577-3582

Device-to-Device (D2D) Communication in MU-MIMO Cellular Networks

James C. F. Li (NEC Laboratories China, P.R. China); Ming Lei (NEC Laboratories China, P.R. China); Feifei Gao (Tsinghua University, P.R. China)
pp. 3583-3587

Iterative Detection and Decoding Using Approximate Bayesian Theorem Based PDA Method Over MIMO Nakagami-m Fading Channels

Shaoshi Yang (University of Southampton, United Kingdom); Lajos Hanzo (University of Southampton, United Kingdom)
pp. 3588-3593

SPC02: Compressed Sensing

Compressed Sensing with Rank Deficient Dictionaries

Thomas L Hansen (Aalborg University, Denmark); Daniel H. Johansen (Aalborg University, Denmark); Peter Jørgensen (Aalborg University, Denmark); Kasper F Trillingsgaard (Aalborg University, Denmark); Thomas Arildsen (Aalborg University, Denmark); Karsten Fyhn (Aalborg University, Denmark); Torben Larsen (Aalborg University, Denmark)
pp. 3594-3599

An Energy-Efficient Cooperative Spectrum Sensing Scheme for Cognitive Radio Networks

Nan Zhao (Dalian University of Technology, P.R. China); F. Richard Yu (Carleton University, Canada); Hongjian Sun (King's College London, United Kingdom); Arumugam Nallanathan (King's College London, United Kingdom)
pp. 3600-3604

Random Circulant Orthogonal Matrix based Analog Compressed Sensing

Xianjun Yang (Beijing University of Post and Telecommunication, P.R. China); Y Jay Guo (CSIRO, Australia); Qimei Cui (Beijing University of Posts and Telecommunications, P.R. China); Xiaofeng Tao (Beijing University of Posts and Telecommunications, P.R. China); Xiaojing Huang (CSIRO ICT Centre, Australia)
pp. 3605-3609

Compressive Sensing Framework for Signal Processing in Heterogeneous Cellular Networks

Niranjan M Gowda (Indian Institute of Technology Madras, India); Arun Pachai Kannu (IIT Madras, India)
pp. 3610-3615

Likelihood-Based Spectrum Sensing of OFDM Signals in the Presence of Tx/Rx I/Q Imbalance

Ahmed ElSamadouny (University of Texas at Dallas, USA); Ahmad Abdulrahman Gomaa (University of Texas at Dallas & Erik Jonsson School of Engineering, USA); Naofal Al-Dahir (University of Texas at Dallas, USA)
pp. 3616-3621

Distributed Multiple-Access for Wireless Communications: Compressed Sensing with Multiple Antennas

Raymond Hall Yip Louie (University of Sydney, Australia); Wibowo Hardjawana (The University of Sydney, Australia); Yonghui Li (University of Sydney, Australia); Branka Vucetic (The University of Sydney, Australia)
pp. 3622-3627

SPC03: Relay

MMSE Based Greedy Eigenmode Selection for AF MIMO Relay Channels

Shenyu Song (Shanghai Jiaotong University, P.R. China); Wen Chen (Shanghai Jiao Tong University, P.R. China)
pp. 3628-3632

Segment Training Based Individual Channel Estimation for One-Way Relay Network

Shun Zhang (Xidian University, P.R. China); Feifei Gao (Tsinghua University, P.R. China); Changxin Pei (Xidian University, P.R. China); Xiandeng He (Xidian University, P.R. China)
pp. 3633-3637

Precoding Design for Cognitive Two-Way Relay Networks

Rui Wang (Shanghai Jiaotong University, P.R. China); Meixia Tao (Shanghai Jiao Tong University, P.R. China)
pp. 3638-3643

An Adaptive Receiver Design for OFDM-Based Cooperative Relay Systems Using Conjugate Transmission

Chin-Liang Wang (National Tsing Hua University, Taiwan); Po-Chung Shen (National Tsing Hua University, Taiwan); Meng-Cian Bai (National Tsing Hua University, Taiwan); Hung-Chin Wang (National Tsing Hua University, Taiwan)
pp. 3644-3648

Secure Resource Allocation for OFDMA Two-Way Relay Networks

Haijun Zhang (Beijing University of Posts and Telecommunications, P.R. China); Hong Xing (King's College London, United Kingdom); Xiaoli Chu (University of Sheffield, United Kingdom); Arumugam Nallanathan (King's College London, United Kingdom); Wei Zheng (Beijing University of Posts and Telecommunications, P.R. China); Xiangming Wen (Beijing University of Posts and Telecommunications, P.R. China)
pp. 3649-3654

SPC04: OFDM and Multicarrier Systems

Constrained Joint Bit and Power Allocation for Multicarrier Systems

Ebrahim Bedeer (Memorial University of Newfoundland, Canada); Octavia A. Dobre (Memorial University of Newfoundland, Canada); Mohamed Hossam Ahmed (Memorial University, Canada); Kareem E. Baddour (Communications Research Centre, Canada)
pp. 3655-3660

Adaptive Threshold Optimization for a Blanking Nonlinearity in OFDM Receivers

Ulrich Epple (German Aerospace Center (DLR), Germany); Michael Schnell (German Aerospace Center (DLR), Germany)
pp. 3661-3666

Symbol Merging Approach for Intercell Interference Mitigation in Wireless OFDM Systems

Enrique M Lizarraga (National University of Cordoba - CONICET, Argentina); Alexis Alfredo Dowhuszko (Aalto University, School of Science and Technology & National University of Cordoba, Finland); Victor Sauchelli (National University of Cordoba, Argentina)
pp. 3667-3672

On Max-SINR Receiver for Hexagonal Multicarrier Transmission Over Doubly Dispersive Channel

Kui Xu (Institute of Communications Engineering, PLAUST, P.R. China); Xiaochen Xia (Institute of Communications Engineering, PLAUST, P.R. China)
pp. 3673-3678

A Parallel ICI Cancellation Technique for OFDM Systems

Hen-Geul Yeh (California State University, Long Beach, USA); Kung Yao (UCLA, USA)
pp. 3679-3684

Optimal Bit and Power Loading for OFDM Systems with Average BER and Total Power Constraints

Ebrahim Bedeer (Memorial University of Newfoundland, Canada); Octavia A. Dobre (Memorial University of Newfoundland, Canada); Mohamed Hossam Ahmed (Memorial University, Canada); Kareem E. Baddour (Communications Research Centre, Canada)
pp. 3685-3689

SPC01P: Signal Processing for Communications II***Joint Optimization for MIMO AF Multiple-Relay Systems with Correlated Channel Uncertainties***

Chia-Chang (James) Hu (National Chung Cheng University, Taiwan); Yi-Shiang Chiu (National Chung Cheng University, Taiwan); Sheng-Shang Lin (National Chung Cheng University, Taiwan)
pp. 3690-3695

Baseband Characterization of Additive White Symmetric α -Stable Noise

Ahmed Mahmood (National University of Singapore, Singapore); Mandar Chitre (National University of Singapore, Singapore); Marc Armand (National University of Singapore, Singapore)
pp. 3696-3701

Green Data Transmission in Power Line Communications

Hongjian Sun (King's College London, United Kingdom); Arumugam Nallanathan (King's College London, United Kingdom); Nan Zhao (Dalian University of Technology, P.R. China); Chengxiang Wang (Heriot-Watt University, United Kingdom)
pp. 3702-3706

A Non-Uniform Sampling ADC Architecture with Embedded Alias-Free Asynchronous Filter

Dylan Hand (University of Southern California, USA); Mike Shuo-Wei Chen (University of Southern California, USA)
pp. 3707-3712

Optimal Power Allocation for Active and Passive Localization

Yuan Shen (Massachusetts Institute of Technology, USA); Wenhan Dai (Massachusetts Institute of Technology, USA); Moe Win (Massachusetts Institute of Technology, USA)
pp. 3713-3718

Correlation-based Cell Search and Measurement for LTE and LTE-A

Wen Xu (Intel & Intel Mobile Communications, Germany); Xiaojun Ma (Intel, Germany)
pp. 3719-3724

Channel Estimation in Underwater Cooperative OFDM System with Amplify-and-Forward Relaying

Habib Şenol (Kadir Has University, Turkey); Erdal Panayırçı (Kadir Has University, Turkey); Mustafa Erdoğan (Kadir Has University, Turkey); Murat Uysal (Ozyegin University, Turkey)
pp. 3725-3730

SPC05: Coding and Decoding

Complexity Reduction of Blind Decoding Schemes Using CRC Splitting

Jonas Eriksson (Ericsson AB, Sweden); Reza Moosavi (Linkoping University, Sweden); Erik G. Larsson (Linköping University, Sweden)
pp. 3731-3736

Near-Optimal Turbo Decoding in Presence of SNR Estimation Error

Mostafa El-Khamy (Samsung Information Systems America, USA); Jinhong Wu (Samsung Information Systems America, USA); Jungwon Lee (Samsung US R&D Center, USA); Hee-Jin Roh (Samsung Electronics Co., Ltd., Korea); Inyup Kang (Samsung Electronics, USA)
pp. 3737-3742

Online SNR Statistic Estimation for LDPC Decoding over AWGN Channel Using Laplace Propagation

Lijuan Cui (University of Oklahoma, USA); Shuang Wang (University of California, San Diego, USA); Samuel Cheng (University of Oklahoma, USA)
pp. 3743-3747

A New Paradigm for Channel Coding in Diffusion-Based Molecular Communications: Molecular Coding Distance Function

Pin-Yu Ko (National Taiwan University, Taiwan); Yen-Chi Lee (National Taiwan University, Taiwan); Ping-Cheng Yeh (National Taiwan University, Taiwan); Chia-Han Lee (Academia Sinica, Taiwan); Kwang-Cheng Chen (National Taiwan University, Taiwan)
pp. 3748-3753

Anti Error Propagation Methods for Wireless Uplink Using Network Coding

Wei Guan (University of Maryland, College Park, USA); K. J. Ray Liu (University of Maryland, USA)
pp. 3754-3759

Practical Coding Schemes for Cognitive Overlay Radios

Ernest Kurniawan (Stanford University & Institute for Infocomm Research, USA); Andrea Goldsmith (Stanford University, USA); Stefano Rini (Stanford, USA)
pp. 3760-3765

SPC06: COMP

Adaptive Joint Nonlinear Transmit-Receive Processing for Multi-Cell MIMO Networks

Liang Sun (NEC Laboratories China, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)
pp. 3766-3771

Design Method of Relative Magnitude Coefficients Considering Rotation of Basis Vectors in Interference Space on the K-User MIMO Interference Channel for Downlink System

Kunitaka Matsumura (Keio University, Japan); Tomoaki Ohtsuki (Keio University, Japan)
pp. 3772-3777

An Interference Alignment Based Precoder Design Using Channel Statistics for OFDM Systems with Insufficient Cyclic Prefix

Yuansheng Jin (University of Delaware, USA); Xiang-Gen Xia (University of Delaware, USA)
pp. 3778-3782

Semi-Blind CoMP System with Multiple-CFO Estimation and ICA Based Equalization

Yufei Jiang (University of Liverpool, United Kingdom); Xu Zhu (University of Liverpool, United Kingdom); Eng Gee Lim (Xi'an Jiaotong-Liverpool University, P.R. China); Hai Lin (Osaka Prefecture University, Japan); Yi Huang (University of Liverpool, United Kingdom)
pp. 3783-3788

Dynamic Power Allocation via Wavefront Multiplexing Through Multiple Base Stations

Donald Chang (Spatial Digital Systems, USA); Hen-Geul Yeh (California State University, Long Beach, USA); Pei Wang (California State University Long Beach, USA)
pp. 3789-3794

Linear Precoding and Power Allocation Optimization with Partial CSI under per BS Power Constraints for Cooperative MIMO TDD Systems

Shu-Yan Yu (Department of Electrical Engineering, National Tsing Hua University, Taiwan); Hsi-Pin Ma (National Tsing Hua University, Taiwan)
pp. 3795-3800

SPC07: Signal Processing for Communications I

Decision Feedback Turbo Equalization for OFDM over Doubly Selective Channels

Imad Barhumi (United Arab Emirates University, UAE)
pp. 3801-3806

Blind Known Interference Cancellation with Parallel Real Valued Belief Propagation Algorithm

Shengli Zhang (Shenzhen University, P.R. China); Suong Chang Liew (The Chinese University of Hong Kong, Hong Kong); Lu Lu (The Chinese University of Hong Kong, Hong Kong); Hui Wang (Shenzhen University, P.R. China)
pp. 3807-3812

Performance Analysis of Code-Aided Iterative Hard/Soft Decision-Directed Carrier Phase Recovery

Nan Wu (Beijing Institute of Technology, P.R. China); Hua Wang (Modern Comm. Lab, P.R. China); Zhixin Li (Beijing Institute of Technology, P.R. China); Jingming Kuang (Beijing Institute of Technology, P.R. China)
pp. 3813-3818

Optimal Detection for Diffusion-Based Communications in the Presence of ISI

Ling-San Meng (National Taiwan University, Taiwan); Ping-Cheng Yeh (National Taiwan University, Taiwan); Kwang-Cheng Chen (National Taiwan University, Taiwan); Ian F. Akyildiz (Georgia Institute of Technology, USA)
pp. 3819-3824

A Same-Frequency Cellular Repeater Using Adaptive Feedback Cancellation

Dennis R. Morgan (Bell Laboratories, Alcatel-Lucent, USA); Zhengxiang Ma (Huawei Technologies, USA)
pp. 3825-3830

Joint Transceiver Design for Iterative FDE

Wei Han (Xi'an Jiaotong University, P.R. China); Qinye Yin (Xi'an Jiaotong University, P.R. China); Lin Bai (Xi'an Jiaotong University, P.R. China); Bobin Yao (Xi'an Jiaotong University, P.R. China); Ang Feng (Xi An Jiaotong University, P.R. China)
pp. 3831-3837

SPC08: MIMO II

Weighted Sum Rate Maximization for Interfering Broadcast Channel via Successive Convex Approximation

Jarkko Kaleva (University of Oulu, Finland); Antti Tölli (University of Oulu, Finland); Markku Juntti (University of Oulu, Finland)
pp. 3838-3843

Low Complexity Adaptive Antenna Selection for Cognitive Radio MIMO Broadcast Channels

Efthymios Stathakis (Royal Institute of Technology, Sweden); Chao Wang (Royal Institute of Technology (KTH), Sweden); Lars K. Rasmussen (KTH Royal Institute of Technology, Sweden); Mikael Skoglund (KTH Royal Institute of Technology, Sweden)
pp. 3844-3849

Unitary Precoding for MIMO Interference Networks

Andreas Dotzler (Technische Universität München, Germany); Guido K E Dietl (University of Applied Sciences Landshut & DOCOMO Euro-Labs, Germany); Wolfgang Utschick (Technische Universität München, Germany)
pp. 3850-3855

X-Structured Precoder Design for Spatial Multiplexing MIMO Systems

Chun-Tao Lin (National Chiao Tung University, Taiwan); Wen-Rong Wu (National Chiao Tung University, Taiwan)
pp. 3856-3861

Simultaneous Information and Energy Transfer: A Two-User MISO Interference Channel Case

Chao Shen (Beijing Jiaotong University, P.R. China); Wei-Chiang Li (National Tsing Hua University, Taiwan); Tsung-Hui Chang (National Taiwan University of Science and Technology, Taiwan)
pp. 3862-3867

How Many RF Chains are Optimal for Large-Scale MIMO Systems When Circuit Power is Considered?

Yiyang Pei (Institute for Infocomm Research, Singapore); The-Hanh Pham (Institute for Infocomm Research, Singapore); Ying-Chang Liang (Institute for Infocomm Research, Singapore)
pp. 3868-3873

SPC09: Wireless Systems and Networks

Enhancing Spectrum Hole Utilization Through Adaptive Sensing in Cognitive Radio Systems

Dusadee Treemnuk (Old Dominion University, USA); Dimitrie Popescu (Old Dominion University, USA)
pp. 3874-3878

Outage-Constrained Power Control in Spectrum Sharing Systems with Partial Primary CSI

Xitao Gong (RWTH Aachen University, Germany); Adrian Ispas (RWTH Aachen University, Germany); Gerd H. Ascheid (RWTH Aachen University, Germany)
pp. 3879-3885

Reduced Dimension Policy Iteration for Wireless Network Control via Multiscale Analysis

Marco Levorato (Stanford University & University of Southern California, USA); Sunil K. Narang (University of Southern California, USA); Urbashi Mitra (University of Southern California, USA); Antonio Ortega (USC, USA)
pp. 3886-3892

Decentralized Largest Eigenvalue Test for Multi-Sensor Signal Detection

Federico Penna (Fraunhofer Heinrich Hertz Institute, Germany); Slawomir Stanczak (Fraunhofer Heinrich Hertz Institute, Germany)
pp. 3893-3898

New Results on Distributed Detection with Dependent Observations

Ge Xu (Syracuse University, USA); Hao Chen (Boise State University, USA); Biao Chen (Syracuse University, USA)
pp. 3899-3904

Theoretical Performance Bounds for Reduced-order Linear and Nonlinear Distributed Estimation

Arash Mohammadi (York University, Canada); Amir Asif (York University, Canada)
pp. 3905-3911

SPC10: Beamforming

Orthogonal Beamforming for Rural Broadband Wireless Access with Limited Feedback

Yingbo Li (Peking University, P.R. China); Lin Bai (Beihang University, P.R. China); Chen Chen (Peking University, P.R. China); Ye Jin (Peking University, P.R. China); Jinho Choi (Swansea University, United Kingdom)
pp. 3912-3917

Outage Balancing in Multiuser MISO Networks: Network Duality and Algorithms

Yichao Huang (University of California, San Diego, USA); Chee Wei Tan (City University of Hong Kong, Hong Kong); Bhaskar Rao (University of California, San Diego, USA)
pp. 3918-3923

A Decentralized Downlink Beamforming Algorithm for Multicell Processing

Tuan Anh Le (King's College London, United Kingdom); Mohammad Reza Nakhai (King's College London, United Kingdom)
pp. 3924-3929

Coordinated Multi-cell Beamforming Scheme Using Uplink-Downlink Max-Min SINR Duality

He Shiwen (School of Information Science and Engineering, Southeast University, P.R. China);
Yongming Huang (Southeast University, P.R. China); Haiming Wang (Southeast University, P.R. China); Arumugam Nallanathan (King's College London, United Kingdom); Yang Luxi (SouthEast University, P.R. China)
pp. 3930-3934

Distributed Penalty-Based Beamforming Design for Multi-Source Multi-Destination Networks

Fuyu Chen (State University of New York at Buffalo, USA); Weifeng Su (State University of New York at Buffalo, USA); Stella Batalama (State University of New York (SUNY) at Buffalo, USA); John Matyjas (Air Force Research Laboratory/RIGF, USA)
pp. 3935-3940

Coordinated Relay Beamforming Based on the Worst-case SINR in Multicell Wireless Systems

Da Wang (Peking University, P.R. China); Lin Bai (Beihang University, P.R. China); Chen Chen (Peking University, P.R. China); Ye Jin (Peking University, P.R. China); Jinho Choi (Swansea University, United Kingdom)
pp. 3941-3945

SPC11: Signal Processing for Communications III

Synchronization Algorithm of Resonator Isolation System for Efficient Power and Data Transmission

Uikun Kwon (Samsung Electronics, Korea); Sang Joon Kim (Samsung, Korea); Seung Keun Yoon (Samsung, Korea)
pp. 3946-3951

Frequency-division spread-spectrum makes frequency synchronisation easy

Tohru Kohda (Kyushu University, Japan); Yutaka Jitsumatsu (Kyushu University, Japan); Kazuyuki Aihara (University of Tokyo, Japan)
pp. 3952-3958

Synchronization and Matched Filtering in Time-Frequency using the Sunflower Spiral

Cornelis Korevaar (University of Twente, The Netherlands); Andre Kokkeler (University of Twente, The Netherlands); Pieter-Tjerk de Boer (University of Twente, The Netherlands); Gerard Smit (University of Twente, The Netherlands)
pp. 3959-3964

Coarse Frame Synchronization for OFDM Systems Using SNR Estimation

Fan Yang (University of Electronic Science and Technology of China, P.R. China); Xi Zhang (Texas A&M University, ECE Department, USA); Zhong-pei Zhang (University of Electronic Science and Technology of China, P.R. China)
pp. 3965-3969

Modulation Classification Based on Gaussian Mixture Models under Multipath Fading Channel

Gejie Liu (The University of Western Ontario, Canada); Xianbin Wang (The University of Western Ontario, Canada); Jay Nadeau (The University of Western Ontario, Canada); Hai Lin (Osaka Prefecture University, Japan)
pp. 3970-3974

Information Theoretic Bounds for Angle-Doppler Estimation in Time Reversal MIMO Communication

Foroohar Forozan (York University, Canada); Amir Asif (York University, Canada)
pp. 3975-3981

GC12 WC: Globecom 2012 - Wireless Communications Symposium - Program

WC01: Resource Allocation

Wireless Information and Power Transfer: Architecture Design and Rate-Energy Tradeoff

Xun Zhou (National University of Singapore, Singapore); Rui Zhang (National University of Singapore, Singapore); Chin Keong Ho (Institute for Infocomm Research, A*STAR, Singapore)
pp. 3982-3987

Resource Allocation for Multipoint-to-Multipoint Orthogonal Multicarrier Division Duplexing

Poramate Tarasak (Institute for Infocomm Research, Singapore); Hlaing Minn (University of Texas at Dallas, USA)
pp. 3988-3993

Delay Quality-of-Service Driven Resource Allocation for Relay-Based OFDMA Cognitive Radio Networks

Jun Yuan (Southeast University, P.R. China); Qiao Wang (Southeast University, P.R. China)
pp. 3994-3999

Optimal Power Allocation and AP Deployment in Green Wireless Cooperative Communications

Xiaoxia Zhang (University of Waterloo, Canada); Zhongming Zheng (University of Waterloo, Canada); Jing Liu (Shanghai Jiao Tong University, P.R. China); Sherman Shen (University of Waterloo, Canada); Liang-Liang Xie (University of Waterloo, Canada)
pp. 4000-4005

Joint Spectrum and Power Efficiencies Optimization for Statistical QoS Provisionings in Wireless Networks

Wenchi Cheng (Xidian University, P.R. China); Xi Zhang (Texas A&M University, ECE Department, USA); Hailin Zhang (Xidian University, P.R. China)
pp. 4006-4011

Power Control and Scheduling for Joint Detection Cooperative Cellular Systems

Fabian Diehm (Technische Universität Dresden, Germany); Guo-Xiong Chen (Technische Universität Dresden, Germany); Gerhard Fettweis (Technische Universität Dresden, Germany)
pp. 4012-4017

WC02: Modulation and Coding I

Exploring Controllable Deterministic Bits for LDPC Iterative Decoding in WiMAX Networks

Bo Rong (CRC, Canada); Yin Xu (Shanghai Jiao Tong University, P.R. China); Yiyan Wu (Communications Research Centre, Canada); Gilles Gagnon (Communications Research Centre Canada, Canada); Bo Liu (Shanghai Jiao Tong University, P.R. China); Gui Lin (Shanghai JiaoTong University, P.R. China); WenJun Zhang (Shanghai JiaoTong University, P.R. China)
pp. 4018-4023

Turbo Trellis-Coded Spatial Modulation

Calin Vladeanu (University Politehnica of Bucharest, Romania)
pp. 4024-4029

Adaptive Demodulation for Raptor Coded Multilevel Modulation Schemes over AWGN Channel

Kadir Turk (Karakadeniz Technical University, Turkey); Pingyi Fan (Tsinghua University, P.R. China)
pp. 4030-4035

Structure-based Decoding for Hierarchically Modulated, LDPC coded Signals

Zixia Hu (University of Washington, USA); Hui Liu (Shanghai JiaoTong University, P.R. China)
pp. 4036-4042

Linear Programming based Joint Detection of LDPC coded MIMO systems

Yong Li (Xiamen University, P.R. China); Lin Wang (Xiamen University, P.R. China); Zhi Ding (UC Davis, USA)
pp. 4043-4048

Structure Optimisation of Spatial Modulation over Correlated Fading Channels

Xiping Wu (University of Edinburgh, United Kingdom); Sinan Sianović (University of Edinburgh, United Kingdom); Marco Di Renzo (French National Center for Scientific Research (CNRS), France); Harald Haas (The University of Edinburgh, United Kingdom)
pp. 4049-4053

WC03: UWB I**Optimal Integration Time for Energy-Detection PPM UWB Systems**

Jose M Almodovar-Faria (University of Florida, USA); Janise McNair (University of Florida, USA)
pp. 4054-4059

Robust Pre-Equalization for Pre-Rake UWB Systems with Spectral Mask Constraints

Zahra Ahmadian (University of British Columbia, Canada); Lutz Lampe (University of British Columbia, Canada)
pp. 4060-4064

Enhanced Bayesian Compressive Sensing for Ultra-Wideband Channel Estimation

Xiantao Cheng (University of Electronic Science and Technology of China, P.R. China); Yong Liang Guan (Nanyang Technological University, Singapore); Guangrong Yue (University of Electronic Science and Technology of China, P.R. China); Shaoqian Li (University of Electronic Science and Technology of China, Taiwan)
pp. 4065-4070

The Correlation Properties of Subchannel Fading for Non-continuous Carrier Aggregation based on Indoor Ultra-Wideband Measurement

Ruonan Zhang (Northwestern Polytechnical University, P.R. China); Yang Zhang (Huawei Technology Co. Ltd, P.R. China); Zhimeng Zhong (Huawei Technology Company, P.R. China); Stan X. Lu (Huawei Technology Company, P.R. China)
pp. 4071-4077

On the Nonlinear Teager-Kaiser Operator for Energy Detection Based Impulse Radio UWB Receivers

Zhimeng Xu (Fuzhou University, P.R. China); Hong Nie (University of Northern Iowa, USA); Zhizhang (David) Chen (Dalhousie University, Canada); Hassan Khani (University of Northern Iowa & Ghochan Higher Educational Complex of Engineering and Technology, USA); Lun Yu (Fuzhou University, P.R. China)
pp. 4078-4083

Low Complexity Suboptimal Monobit Receiver for Transmitted-Reference Impulse Radio UWB Systems

Hassan Khani (University of Northern Iowa & Ghochan Higher Educational Complex of Engineering and Technology, USA); Hong Nie (University of Northern Iowa, USA); Weidong Xiang (University of Michigan, Dearborn, USA); Zhimeng Xu (Fuzhou University, P.R. China); Zhizhang Chen (Dalhousie University, Canada)
pp. 4084-4089

WC04: Cooperative Communications I: Coding and Diversity**Towards Reliable Cooperative Communications in Clustered Ad Hoc Networks**

Ahasanun Nessa (École de technologies supérieure, Canada); Kadouch Michel (Ecole de technologie supérieure, Canada); Rose Qingyang Hu (USU, USA); Bo Rong (CRC, Canada)
pp. 4090-4095

User Cooperation via Rateless coding

Mahyar Shirvanimoghaddam (University of Sydney, Australia); Yonghui Li (University of Sydney, Australia); Branka Vucetic (The University of Sydney, Australia)
pp. 4096-4101

Opportunistic Relaying with Time-Division Broadcast in Bidirectional Cooperative Networks

Peng Liu (Queen's University, Canada); Saeed Gazor (Queen's University, Canada); Il-Min Kim (Queen's University, Canada)
pp. 4102-4107

Cooperative Communication Based on Random Beamforming Strategy in Wireless Sensor Networks

Li Li (University of North Texas, USA); Kamesh Namuduri (University of North Texas, USA); Shengli Fu (University of North Texas, USA)
pp. 4108-4113

Cooperative Beamforming in Multiuser MIMO Networks: Fast SINR Fairness Algorithms

Yichao Huang (University of California, San Diego, USA); Chee Wei Tan (City University of Hong Kong, Hong Kong); Bhaskar Rao (University of California, San Diego, USA)
pp. 4114-4119

WC05: Heterogeneous Network

Optimal Intra-cell Cooperation in the Heterogeneous Relay Network

Yiran Xu (Utah State University, USA); Rose Qingyang Hu (USU, USA)
pp. 4120-4125

Macro Transmission Power Reduction for HetNet Co-Channel Deployments

Beatriz Soret (Aalborg University, Denmark); Klaus Pedersen (Nokia Siemens Networks, Denmark)
pp. 4126-4130

Joint uplink and downlink optimal mobile association in a wireless heterogeneous network

Richard Chen (Utah State University, USA); Rose Qingyang Hu (USU, USA)
pp. 4131-4137

Efficient Communications in Mobile Hybrid Wireless Networks

Xueli Huang (Temple University, USA); Xiaojiang Du (Temple University, USA); XiaoMing Li (Peking University, P.R. China); Kaigui Bian (Peking University, P.R. China)
pp. 4138-4142

Towards an Optimal User Association in Heterogeneous Cellular Networks

Qiaoyang Ye (The University of Texas at Austin, USA); Beiyu Rong (Marvell Semiconductor, Inc, USA); Yudong Chen (The University of Texas at Austin, USA); Constantine Caramanis (The University of Texas at Austin, USA); Jeffrey Andrews (The University of Texas at Austin, USA)
pp. 4143-4147

WC06: UWB II: Performance Analysis

Performance Analysis of Dual-Hop systems with Fixed-Gain Relays over Generalized η - μ Fading Channels

Osamah Badarneh (Yarmouk University, Jordan); Kadoc Michel (Ecole de technologie superieure, Canada)
pp. 4148-4152

Design and Performance Analysis of Distributed Network-Channel Codes for Wireless Sensor Networks

Jing Yue (Xidian University, P.R. China); Kun Pang (the University of Sydney, Australia); Zihuai Lin (University of Sydney, Australia); Yonghui Li (University of Sydney, Australia); Bao-Ming Bai (Xidian University, P.R. China); Branka Vucetic (The University of Sydney, Australia)
pp. 4153-4158

SINR Order Statistics in OFDMA Systems

Radha Krishna Ganti (Indian Institute of Technology Madras, India); Kiran Kuchi (IIT Hyderabad, India)
pp. 4159-4164

Heterogeneous Broadcast Channel: Spatial Diversity or Advanced Receiver Design

Rizwan Ghaffar (University of Waterloo, Canada); Pin-Han Ho (University of Waterloo, Canada); Bin Wu (Tianjin University, P.R. China)
pp. 4165-4169

Downlink Coverage Analysis in a Heterogeneous Cellular Network

Prasanna Madhusudhanan (University of Colorado at Boulder, USA); Juan Restrepo (University of Colorado at Boulder, USA); Youjian (Eugene) Eugene Liu (University of Colorado at Boulder, USA); Timothy Brown (University of Colorado, USA)
pp. 4170-4175

WC07: Cooperative Communications II: Performance Analysis**Performance of OSTBC Transmission in Dual-Hop Amplify-and-Forward MIMO Relaying Systems over Spatially Correlated Nakagami-m Fading Channels**

Kai Yang (Alcatel-Lucent Shanghai Bell Co., Ltd, P.R. China); Jie Yang (Beijing Institute of Technology, P.R. China); Liyu Cai (Alcatel-Lucent Shanghai Bell Co., Ltd, P.R. China)
pp. 4176-4181

Performance Analysis of AF Cooperative Systems with HPA Nonlinearity in Semi-Blind Relays

Jian Qi (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Sonia Aissa (INRS, University of Quebec, Canada); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)
pp. 4182-4186

Efficient Concurrent Transmission Scheduling for Cooperative Millimeter Wave Systems

Jian Qiao (University of Waterloo, Canada); Bin Cao (Harbin Institute of Technology Shenzhen Graduate School & University of Waterloo, P.R. China); Xiaoxia Zhang (University of Waterloo, Canada); Sherman Shen (University of Waterloo, Canada); Jon Mark (University of Waterloo, Canada)
pp. 4187-4192

Multi-cell Distributed Interference Cancellation for Co-operative Pico-cell Clusters

Shirish Nagaraj (Nokia Siemens Networks, USA); Raghavendra M R (Nokia Siemens Networks, India); Philip J Fleming (Nokia Siemens Networks USA, USA); Michael Honig (Northwestern University, USA)
pp. 4193-4199

Adaptive Fusion in Air: A Cooperative Sensing Scheme Based on Distributed Beamforming

Cheng Luo (Tsinghua University, P.R. China); Wei Chen (Tsinghua University, P.R. China); Shunliang Mei (Tsinghua University, P.R. China)
pp. 4200-4204

Cooperative Binary Relaying and Combining for Multi-hop Wireless Communication

Yi Zhu (University of Southern Mississippi, USA); Chong Tang (University of Southern Mississippi, USA); Lixing Song (University of Southern Mississippi, USA); Qingmei Yao (University of Southern Mississippi, USA); Shaoen Wu (University of Southern Mississippi, USA)
pp. 4205-4210

WC08: Modulation and Coding II**Optimal Binary/Quaternary Adaptive Signature Design for Code-Division Multiplexing**

Lili Wei (Shanghai Jiao Tong University, P.R. China); Wen Chen (Shanghai Jiao Tong University, P.R. China)
pp. 4211-4216

Reduced-Complexity Soft STBC Detection

Chao Xu (University of Southampton, United Kingdom); Dandan Liang (University of Southampton, United Kingdom); Shinya Sugiura (Tokyo University of Agriculture and Technology, Japan); Soon Xin (Michael) Ng (University of Southampton, United Kingdom); Lajos Hanzo (University of Southampton, United Kingdom)
pp. 4217-4221

Differential Codebook for General Rotated Dual-Polarized MISO Channels

Junil John Choi (Purdue University, USA); Bruno Clerckx (Imperial College London, United Kingdom); David Love (Purdue University, USA)
pp. 4222-4227

Channel Codes for Mitigating Intersymbol Interference in Diffusion-based Molecular Communications

Po-Jen Shih (National Taiwan University, Taiwan); Chia-Han Lee (Academia Sinica, Taiwan); Ping-Cheng Yeh (National Taiwan University, Taiwan)
pp. 4228-4232

Blind Encoder Parameter Estimation for Turbo Codes

Yonas Debessu (Louisiana State University, USA); Hsiao-Chun Wu (Louisiana State University, USA); Hong Jiang (Bell Labs & Alcatel-Lucent, USA); Shih Yu Chang (National Tsing Hua University of Taiwan, Taiwan)
pp. 4233-4237

On the Design of PS-RCPT Codes for LTE System

Xiaofeng Long (Southwest Jiaotong University, P.R. China); Qingchun Chen (Southwest Jiaotong University, P.R. China); Pei Xiao (University of Surrey, United Kingdom); Jinsong Wu (Bell Laboratories & Alcatel-Lucent, P.R. China)
pp. 4238-4243

WC09: Interference Management I

Interference Alignment Based on Channel Prediction with Delayed Channel State Information

Nan Zhao (Dalian University of Technology, P.R. China); F. Richard Yu (Carleton University, Canada); Hongjian Sun (King's College London, United Kingdom); Hongxi Yin (Dalian University of Technology, P.R. China); Arumugam Nallanathan (King's College London, United Kingdom)
pp. 4244-4248

An effective initialization of interference cancellation algorithms for distributed MIMO systems in wireless datacenters

Toshiyuki Yamane (IBM research, Tokyo Research Laboratory, Japan); Yasunao Katayama (IBM Research - Tokyo, Japan)
pp. 4249-4254

Is Multicell Interference Coordination Worthwhile in Indoor Wireless Broadband Systems?

Du Ho Kang (Royal Institute of Technology (KTH), Sweden); Ki Won Sung (Royal Institute of Technology (KTH), Sweden); Jens Zander (KTH Royal Institute of Technology, Sweden)
pp. 4255-4260

Adaptive partitioned interference management in cellular networks

Bijan Golkar (University of Toronto, Canada); Elvino Silveira Sousa (University of Toronto, Canada)
pp. 4261-4266

Distributed Clustering and Interference Management in Two-Tier Networks

Kianoush Hosseini (University of Toronto, Canada); Hayssam Dahrouj (University of Toronto, Canada); Raviraj Adve (University of Toronto, Canada)
pp. 4267-4272

Data Sharing Coordination and Blind Interference Alignment for Cellular Networks

Salam Akoum (The University of Texas at Austin, USA); Chung Shue Chen (Alcatel-Lucent Bell Labs & Laboratory of Information, Network and Communication Sciences (LINCS), France); Mérouane Debbah (Supelec, France); Robert Heath (The University of Texas at Austin, USA)
pp. 4273-4277

WC01P: Wireless Communications I

On Balancing Energy Efficiency and Estimation Error in Compressed Sensing

Donglin Hu (Auburn University, USA); Shiwen Mao (Auburn University, USA); Nedret Billor (Auburn University, USA)
pp. 4278-4283

Full-Duplex Transmissions in Fiber-Connected Distributed Relay Antenna Systems

Hu Jin (The University of British Columbia, Canada); Victor CM Leung (The University of British Columbia, Canada)
pp. 4284-4289

Reliable OFDM System Design under Hostile Multi-tone Jamming

Mai Abdelhakim (Michigan State University, USA); Jian Ren (Michigan State University, USA); Tongtong Li (Michigan State University, USA)
pp. 4290-4295

Performance Enhanced Transmission in Device-to-Device Communications: Beamforming or Interference Cancellation?

Wei Xu (Southeast University, P.R. China); Le Liang (University of Victoria, Canada); Hua Zhang (Southeast University, P.R. China); Shi Jin (Southeast University, P.R. China); James C. F. Li (NEC Laboratories China, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)
pp. 4296-4301

Multiplexing over Molecular Communication Channels from Nanomachines to a Micro-scale Sensor Device

Michael J. Moore (Osaka University, Japan); Tadashi Nakano (Osaka University, Japan)
pp. 4302-4307

Multi-User Detection for Asynchronous Space-Frequency Block Coded Schemes in Frequency Selective Environments

Konstantinos Nikitopoulos (University of California, Irvine, USA); Sanaz Barghi (University of California, Irvine, USA); Hamid Jafarkhani (University of California, Irvine, USA); Homayoun Yousefi'zadeh (University of California, Irvine, USA)
pp. 4308-4313

WC02P: Wireless Communications II***Load-Aware Heterogeneous Cellular Networks: Modeling and SIR Distribution***

Harpreet S Dhillon (The University of Texas at Austin & WNCG, USA); Radha Krishna Ganti (Indian Institute of Technology Madras, India); Jeffrey Andrews (The University of Texas at Austin, USA)
pp. 4314-4319

QoS Driven Energy-Efficient Design for Downlink OFDMA Networks

Cong Xiong (Georgia Institute of Technology, USA); Geoffrey Li (Georgia Tech, USA); Yalin Liu (Huawei Technologies Co., Ltd, P.R. China); Shugong Xu (Huawei, P.R. China)
pp. 4320-4325

On Gaussian Multiple Access Channel with Signal Dependent Noise

Hai Li (University of Colorado at Boulder, USA); Youjian (Eugene) Eugene Liu (University of Colorado at Boulder, USA)
pp. 4326-4331

Spectrum-Efficient Distributed Collaborative Beamforming in the Presence of Local Scattering and Interference

Slim Zaidi (University of Quebec, INRS-EMT, Canada); Sofiene Affes (INRS-EMT, Canada)
pp. 4332-4337

Decentralized Linear Transceiver Design in Coordinated Multi-Cell Multiuser MIMO Systems

Harri Pennanen (University of Oulu, Finland); Antti Tölli (University of Oulu, Finland); Matti Latvala-aho (UoOulu, Finland)
pp. 4338-4343

A Novel Security-Oriented Cooperative Scheme for Wireless Relay Networks in Presence of Eavesdroppers

Li Wang (Beijing University of Posts and Telecommunications, P.R. China); Xi Zhang (Texas A&M University, ECE Department, USA); Mei Song (, P.R. China); Tenghui Ke (Beijing University of Posts and Telecommunications, P.R. China)
pp. 4344-4349

WC03P: Wireless Communications III***Analysis of the Indoor Localization Game***

Deric Waters (Texas Instruments, USA); Mohamed Mansour (TI, USA); Arton Xhafa (Texas Instruments Inc., USA)

pp. 4350-4355

A Game Formulation of Duopoly Market with Coexistence of SoftSim and Regular Users

Peng Lin (HKUST, Hong Kong); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong); Mounir Hamdi (Hong Kong University of Science and Technology, P.R. China)
pp. 4356-4361

Signal Detection and ISI Cancellation for Quantity-based Amplitude Modulation in Diffusion-based Molecular Communications

Wei-An Lin (National Taiwan University, Taiwan); Yen-Chi Lee (National Taiwan University, Taiwan); Ping-Cheng Yeh (National Taiwan University, Taiwan); Chia-Han Lee (Academia Sinica, Taiwan)
pp. 4362-4367

The UC4G Wireless MIMO Testbed

Pat Chambers (Heriot-Watt University, United Kingdom); Xuemin Hong (Xiamen University, P.R. China); Zengmao Chen (Heriot-Watt University, United Kingdom); Chengxiang Wang (Heriot-Watt University, United Kingdom); Mark Beach (University of Bristol, United Kingdom); Harald Haas (The University of Edinburgh, United Kingdom)
pp. 4368-4373

Wireless MIMO Switching

Fanggang Wang (Beijing Jiaotong University, P.R. China); Soungh Chang Liew (The Chinese University of Hong Kong, Hong Kong)
pp. 4374-4379

Fractional Cooperation in Femtocell Networks

K Venkata Srinivas (Samsung Electronics India, India); Andrew Eckford (York University, Canada); Raviraj Adve (University of Toronto, Canada)
pp. 4380-4385

WC10: Relay Technologies: Performance Analysis and Relay Selection

Spectral-Energy Efficiency Tradeoff in Multicell Cellular Networks with Adaptive Relay Cooperation

Ivan Ku (Heriot Watt University, United Kingdom); Chengxiang Wang (Heriot-Watt University, United Kingdom); John Thompson (University of Edinburgh, United Kingdom)
pp. 4386-4391

Distributed Multiple Relay Selection by an Auction Mechanism

Chia-Hao Yu (MediaTek, Finland); Brendan Mumey (Montana State University, USA); Olav Tirkkonen (Aalto University, Finland)
pp. 4392-4397

Outage Probability of Opportunistic Decode-and-Forward Relaying with Beamforming in Two-Wave with Diffuse Power Fading Channels

Yao Lu (China Unicom, P.R. China); Nan Yang (University of New South Wales, Australia); Xiaoxiang Wang (Beijing University of Posts and Telecommunications, P.R. China); Jiameng Luo (Beijing University of Posts and Telecommunications, P.R. China)
pp. 4398-4403

Space Full-Duplex Max-Max Relay Selection for Relays with Buffers

Aissa Ikhlef (University of British Columbia, Canada); Junsu Kim (Korea Polytechnic University, Korea); Robert Schober (University of British Columbia, Canada)
pp. 4404-4409

Outage Probability of Wireless Ad Hoc Networks with Cooperative Relaying

MohammadAli Mohammadi (The Australian National University, Australia); Himal A Suraweera (Singapore University of Technology and Design, Singapore); Xiangyun Zhou (The Australian National University, Australia)
pp. 4410-4416

An Efficient Cooperative Retransmission for Wireless Regenerative Relay Networks

Quoc-Tuan Vien (Glasgow Caledonian University, United Kingdom); Brian G Stewart (Glasgow Caledonian University, United Kingdom); Huaglory Tianfield (Glasgow Caledonian University, United Kingdom); Huan X Nguyen (Middlesex University, United Kingdom)
pp. 4417-4422

WC11: Network Coding I

Phase-Level Synchronization for Physical-Layer Network Coding

Yang Huang (Northeastern University, P.R. China); Qingyang Song (Northeastern University, P.R. China); Shiqiang Wang (Imperial College London, United Kingdom); Abbas Jamalipour (University of Sydney, Australia)
pp. 4423-4428

Constellation Mapping for Physical-Layer Network Coding with M-QAM Modulation

Shiqiang Wang (Imperial College London, United Kingdom); Qingyang Song (Northeastern University, P.R. China); Lei Guo (Northeastern University, P.R. China); Abbas Jamalipour (University of Sydney, Australia)
pp. 4429-4434

Deadline-aware Broadcasting in Wireless Networks with Network Coding

Pouya Ostovari (Temple University & Computer and Information Sciences, USA); Abdallah A Khreishah (New Jersey Institute of Technology, USA); Jie Wu (Temple University, USA)
pp. 4435-4440

Soft Network Coding Design in Two-Way Relay Channel

Weixiao Meng (Harbin Institute of Technology, P.R. China); Rui Fang (Harbin Institute of Technology, P.R. China); Cheng Li (Memorial University of Newfoundland, Canada); Qiyue Yu (Harbin Institute of Technology, P.R. China)
pp. 4441-4446

Block Relay for Physical-Layer Network Coding

Ning Xu (Ericsson Inc, USA); Shengli Fu (University of North Texas, USA); Dong Wang (Philips Research North America, USA); Yabo Li (Zhejiang University, P.R. China)
pp. 4447-4452

Joint Channel-Network Coding with Rateless Code in Two-way Relay System

Yu Zhang (Zhejiang University, P.R. China); Zhaoyang Zhang (Zhejiang University, P.R. China); Rui Yin (Zhe Jiang University, P.R. China); Guanding Yu (Zhejiang University, P.R. China); Wei Wang (Zhejiang University, P.R. China)
pp. 4453-4458

WC12: MIMO Systems: Transmission and Detection

Information Dissemination in MIMO Networks

Youngmin Jeong (Kyung Hee University, Korea); Hyundong Shin (Kyung Hee University, Korea); Moe Win (Massachusetts Institute of Technology, USA)
pp. 4459-4464

A Transmission Mode Selection Scheme for MIMO Interference Channels with Antenna Correlations

Jin-Sung Kim (Bell Labs Seoul Ltd., Korea); Kyoung-Jae Lee (University of Texas at Austin, USA); Haewook Park (Korea University, Korea); Inkyu Lee (Korea University, Korea)
pp. 4465-4469

Novel Tree-Search Algorithm versus Sphere-Decoding-based Algorithms for MIMO system with Inter-Symbol Interference

Xu Chong (University of St. Thomas, USA); Hamid Gharavi (NIST & ITL, USA)
pp. 4470-4475

Achieving Full Diversity and Full Rate with Energy Spreading Transform for MIMO Systems

Taewon Hwang (Yonsei University, Korea); Yunesung Kim (Yonsei University, Korea); Hyunsung Park (Yonsei University, Korea); Younggap Kwon (Yonsei University, Korea)
pp. 4476-4481

A Modified Fixed Sphere Decoding Algorithm for Under-Determined MIMO Systems

Chen Qian (Tsinghua University, P.R. China); Jingxian Wu (University of Arkansas, USA); Yahong Rosa Zheng (Missouri University of Science and Technology, USA); Zhaocheng Wang (Tsinghua University, P.R. China)
pp. 4482-4487

Turbo Receiver Design for MIMO Relay ARQ Transmissions

Zakaria El-Moutaouakkil (Telecom Bretagne & LabSticc, France); Tarik Ait-Idir (Exceliacom Solutions, Morocco); Samir Saoudi (Telecom-Bretagne, France); Halim Yanikomeroglu (Carleton University, Canada); Mounir Ghogho (University of Leeds, United Kingdom)
pp. 4488-4493

WC13: Cellular Networks**A Mutual-Information Based Power Allocation Algorithm for Multi-Layer Rate Splitting Scheme in Tri-sectored Wireless Networks**

Guangxia Zhou (Intel Mobile Communications & Technische Universität Hamburg-Harburg, Germany); Wen Xu (Intel & Intel Mobile Communications, Germany); Gerhard Bauch (Hamburg University of Technology, Germany)
pp. 4494-4499

A Non-asymptotic Throughput for Massive MIMO Cellular Uplink with Pilot Reuse

Yang Li (University of Texas at Dallas, USA); Young-Han Nam (Samsung Telecommunications America, USA); Boon Loong Ng (Samsung Telecommunications America, USA); Jianzhong Zhang (Samsung Telecommunications America, USA)
pp. 4500-4504

Baseband Signal Compression in Wireless Base Stations

Aida Vosoughi (Rice University, USA); Michael Wu (Rice University, USA); Joseph R. Cavallaro (Rice University, USA)
pp. 4505-4511

Optimal 3D Cell Planning: A Random Matrix Approach

Axel Müller (Intel, France); Jakob Hoydis (Alcatel-Lucent Bell Labs, Germany); Romain Couillet (Supélec, France); Mérouane Debbah (Supelec, France)
pp. 4512-4517

Power Efficiency and Consumption Factor Analysis for Broadband Millimeter-Wave Cellular Networks

Theodore Rappaport (NYU-Poly and NYU, USA); James Murdock (Texas Instruments, USA)
pp. 4518-4523

Pairwise Interaction Processes for Modeling Cellular Network Topology

David Taylor (University of Texas at Austin, USA); Harpreet S Dhillon (The University of Texas at Austin & WNCG, USA); Thomas Novlan (The University of Texas at Austin, USA); Jeffrey Andrews (The University of Texas at Austin, USA)
pp. 4524-4529

WC14: Relay Technologies: Decode-and-Forward**QoS-Aware Policies for OFDM Bidirectional Transmission with Decode-and-Forward Relaying**

Yuan Liu (Shanghai Jiao Tong University, P.R. China); Jianhua Mo (Shanghai Jiao Tong University, P.R. China); Meixia Tao (Shanghai Jiao Tong University, P.R. China)
pp. 4530-4535

Multi-Level Compress and Forward Coding for Half-Duplex Relays

Jaweria Amjad (NUST School of Electrical Engineering & Computer Science, Pakistan); Momin Uppal (Lahore University of Management Sciences, Pakistan); Saad B. Qaisar (School of Electrical Engineering and Computer Science (SEECS), NUST & National University of Sciences & Technology, Pakistan)
pp. 4536-4541

Resource Allocation Using A Reverse Iterative Combinatorial Auction for Device-to-Device Underlay Cellular Networks

Chen Xu (Peking University, P.R. China); Lingyang Song (Peking University, P.R. China); Zhu Han (University of Houston, USA); Do Li (Peking University, P.R. China); Bingli Jiao (Peking University, P.R. China)
pp. 4542-4547

Optimal Beamforming for MIMO Decode-and-Forward Relay Channels

Zhengfeng Xu (Tsinghua University, P.R. China); Pingyi Fan (Tsinghua University, P.R. China); Hong-Chuan Yang (University of Victoria, Canada); Ke Xiong (Tsinghua University, P.R. China); Ming Lei (NEC Laboratories China, P.R. China); Su Yi (NEC Labs, P.R. China)
pp. 4548-4553

Outage Performance for Interference-Limited Decode-and-Forward Two-Way Relaying Networks

Liang Xuesong (National Mobile Communications Research Laboratory, Southeast University, P.R. China); Shi Jin (Southeast University, P.R. China); Xiqi Gao (Southeast University, P.R. China); Kai Kit Wong (University College London, United Kingdom); Chen Sun (Southeast University, P.R. China)
pp. 4554-4559

Exact Outage Probability of Opportunistic DF Relay Systems with Interference at Both the Relay and the Destination over Nakagami-m Fading Channels

Anas M. Salhab (King Fahd University of Petroleum & Minerals, Saudi Arabia); Fawaz Al-Qahtani (Texas A&M University at Qatar & Education City, Qatar); Salam A. Zummo (KFUPM, Saudi Arabia); Hussein Alnuweiri (Texas A&M University, Qatar)
pp. 4560-4565

WC15: OFDMA***Joint Evaluation of Reduced Feedback Scheme, Scheduling, and Rate Adaptation in OFDMA Systems with Feedback Delays***

Subhojit Guharoy (Indian Institute of Science, India); Neelesh B. Mehta (Indian Institute of Science, India)
pp. 4566-4571

Joint Subchannel and Power Allocation in Interference-Limited OFDMA Femtocells with Heterogeneous QoS Guarantee

Haijun Zhang (Beijing University of Posts and Telecommunications, P.R. China); Wei Zheng (Beijing University of Posts and Telecommunications, P.R. China); Xiaoli Chu (University of Sheffield, United Kingdom); Xiangming Wen (Beijing University of Posts and Telecommunications, P.R. China); Meixia Tao (Shanghai Jiao Tong University, P.R. China); Arumugam Nallanathan (King's College London, United Kingdom); David López-Pérez (Bell Labs Alcatel-Lucent, Ireland)
pp. 4572-4577

Capacity-Achieving Resource Allocation for OFDMA Fading Channels

Zhaoquan Li (Florida Atlantic University, USA); Xin Wang (Florida Atlantic University, USA)
pp. 4578-4582

A Message Passing Approach for Resource Allocation in Cellular OFDMA Communications

Andrea Abrardo (University of Siena, Italy); Marco Belleschi (Ericsson AB, Sweden); Gabor Fodor (Royal Institute of Technology (KTH), Sweden); Marco Moretti (Università di Pisa, Italy)
pp. 4583-4588

Energy-efficient Resource Allocation for Uplink OFDMA Systems Using Correlated Equilibrium

Dan Wu (Institute of Communications Engineering, PLAUST, P.R. China); Liang Zhou (Nanjing University of Posts and Telecommunications, P.R. China); Cai Yueming (Institute of Communications Engineering, PLAUST, P.R. China); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal)
pp. 4589-4593

Joint Beamforming, Resource Allocation, and Scheduling for Multi-Cell Multi-User MIMO-OFDMA Systems

Jun Zhu (University of British Columbia, Canada); Robert Schober (University of British Columbia, Canada); Vijay Bhargava (University of British Columbia, Canada)
pp. 4594-4599

WC16: MIMO Systems: Performance Analysis

Antenna Selection and Power Combining for Transmit Beamforming in MIMO Systems

Tae Min Kim (Stanford University, USA); Alireza Ghaderipoor (Broadcom, USA); Arogyaswami Paulraj (Stanford University, USA)
pp. 4600-4605

Receive Antenna Subset Selection For Time-Varying Channels Using Slepian Subspace Projections

Hassan Abou Saleh (Queen's University, Canada); Steven D Blostein (Queen's University, Canada)
pp. 4606-4611

Capacity Bounds of Downlink Network MIMO Systems with Inter-Cluster Interference

Zhiyuan Jiang (Tsinghua University, P.R. China); Sheng Zhou (Tsinghua University, P.R. China); Zhisheng Niu (Tsinghua University, P.R. China)
pp. 4612-4617

Transparent User-Specific 3D MIMO in FDD Using Beamspace Methods

Timothy A. Thomas (Nokia Siemens Networks, USA); Frederick W. Vook (Nokia Siemens Networks, USA)
pp. 4618-4623

Performance of Precoding Assisted Dual-Polarized Multi-cell MIMO Downlink Communications

Shriram Swaminathan (Georgia Institute Of Technology, USA); Gordon Stüber (Georgia Institute of Technology, USA)
pp. 4624-4628

On the Capacity of Airborne MIMO Communications

Weifeng Su (State University of New York at Buffalo, USA); John Matyas (Air Force Research Laboratory/RIFG, USA); Michael Gans (Air Force Research Laboratory/RIT, USA); Stella Batalama (State University of New York (SUNY) at Buffalo, USA)
pp. 4629-4634

WC17: Routing and Scheduling

Opportunistic Scheduling in Dual-Hop Multiuser Relay Networks in the Presence of Co-Channel Interference

Kasun T. Hemachandra (University of Alberta, Canada); Norman C. Beaulieu (University of Alberta, Canada)
pp. 4635-4640

On Cooperative Wireless Relaying: A Joint Routing and Scheduling Flow-based Framework

Samat Shabdanov (University of Waterloo, Canada); Patrick Mitrani (University of Waterloo, Canada); Catherine Rosenberg (University of Waterloo, Canada)
pp. 4641-4646

Novel Scheduling for a Mixture of Real-time and Non-real-time Traffic

Huseyin Haci (University of Kent, United Kingdom); Huiling Zhu (University of Kent, United Kingdom); Jiangzhou Wang (University of Kent, United Kingdom)
pp. 4647-4652

Single and Multi-Cell Scheduling in Coordinated Multi-Point Distributed Antenna Systems

Runhua Chen (Texas Instruments Incorporated, USA); Ralf M Bendlin (Texas Instruments Inc., USA); Eko Onggosanusi (DSPS R&D Texas Instruments, USA); Anthony E Ekpenyong (Texas Instruments, USA)
pp. 4653-4657

Searching for Optimal Scheduling of MIMO Doubly Iterative Receivers: An Ant Colony Optimization-Based Method

Dan Zhang (RWTH Aachen University, Germany); Gaojian Wang (RWTH-Aachen, Germany); Gerd H. Ascheid (RWTH Aachen University, Germany); Heinrich Meyr (RWTH Aachen University, Germany)
pp. 4658-4664

WC18: Relay Technologies: Amplify-and-Forward

Performance Analysis of Dual-Hop Amplify-and-Forward Systems with Multiple Antennas and Interference at the Relay

Kuan-Chou Lee (National Taiwan University, Taiwan); Jyun-Wei Pu (National Taiwan University, Taiwan); Chih-Peng Li (National Sun Yat-sen University, Taiwan); Hsueh-Jyh Li (National Taiwan University, Taiwan)
pp. 4665-4670

Amplify-and-Forward Relaying under I/Q Imbalance

Ahmad Abdulrahman Gomaa (University of Texas at Dallas & Erik Jonsson School of Engineering, USA); Mohamed Mokhtar (University of Texas at Dallas, USA); Naofal Al-Dhahir (University of Texas at Dallas, USA)
pp. 4671-4676

Capacity Analysis and Power Allocation under Imperfect Channel Estimation for AF-Based Cooperative Relay Systems

Chin-Liang Wang (National Tsing Hua University, Taiwan); Jyun-Yu Chen (National Tsing Hua University, Taiwan); Hung-Chin Wang (National Tsing Hua University, Taiwan)
pp. 4677-4682

Sum Rate of Two-way MIMO AF Relay Networks With Transmit/Receive Zero-Forcing

Gayan Amarasuriya (University of Alberta, Canada); Chintha Tellambura (University of Alberta, Canada); Masoud Ardakani (University of Alberta, Canada)
pp. 4683-4688

Multi-Way MIMO Amplify-and-Forward Relay Networks With Zero-Forcing

Gayan Amarasuriya (University of Alberta, Canada); Chintha Tellambura (University of Alberta, Canada); Masoud Ardakani (University of Alberta, Canada)
pp. 4689-4694

A Novel Partial Relay Selection Method for Amplify-and-Forward Relay Systems

Batu Krishna Chalise (Villanova University, USA); Yimin D. Zhang (Villanova University, USA); Moeness G. Amin (Villanova University, USA)
pp. 4695-4700

WC19: Network Coding II

Resource Allocation for OFDM Multiple-Access Relay Channels with Network Coding

Bin Han (Beijing University of Post and Telecommunication, P.R. China); Zhongyuan Zhao (Beijing University of Posts and Telecommunications, P.R. China); Mugen Peng (Beijing University of posts & Telecommunications, P.R. China); Yong Li (Beijing University of Posts and Telecommunications, P.R. China); Wenbo Wang (Beijing University of Posts and Telecommunications, P.R. China)
pp. 4701-4706

Rate Selection for Wireless Networks with Intra- and Inter-session Network Coding

Kaiqian Ou (University of Science and Technology Of China, P.R. China); Yinlong Xu (University of Science and Technology of China, P.R. China); Shengli Fu (University of North Texas, USA)
pp. 4707-4712

Relay Selection and Power Allocation in Analogue Network Coding system with Asymmetric Traffic under Imperfect CSI

Yixin Li (The University of Reading, United Kingdom); Fu-Chun Zheng (The University of Reading, United Kingdom)
pp. 4713-4718

A Distributed Differential Space-Time Coding Scheme with Analog Network Coding in Two-Way Relay Networks

Qiang Huo (Peking University, P.R. China); Lingyang Song (Peking University, P.R. China); Yonghui Li (University of Sydney, Australia); Yan Feng (Peking University, P.R. China); Bingli Jiao (Peking University, P.R. China)
pp. 4719-4724

Error Probability of Physical-Layer Network Coding in Multiple-Antenna Two-Way Relay Channel

Mengyu Huang (University of New South Wales, Australia); Jinhong Yuan (University of New South Wales, Australia); Tao Yang (CSIRO, Australia)
pp. 4725-4730

Achieving Low Outage Probability with Network Coding in Wireless Multicarrier Multicast Systems

Juan Liu (NCSU, USA); Wei Chen (Tsinghua University, P.R. China); Zhigang Cao (Tsinghua University, P.R. China); Ying Jun (Angela) Zhang (The Chinese University of Hong Kong, Hong Kong); Huaiyu Dai (NC State University, USA)
pp. 4731-4735

WC20: OFDM I

Uneven Comb Pilots Based Channel Estimation for CDD-OFDM System

Sun Songlin (Beijing University of Posts and Telecommunications, P.R. China); Bo Rong (CRC, Canada); Rose Qingyang Hu (USU, USA); Yanhong Ju (Beijing University of Posts and Telecommunications, P.R. China)
pp. 4736-4740

Orthogonal Frequency Division Multiplexing with Index Modulation

Ertuğrul Başar (Istanbul Technical University, Turkey); Umit Aygölü (Istanbul Technical University, Turkey); Erdal Panayırçı (Kadir Has University, Turkey); H. Vincent Poor (Princeton University, USA)
pp. 4741-4746

Low-Complexity PAPR Reduction Algorithm in OFDM Systems by Designing Data Subcarriers

Si Liu (Shanghai Jiao Tong University, P.R. China); Bo Liu (Shanghai Jiao Tong University, P.R. China); Xiaoqiang Ma (Shanghai Jiao Tong University, P.R. China); Bo Rong (CRC, Canada); Gui Lin (Shanghai Jiao Tong University, P.R. China)
pp. 4747-4751

Timing Synchronization Reciprocity Error Cancellation in OFDM/TDD Coordinated Multi-point Transmission System

Zheqi Gu (University of Electronic Science and Technology of China, P.R. China); Ning Wei (University of Electronic Science and Technology of China, P.R. China); Zhongpei Zhang (University of Electronic Science and Technology of China, P.R. China)
pp. 4752-4757

Power Allocation Based on Fast Water-Filling for Energy Efficient OFDM and MIMO Transmissions

Fengya Luo (University of Electronic Science and Technology of China, P.R. China); Yu Ye (University of Electronic Science and Technology of China, P.R. China); Bin Wu (Tianjin University, P.R. China); Pin-Han Ho (University of Waterloo, Canada); Xiang Ling (University of Electronic Science and Technology of China, P.R. China)
pp. 4758-4763

Inter-cell interference statistics of uplink OFDM systems with soft frequency reuse

Yuanping Zhu (Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences & Shanghai Research Center for Wireless Communications, P.R. China); Jing Xu (Shanghai Institute of Microsystem and Information Technology, and SHRCWC, P.R. China); Yang Yang (Shanghai Research Center for Wireless Communications & CAS Shanghai Institute of Microsystem and Information Technology, P.R. China); Xin Yang (SHRCWC, and Key Lab of Wireless Sensor Network & Communication, P.R. China); Zeming Hu (SIMIT, CAS, and Key Lab of Wireless Sensor Network & Communication, P.R. China)
pp. 4764-4769

WC21: Beamforming

Dual-Band Dual-Polarized Antenna Array for Beam Selection MIMO WLAN

Wenchoao Zheng (Huazhong University of Science and Technology, P.R. China); Long Zhang (Huazhong University of Science and Technology, P.R. China); Qingxia Li (Huazhong University of Science and Technology, P.R. China); Yuan Zhou (Huawei Technologies Co. Ltd, P.R. China); Rong Rong (Huawei Technologies Co. Ltd, P.R. China)
pp. 4770-4774

Optimal Coordinated Beamforming in the Multicell Downlink with Transceiver Impairments

Emil Björnson (Supélec & KTH Royal Institute of Technology, Sweden); Per Zetterberg (KTH Royal Institute of Technology, Sweden); Mats Bengtsson (KTH Royal Institute of Technology, Sweden)
pp. 4775-4780

Performance Evaluation of Coordinated Dual-Cell Transmission Based on Random Unitary Beamforming with User Scheduling

Jun Zhu (University of British Columbia, Canada); Hong-Chuan Yang (University of Victoria, Canada); Robert Schober (University of British Columbia, Canada)
pp. 4781-4786

Distributed beamforming with software-defined radios: frequency synchronization and digital feedback

Francois Qutin (University of California, Santa Barbara, USA); Muhammad Mahboob Ur Rahman (University of Iowa, USA); Raghuraman Mudumbai (University of Iowa, USA); Upamanyu Madhow (University of California, Santa Barbara, USA)
pp. 4787-4792

Coordinated Beamforming Design in Multicell Multicast Networks

Zhengzheng Xiang (Shanghai Jiao Tong University, P.R. China); Meixia Tao (Shanghai Jiao Tong University, P.R. China); Xiaodong Wang (Columbia University, USA)
pp. 4793-4797

Transmit Beamforming for EIRP-limited MIMO Systems based on Golay Sequence

Tae Min Kim (Stanford University, USA); Alireza Ghaderipoor (Broadcom, USA); Arogyaswami Paulraj (Stanford University, USA)
pp. 4798-4803

WC22: LTE

Exploiting frequency correlation in LTE to reduce HARQ memory

Rodolfo Torrea-Duran (KUL, Belgium); Min Li (IMEC, Belgium); Claude Dessel (IMEC, Belgium); Sofie Pollin (IMEC / UC Berkeley, USA); Liesbet Van der Perre (IMEC, Belgium)
pp. 4804-4809

Interference Mitigation by Dynamic Self-Power Control in Femtocell Scenarios in LTE Networks

Mauricio Iturralte (University of Paris 11 & LRI, France); Tara Ali Yahiya (University Paris Sud 11, France); Anne Wei (Conservation National des Arts et Metiers, France); André-Luc Beylot (IRIT Toulouse, France)
pp. 4810-4815

Proportional Fair Scheduling Algorithm for SC-FDMA in LTE Uplink

Jeongchan Kim (Korea Advanced Institute of Science and Technology, Korea); Donggeun Kim (Pantech, Korea); Youngnam Han (KAIST, Korea)
pp. 4816-4820

Compensating for CQI Aging By Channel Prediction: The LTE Downlink

Rudi Abi Akl (Fraunhofer Heinrich Hertz Institute, Germany); Stefan Valentin (Bell Labs & Alcatel-Lucent Deutschland AG, Germany); Gerhard Wunder (Heinrich-Hertz-Institut, Germany); Slawomir Stanczak (Fraunhofer Heinrich Hertz Institute, Germany)
pp. 4821-4827

Inter-Cell Interference Coordination for LTE Systems

Daewon Lee (Georgia Institute of Technology, USA); Geoffrey Li (Georgia Tech, USA); Suwen Tang (Huawei Shanghai Research Institute, P.R. China)
pp. 4828-4833

Cross-Layer Rate Adaptation for Video Communications over LTE Networks

Song Ci (University of Nebraska-Lincoln, USA); Dalei Wu (Massachusetts Institute of Technology & Mechatronics Research Lab, USA); Haiyan Luo (Cisco Systems & University of Nebraska-Lincoln, USA)
pp. 4834-4839

WC23: Wireless Security**Secrecy Diversity in MISOME Wiretap Channels**

Thang Van Nguyen (Kyung Hee University, Korea); Tony Q. S. Quek (Singapore University of Technology and Design (SUTD) & Institute for Infocomm Research, Singapore); Yun Hee Kim (Kyung Hee University, Korea); Hyundong Shin (Kyung Hee University, Korea)
pp. 4840-4845

Hybrid Cooperative Relaying and Jamming for Secure Two-Way Relay Networks

Hui-Ming Wang (Xi'an Jiaotong University, P.R. China); Miao Luo (Xi'an Jiaotong University, P.R. China); Qinye Yin (Xi'an Jiaotong University, P.R. China)
pp. 4846-4850

Deterministic Bisection Search Algorithm for Distributed Sensor/Relay Networks

Juwendo Denis (National Tsing Hua University, Taiwan); Chia-Shiang Tseng (National Tsing Hua University, Taiwan); Cheng-Wei Lee (National Tsing Hua University, Taiwan); Chia-Yu Tsai (National Tsing Hua University, Taiwan); Che Lin (National Tsing Hua University, USA)
pp. 4851-4855

A Robust Malicious User Detection Scheme in Cooperative Spectrum Sensing

Changlong Chen (University of Toledo, USA); Min Song (The University of Toledo, USA); ChunSheng Xin (Norfolk State University, USA); Mansoor Alam (EECS Department, USA)
pp. 4856-4861

Opportunistic Jammer Selection for Secure Degrees of Freedom

Jung Hoon Lee (KAIST, Korea); Seong Ho Chae (KAIST, Korea); Wan Choi (KAIST, Korea)
pp. 4862-4867

Physical Layer Security in Wireless Networks with Passive and Active Eavesdroppers

Arsenia Chorti (Princeton University & ICS FORTH, USA); Samir M. Perlaza (Princeton University, USA); Zhu Han (University of Houston, USA); H. Vincent Poor (Princeton University, USA)
pp. 4868-4873

WC24: OFDM II**Joint Subcarrier-pairing and Resource Allocation for Two-way Multi-relay OFDM Networks**

Ke Xiong (Tsinghua University, P.R. China); Pingyi Fan (Tsinghua University, P.R. China); Khaled Ben Letaief (Hong Kong University of Science & Technology, Hong Kong); Su Yi (NEC Labs, P.R. China); Ming Lei (NEC Laboratories China, P.R. China)
pp. 4874-4879

Time Domain Synchronous OFDM Based on Compressive Sensing: A New Perspective

Changyong Pan (Tsinghua University, P.R. China); Linglong Dai (Tsinghua University, P.R. China)
pp. 4880-4885

Coordinated Multi-Point Transmission of MIMO-OFDM System with Per-Antenna Power Constraints

Chih-yu Hsu (University of Melbourne, Australia); Brian Krongold (University of Melbourne, Australia)
pp. 4886-4892

Channel Adaptive Power Allocation and Pilot Optimization for OFDM systems

Mahdi Karami (University of Alberta, Canada); Norman C. Beaulieu (University of Alberta, Canada)
pp. 4893-4898

Tone Injection for PAPR Reduction Using Parallel Tabu Search Algorithm in OFDM Systems

Jun Hou (Xidian University & State Key Laboratory of Integrated Service Networks, Canada); Chinthia Tellambura (University of Alberta, Canada); Jianhua Ge (Xidian University, P.R. China)
pp. 4899-4904

Buffer-Aided BICM-OFDM Relaying

Toufiqul Islam (University of British Columbia, Canada); Aissa Ikhlef (University of British Columbia, Canada); Robert Schober (University of British Columbia, Canada)
pp. 4905-4910

WC25: Spectrum Sensing and Cognitive Networks

Spectrum Sharing in Cognitive Two-Way Relay Networks

Yong Li (Beijing University of Posts and Telecommunications, P.R. China); Mugen Peng (Beijing University of Posts & Telecommunications, P.R. China); Wenbo Wang (Beijing University of Posts and Telecommunications, P.R. China)
pp. 4911-4915

Fair and Efficient Spectrum Splitting for Cooperative Cognitive Radio Networks

Guopeng Zhang (China University of Mining and Technology, P.R. China); Kun Yang (University of Essex, United Kingdom); Yan Jun Hu (China University of Mining and Technology, P.R. China); Xiaoji Li (Guilin University of Electronic Technology, P.R. China); Liang Hu (Jilin University, P.R. China)
pp. 4916-4920

Near-Optimal Spectrum Allocation for Cognitive Radios: A Frequency-Time Auction Perspective

Xinyu Wang (Shanghai Jiao Tong University, P.R. China); Gaofei Sun (Shanghai Jiao Tong University, P.R. China); Jikai Yin (Shanghai Jiao Tong University, P.R. China); Yinxu Wang (Shanghai Jiao Tong University, P.R. China); Xiaohua Tian (Shanghai Jiaotong University, P.R. China); Xinbing Wang (Shanghai Jiaotong University, P.R. China)
pp. 4921-4926

Spectrum Leasing Based on Bandwidth Efficient Relaying in Cognitive Radio Networks

Chao Zhai (The University of New South Wales, Australia); Wei Zhang (The University of New South Wales, Australia); Pei Ching (The Chinese University of Hong Kong, Hong Kong)
pp. 4927-4932

Towards Addressing Group Selfishness of Cluster-Based Collaborative Spectrum Sensing in Cognitive Radio Networks

Yiyong Sun (Shanghai Jiao Tong University, P.R. China); Zhaoyu Gao (Shanghai Jiaotong University, P.R. China); Suguo Du (Shanghai Jiao Tong University, P.R. China); Shuai Li (Shanghai Jiao Tong University, P.R. China); Haojin Zhu (Shanghai Jiao Tong University, P.R. China); Xiaodong Lin (University of Ontario Institute of Technology, Canada)
pp. 4933-4938

Efficiency of Energy Detection for Spectrum Sensing in the Presence of Non-Cooperating Secondary Users

Abubakar U. Makarfi (University of Manchester, United Kingdom); Khairi A. Hamdi (University of Manchester, United Kingdom)
pp. 4939-4944

WC26: Optimization in Wireless Systems

Joint Optimization in Multi-Relay Multi-User Bidirectional Systems: Non-Robust and Robust Cases

Meng Zhang (Shanghai Jiao Tong University, P.R. China); Haire Yi (Shanghai Jiao Tong University, P.R. China); Hui Yu (Shanghai Jiao Tong University, P.R. China); HanWen Luo (Shanghai JiaoTong University, P.R. China)
pp. 4945-4950

On the Minimum Number of Active Anchors for Optimal Localization

Wenhan Dai (Massachusetts Institute of Technology, USA); Yuan Shen (Massachusetts Institute of Technology, USA); Moe Win (Massachusetts Institute of Technology, USA)
pp. 4951-4956

Chance-Constrained Robust Beamforming for Multi-Cell Coordinated Downlink

Chao Shen (Beijing Jiaotong University, P.R. China); Tsung-Hui Chang (National Taiwan University of Science and Technology, Taiwan); Kun-Yu Wang (National Tsing Hua University, Taiwan); Zhengding Qiu (, P.R. China); Chong-Yung Chi (National Tsing Hua University, Taiwan)
pp. 4957-4962

Optimization of Wireless Access Point Placement in Realistic Urban Heterogeneous Networks

Yicheng Lin (University of Toronto, Canada); Wei Yu (University of Toronto, Canada); Yves Lestanlen (SIRADEL & University of Toronto, Canada)
pp. 4963-4968

Energy-Efficient Scheduling for Wireless Communication

Kuhn-Chang Lin (National Chiao Tung University, Taiwan); Jiun-You Lai (Industrial Technology Research Institute, Taiwan); Yu Ted Su (National Chiao Tung University, Taiwan)
pp. 4969-4974

Q-Learning Cell Selection for Femtocell Networks: Single- and Multi-User Case

Chaima Dahri (Keio University, Japan); Tomoaki Ohtsuki (Keio University, Japan)
pp. 4975-4980

WC27: SC-FDMA and SC-FDE

BER Analysis for MMSE-FDE-Based Interleaved SC-FDMA Systems Over Nakagami-m Fading Channels

Miaowen Wen (Peking University, P.R. China); Xiang Cheng (Peking University, P.R. China); Zhongshan Zhang (University of Science and Technology Beijing (USTB), P.R. China); Xiaohui Duan (Peking University, P.R. China); Bingli Jiao (Peking University, P.R. China)
pp. 4981-4986

Joint Transceiver Design for MIMO Relay Systems Employing SC-FDE

Peiran Wu (University of British Columbia, Canada); Robert Schober (University of British Columbia, Canada); Vijay Bhargava (University of British Columbia, Canada)
pp. 4987-4992

Multiuser Pairing and Resource Allocation with Interference Avoidance for SC-FDMA Cellular Systems

Jiancun Fan (Xi'an Jiaotong University, P.R. China); Geoffrey Li (Georgia Tech, USA); Qinye Yin (Xi'an jiaotong university, P.R. China); Liangliang Li (Huawei Shanghai Research Institute, P.R. China)
pp. 4993-4997

D.C. Programming for Cooperative Beamforming in SC-FDMA Multi-User Multi-Relay Networks

Ha H Kha (University of Technology Sydney, Australia); Hoang D. Tuan (University of Technology, Sydney, Australia); Ha Nguyen (University of Saskatchewan, Canada); Tung T. Pham (University of Saskatchewan, Canada)
pp. 4998-5003

Offset Modulated Single-Carrier FDMA with Flexible Users' Bandwidth

Wenjin Wang (University of Reading, United Kingdom); Xiqi Gao (Southeast University, P.R. China); Fu-Chun Zheng (The University of Reading, United Kingdom)
pp. 5004-5009

A Projection Based Approach for Radar and Telecommunication Systems Coexistence

Shabnam Sodagari (Virginia Tech, USA); Awais Khawar (University of Maryland, USA); T. Charles Clancy (Virginia Tech, USA); Robert McGwier (Virginia Tech & AMSAT, Inc. and Flex Radio System, Inc., USA)
pp. 5010-5014

WC28: Wireless Channels and Propagation

Propagation Measurements and Analysis of Fading Behavior for High Speed Rail Cutting Scenarios

Ruisi He (Beijing Jiaotong University, P.R. China); 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); Yaoqing (Lamar) Yang (University of Nebraska-Lincoln, USA)
pp. 5015-5020

A Hybrid Propagation Model for Large-scale Variations Caused by Vehicular Traffic in Small Cells

Laurent Mavel (CITI Laboratory & SIRADEL, France); Yves Lostanlen (SIRADEL & University of Toronto, Canada); Jean-Marie Gorce (INSA-Lyon, France)
pp. 5021-5026

A Raytracing Model for Wireless Propagation in Tunnels with Varying Cross Section

Camillo Gentile (NIST, USA); Fabien Valoit (National Institute of Standards and Technology, USA); Nader Moayeri (NIST, USA)
pp. 5027-5032

A New Path Loss Modeling Approach for In-Building Wireless Networks

Aliye Ozge Kaya (Bell Labs, Alcatel-Lucent, USA); Larry J. Greenstein (Rutgers University, USA)
pp. 5033-5037

Time-Variant Channel Modeling with Application to Mobile Radio Based Positioning

Wei Wang (German Aerospace Center (DLR), Germany); Jost Thomas (German Aerospace Center (DLR), Germany); Uwe-Carsten G. Fiebig (German Aerospace Center (DLR), Germany); Wolfgang Koch (University of Erlangen, Germany)
pp. 5038-5043

WC29: Interference Management II

Transceiver Design Based on Interference Alignment for MIMO Interfering Broadcast Channels

Hyun-Ho Lee (Korea University, Korea); Myeong-Jin Kim (Korea University, Korea); Young-Chai Ko (Korea University, Korea)
pp. 5044-5049

Interference Mitigation via Power Control under the One-Power-Zone Constraint

Hayssam Dahrouj (University of Toronto, Canada); Wei Yu (University of Toronto, Canada); Jerry Chow (BlinQ Networks Inc., Canada); Radu Selea (BlinQ Networks Inc., Canada)
pp. 5050-5055

Interference-Avoidance Pilot Design using ZCZ Sequences for Multi-Cell MIMO-OFDM Systems

Rongqing Zhang (Peking University, P.R. China); Xiang Cheng (Peking University, P.R. China); Meng Ma (Peking University, P.R. China); Bingli Jiao (Peking University, P.R. China)
pp. 5056-5061

Traffic-based Dynamic Spectrum Management for Inter-cell Interference Coordination in LTE Networks

Hongcheng Zhuang (Huawei Technologies Co., Ltd, P.R. China); Zezhou Luo (Huawei Technologies Co., Ltd, P.R. China); Mikhail Pikhletsy (Huawei Technologies, Russia); Dmitri Shmelkin. (Huawei Technologies, Russia); Farid Khafizov (Huawei Technologies, P.R. China)
pp. 5062-5067

Novel Macro- and Femtocell Interference Mitigation in OFDMA Wireless System

Gang Ning (Xidian University, P.R. China); Qinghai Yang (Xidian University, P.R. China); Kyung Sup Kwak (Inha University, Korea); Lajos Hanzo (University of Southampton, United Kingdom)
pp. 5068-5073

WC30: Random Access Networks

Dynamic Contention Window Adjustment Scheme for Improving Throughput and Fairness in IEEE 802.11 Wireless LANs

Qin Yu (University of Electronic Science and Technology of China, P.R. China); Yiqun Zhuang (University of Electronic Science and Technology of China, P.R. China); Lixiang Ma (University of Electronic Science and Technology of China, P.R. China)
pp. 5074-5080

Capacity in Arbitrary Wireless Ad Hoc Networks with MIMO and Power Constraint

Jian Li (Shanghai Jiao Tong University, P.R. China); Jinbei Zhang (Shanghai Jiaotong University, P.R. China); Luoyi Fu (Shanghai Jiao Tong University, P.R. China); Xinbing Wang (Shanghai Jiaotong University, P.R. China); Xiaohua Tian (Shanghai Jiaotong University, P.R. China)
pp. 5081-5086

Acknowledgement-Aware MPR MAC Protocol for Distributed WLANs: Design and Analysis

Arpan Mukhopadhyay (University of Waterloo, Canada); Neelesh B. Mehta (Indian Institute of Science, India); Vikram Srinivasan (Bell Labs Research India, India)
pp. 5087-5092

Towards Collisions: An Enhanced Successive Interference Cancellation With Asynchronism

Qiang Li (Huazhong University of Science and Technology, P.R. China); See Ho Ting (Nanyang Technological University, Singapore); Mehul Motani (National University of Singapore, Singapore); Ashish Pandharipande (Philips Research Laboratories, The Netherlands)
pp. 5093-5098

On the Collision Model of Multi-Packet Wireless Networks Realized by Spatial Reuse

Fulvio Babich (University of Trieste, Italy); Massimiliano Comisso (University of Trieste, Italy)
pp. 5099-5104

Cross-Layer Collision-Tolerant MAC with Message Passing Detection

Jingxian Wu (University of Arkansas, USA); Guoqing Zhou (University of Arkansas, USA)
pp. 5105-5109

GC12 WN: Globecom 2012 - Wireless Networking Symposium - Program

WN01: Femto-cell Networks

So near, and yet so far: Managing 'far-away' interferers in dense femto-cell networks

Huiguang Liang (Carnegie Mellon University, USA); Hyong Kim (Carnegie Mellon University, USA); Wai-Leong Yeow (Docomo Labs USA & Institute for Infocomm Research, USA); Hwee Pink Tan (Institute for Infocomm Research, Singapore)
pp. 5110-5115

QoS-based Power Control and Resource Allocation in OFDMA Femtocell Networks

Abbas Antoun Hatoum (UPMC, France); Rami Langar (UPMC - University of Paris 6, France); Nadjib Aitsaadi (University of Paris-Est Creteil - UPEC, France); Raouf Boutaba (University of Waterloo, Canada); Guy Pujolle (University Pierre et Marie Curie - Paris 6, France)
pp. 5116-5122

Load Balancing in Open Access Femtocell Based Two-Tier Cellular Networks

Dongmyoung Kim (Seoul National University, Korea); Sunghyun Choi (Seoul National University, Korea)
pp. 5123-5129

Prediction Handover Trigger Scheme for Reducing Handover Latency in Two-tier Femtocell Networks

Hongjia Li (Institute of Acoustics, Chinese Academy of Sciences & Beijing University of Posts and Telecommunications, P.R. China); Song Ci (University of Nebraska-Lincoln, USA); Zejue Wang (Institute of Acoustics, Chinese Academy of Sciences, P.R. China)
pp. 5130-5135

LOGA: Local Grouping Architecture for Self-Healing Femtocell Networks

Wei Wang (Hong Kong University of Science and Technology, Hong Kong); Jin Zhang (Hong Kong University of Science and Technology, P.R. China); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong)
pp. 5136-5141

A Complete Femtocell Network Modeling and Development Platform

Elias Chavarria Reyes (Georgia Institute of Technology, USA); David M Gutierrez-Estevez (Georgia Institute of Technology, USA); Ian F. Akyildiz (Georgia Institute of Technology, USA)
pp. 5142-5147

WN02: Smart Grid Communications

Decentralized Inverter Control in Microgrids Based on Power Sharing Information through Wireless Communications

Hao Liang (University of Waterloo, Canada); Bong Jun Choi (The State University of New York (SUNY) Korea & Stony Brook University, Korea); Weihua Zhuang (University of Waterloo, Canada); Sherman Shen (University of Waterloo, Canada)
pp. 5148-5153

A Novel Demand Control Policy for Improving Quality of Power Usage in Smart Grid

Mostafa M. Fouad (Tohoku University, Japan); Zubair Md. Fadlullah (Tohoku University, Japan); Nei Kato (Tohoku University, Japan); Akira Takeuchi (NTT Energy and Environment Systems Laboratories, Japan); Yousuke Nozaki (NTT, Japan)
pp. 5154-5159

Adaptive Electricity Scheduling with Quality of Usage Guarantees in Microgrids

Yingsong Huang (Auburn University, USA); Shiwen Mao (Auburn University, USA)
pp. 5160-5165

Cognitive Transmission based on Data Priority Classification in WSNs for Smart Grid

Chunhua Qian (Shanghai Jiao Tong University, P.R. China); Zhe Luo (Shanghai Jiao Tong University, P.R. China); Xiaohua Tian (Shanghai Jiaotong University, P.R. China); Xinbing Wang (Shanghai Jiaotong University, P.R. China); Mohsen Guizani (QU, USA)
pp. 5166-5171

Traffic Scheduling for Smart Grid in Rural Areas with Cognitive Radios

Jiazen Zhou (University of Wisconsin - Whitewater, USA); Rose Qingyang Hu (Utah State University, USA); Yi Qian (University of Nebraska-Lincoln, USA)
pp. 5172-5176

WN03: Cellular Networks I**Regularity-Based Wireless Subscriber Population Estimation**

Sara Motahari (Sprint, USA); Kosol Jintaseranee (Sprint, USA); Phyllis Reuther (Sprint, USA); Hui Zang (Sprint, USA)
pp. 5177-5182

Statistical Analysis of COB-based Location Estimation in Cellular Mobile Radio Systems

Nejla Ghaboosi (University of Sydney, Australia); Abbas Jamalipour (University of Sydney, Australia)
pp. 5183-5188

Optimizing Cell Size for Energy Saving in Cellular Networks with Hybrid Energy Supplies

Tao Han (New Jersey Institute of Tech, USA); Nirwan Ansari (NJIT, USA)
pp. 5189-5193

Decentralized Energy-Efficient Base Station Operation for Green Cellular Networks

Wei-Te Wong (National Taiwan University, Taiwan); Ya-Ju Yu (Academia Sinica, Taiwan); Ai-Chun Pang (National Taiwan University, Taiwan)
pp. 5194-5200

Dynamic Operation of Base Stations in Green Wireless Cellular Networks Powered by the Smart Grid

Shengrong Bu (Carleton University, Canada); F. Richard Yu (Carleton University, Canada); Yegui Cai (Carleton University, Canada); Peter Liu (Carleton University, Canada)
pp. 5201-5205

WN04: 802.11 Wireless Networks**Receiver Design for Realizing On-Demand WiFi Wake-up using WLAN Signals**

Hiroyuki Yomo (Kansai University & Aalborg University, Japan); Yoshihisa Kondo (ATR Adaptive Communications Research Lab., Japan); Noboru Miyamoto (Kansai University, Japan); Suhua Tang (ATR Adaptive Communications Research Laboratories, Japan); Masahito Iwai (NEC Communication Systems, Ltd., Japan); Tetsuya Ito (NEC Communication Systems, Ltd., Japan)
pp. 5206-5211

Markov Chain Performance Model for IEEE 802.11 Devices with Energy Harvesting Source

Ger Yang (National Taiwan University, Taiwan); Guan-Yu Lin (National Taiwan University, Taiwan); Hung-Yu Wei (National Taiwan University, Taiwan)
pp. 5212-5217

Collision Detection in IEEE 802.11 Networks by Error Vector Magnitude Analysis

Muhammad Aman (Rensselaer Polytechnic Institute, USA); Wai Chan (Rensselaer Polytechnic Institute, USA); Biplab Sikdar (Rensselaer Polytechnic Institute, USA)
pp. 5218-5223

Averting Speed Inefficiency in Rate-Diverse WiFi Networks through Queueing and Aggregation

Martín Zubeldía (Universidad ORT Uruguay, Uruguay); Andres Ferragut (Universidad ORT Uruguay, Uruguay); Fernando Paganini (Universidad ORT, Uruguay)
pp. 5224-5230

DeepSleep: IEEE 802.11 Enhancement for Energy-Harvesting Machine-to-Machine Communications

Hsiang-Ho Lin (National Taiwan University, Taiwan); Hung-Yu Wei (National Taiwan University, Taiwan); Rath Vannithamby (Intel, USA)
pp. 5231-5236

WN05: Handover and Mobility Management

Playout-Buffer Aware Hand-Off Control for Wireless Video Streaming

Lawrence Chow (Stanford University, USA); Bradley Collins (Stanford University, USA); Nicholas Bambos (Stanford University, USA); Christoph Peylo (Deutsche Telekom Laboratories, Germany); Hans Joachim Einsiedler (Deutsche Telekom, Berlin, Germany); Nico Bayer (Deutsche Telekom Laboratories, Germany); Peter Dely (Karlstad University, Sweden); Andreas J. Kassler (Karlstad University, Sweden)
pp. 5237-5242

Joint Utility Optimization Based Vertical Handoff Algorithm in Heterogeneous Network

Ruijie Yin (Chongqing University of Posts and Telecommunications, P.R. China); Rong Chai (Chongqing University of Posts and Telecommunications, P.R. China); Qian-bin Chen (Chongqing university of Posts and telecommunications, P.R. China)
pp. 5243-5248

Effect of Call Dynamics of a Multiservice Multimode Terminal on RAT Selection in Heterogeneous Wireless Networks

Olabisi Emmanuel Falowo (University of Cape Town, South Africa); H Anthony Chan (Huawei Technologies, USA)
pp. 5249-5253

Distributed Mobility Management Scheme with Mobility Routing Function at the Gateways

Petro Pesha Ernest (University of Cape Town, South Africa); H Anthony Chan (Huawei Technologies, USA); Olabisi Emmanuel Falowo (University of Cape Town, South Africa)
pp. 5254-5259

Performance Comparison between Multihomed Network Mobility Protocols

Md Shohrab Hossain (University of Oklahoma, USA); Mohammed Atiquzzaman (University of Oklahoma, USA); William D. Ivancic (NASA Glenn Research Center, USA)
pp. 5260-5265

Cost and Efficiency Analysis of Hierarchical SIGMA

Md Shohrab Hossain (University of Oklahoma, USA); Mohammed Atiquzzaman (University of Oklahoma, USA); William D. Ivancic (NASA Glenn Research Center, USA)
pp. 5266-5271

WN06: Delay Tolerant Networks

Modeling Opportunistic Data Delivery in Dynamic Wireless Networks

Mary R Schurgot (LGS Bell Labs Innovations, USA); Cristina Comaniciu (Stevens Institute of Technology, USA); Katia Jaffrèrs-Runser (University of Toulouse, France)
pp. 5272-5278

Incentive Driven Information Sharing in Delay Tolerant Mobile Networks

Yan Wang (Stevens Institute of Technology, USA); Mooi Choo Chuah (Lehigh University, USA); Yingying Chen (Stevens Institute of Technology, USA)
pp. 5279-5284

A Novel Bargaining based Incentive Protocol for Opportunistic Networks

Yun Li (ChongQing University of Posts and Telecommunications of China, P.R. China); Jihong Yu (CQUPT, P.R. China); Chonggang Wang (InterDigital Communications, USA); Qilie Liu (Chongqing University of Posts and Telecommunications, P.R. China); Bin Cao (University of Electronic Science and Technology of China, P.R. China); Mahmoud Daneshmand (AT&T, USA)
pp. 5285-5289

Routing with Multi-Level Social Groups in Mobile Opportunistic Networks

Lunan Zhao (Beijing Institute of Technology, USA); Fan Li (Beijing Institute of Technology, P.R. China); Chao Zhang (Beijing Institute of Technology, P.R. China); Yu Wang (University of North Carolina at Charlotte, USA)
pp. 5290-5295

Topology Design in Time-Evolving Delay-Tolerant Networks with Unreliable Links

Minsu Huang (University of North Carolina at Charlotte, USA); Siyuan Chen (University of North Carolina at Charlotte, USA); Fan Li (Beijing Institute of Technology, P.R. China); Yu Wang (University of North Carolina at Charlotte, USA)
pp. 5296-5301

Constructing Time-Varying Contact Graphs for Heterogeneous Delay Tolerant Networks

Xiaoyan Hong (University of Alabama, USA); Bo Gu (University of Alabama, USA); Yuguang Zeng (University of Alabama, USA); Jingyuan Zhang (University of Alabama, USA)
pp. 5302-5307

WN07: 802.16 and LTE Networks***Unified Handover Authentication between Heterogeneous Access Systems in LTE Networks***

Jin Cao (Xidian University, P.R. China); Maode Ma (Nanyang Technological University, Singapore); Hui Li (Xidian University, P.R. China)
pp. 5308-5313

On the Energy Efficiency of Self-Organizing LTE Cellular Access Networks

Md. Farhad Hossain (The University of Sydney, Australia); Kumudu S Munasinghe (University of Sydney, Australia); Abbas Jamalipour (University of Sydney, Australia)
pp. 5314-5319

A Fairness-Based Preemption Algorithm for LTE-Advanced

Mehdi Khabazian (Qatar Mobility Innovations Center (QMIC) & INRS-EMT, University of Quebec, Qatar); Osama Kubbar (QU Wireless Innovation Centre & Senior IEEE Member, Qatar); Hossam S. Hassanein (Queen's University, Canada)
pp. 5320-5325

Performance Evaluation of a Coordinated Time-Domain eICIC Framework based on ABSF in Heterogeneous LTE-Advanced Networks

Mahmoud I Kamel (Cairo University, Egypt); Khaled Elsayed (Cairo University, Egypt)
pp. 5326-5331

Adaptive CAC for SVC Video Traffic in IEEE 802.16 Networks

Marwen Abdennabi (L2TI Laboratory, University of Paris Nord, France); Yacine Ghamri-Doudane (ENSIIE & Université Paris-Est (LIGM Lab), France)
pp. 5332-5338

On Interference Alignment in Multi-user OFDM Systems

Yi Xu (Auburn University, USA); Shiwen Mao (Auburn University, USA)
pp. 5339-5344

WN08: Wireless Sensor Network Design***Fault-tolerant Scheduling for Data Collection in Wireless Sensor Networks***

Liang Zhang (The Hong Kong Polytechnic University, Hong Kong); Qiang Ye (University of Prince Edward Island, Canada); Jie Cheng (University of Prince Edward Island, Canada); Hongbo Jiang (Huazhong University of Science and Technology, P.R. China); Wang Yake (Huazhong University of Science and Technology & Electronic and Information Department, P.R. China); Rui Zhou (University of Prince Edward Island, Canada); Peng Zhao (Ericsson, USA)
pp. 5345-5349

OWER-MDG: A Novel Energy Replenishment and Data Gathering Mechanism in Wireless Rechargeable Sensor Networks

Ji Li (Stony Brook University, USA); Miao Zhao (Multimedia Networking Research Lab of Huawei Technologies, USA); Yuanyuan Yang (Stony Brook University, USA)
pp. 5350-5355

An Efficient and Sustainable Self-healing Protocol for Unattended Wireless Sensor Networks

Juan Chen (Harbin Institute of Technology, P.R. China); Hongli Zhang (Harbin Institute of Technology, P.R. China); Fang Binxing (Institute of Computing Technology Chinese Academy of

Sciences, P.R. China); Xiaojiang Du (Temple University, USA); Haining Yu (Harbin Institute of Technology, P.R. China); Xiangzhan Yu (Harbin Institute of Technology, P.R. China)
pp. 5356-5361

Aggregating User Rating and Service Context for WSN Service Ranking

Jun Lei (Institute of Acoustics, Chinese Academy of Sciences, P.R. China); Wenjia Niu (Institute Of Acoustics, Chinese Academy Of Sciences, P.R. China); Yifang Qin (Chinese Academy of Sciences, P.R. China); Hui Tang (IOA, Chinese Academy of Sciences, USA); Song Ci (University of Nebraska-Lincoln, USA)
pp. 5362-5367

Exploiting timing channel in intra-body sensor networks

Laura Galluccio (DIEEI, Italy); Giacomo Morabito (University of Catania, Italy); Sergio Palazzo (University of Catania, Italy)
pp. 5368-5373

Gaussian Distributed Deployment of Relay Nodes for Wireless Visual Sensor Networks

Hailong Li (University of Cincinnati, USA); Vaibhav Pandit (University of Cincinnati, USA); Dharma P Agrawal (University of Cincinnati, USA)
pp. 5374-5379

P-WN18: Topics in Wireless Networking (Poster)

MIMO Communications Based on Molecular Diffusion

Ling-San Meng (National Taiwan University, Taiwan); Ping-Cheng Yeh (National Taiwan University, Taiwan); Kwang-Cheng Chen (National Taiwan University, Taiwan); Ian F. Akyildiz (Georgia Institute of Technology, USA)
pp. 5380-5385

Compressive Sensing with Optimal Sparsifying Basis and Applications in Spectrum Sensing

Youngjune L Gwon (Harvard University, USA); Ht Kung (Harvard University, USA); Dario Vlah (Harvard University, USA)
pp. 5386-5391

Spatial Reuse Strategy in mmWave WPANs with Directional Antennas

Qian Chen (Institute for Infocomm Research, Singapore); Xiaoming Peng (Institute for InfoComm Research, Singapore); Juan Yang (National Mobile Communications Research Laboratory, Southeast University, P.R. China); Francois Chin (Institue for InfoComm Research, Singapore)
pp. 5392-5397

Two-Tier WBAN/WLAN Healthcare Networks; Priority Considerations

Saeed Rashwand (University of Manitoba, Canada); Jelena Mišić (Ryerson University, Canada)
pp. 5398-5403

Metropolitan-Scale Taxicab Mobility Modeling

Lei Zhang (University of Victoria, Canada); Maryam Ahmadi (University of Victoria, Canada); Jianping Pan (University of Victoria, Canada); Le Chang (University of Victoria, Canada)
pp. 5404-5409

Extracting Typical Users' Moving Patterns Using Deep Learning

Nam Tuan Nguyen (University of Houston, USA); Yichuan Wang (University of California, Davis, USA); Husheng Li (University of Tennessee, USA); Xin Liu (UC Davis, USA); Zhu Han (University of Houston, USA)
pp. 5410-5414

An Information Theoretic Location Verification System for Wireless Networks

Shihao Yan (The University of New South Wales, Australia); Robert Malaney (University of New South Wales, Australia); Ido Nevat (CSIRO, Australia); Gareth Peters (Australia & University of NSW, Australia)
pp. 5415-5420

Finite State Markov Modelling for High Speed Railway Wireless Communication Channel

Siyu Lin (Beijing Jiaotong University & University of Victoria, P.R. China); Zhangdui Zhong (Beijing Jiaotong University, P.R. China); Lin Cai (University of Victoria, Canada); Yuanqian Luo (University of Victoria, Canada)
pp. 5421-5426

Spectrum Broker by Geo-location Database

Yuan Luo (The Chinese University of Hong Kong, Hong Kong); Lin Gao (The Chinese University of Hong Kong, Hong Kong); Jianwei Huang (The Chinese University of Hong Kong, Hong Kong)
pp. 5427-5432

WN09: Cellular Networks II**Fundamentals of Mobility in Cellular Networks: Modeling and Analysis**

Xingqin Lin (The University of Texas at Austin, USA); Radha Krishna Ganti (Indian Institute of Technology Madras, India); Philip J Fleming (Nokia Siemens Networks USA, USA); Jeffrey Andrews (The University of Texas at Austin, USA)
pp. 5433-5438

Improving Soft Frequency Reuse for Realistic OFDMA-based Cellular Deployments

David González G (Universitat Politècnica de Catalunya, Spain); Mario Garcia-Lozano (Universitat Politècnica de Catalunya, Spain); Silvia Ruiz Boqué (UPC, Spain); DongSeop Lee (International Center for Numerical Methods in Engineering & Deloitte Consulting - Korea, Spain)
pp. 5439-5445

Dynamic Inter-Cell Interference Coordination in HetNets: A Reinforcement Learning Approach

Meryem Simsek (University of Duisburg-Essen, Germany); Mehdi Bennis (Centre of Wireless Communications, University of Oulu, Finland); Andreas Czylwik (Universität Duisburg-Essen, Germany)
pp. 5446-5450

Fair Resource Allocation for Device-to-Device Communications in Wireless Cellular Networks

Long Bao Le (INRS, University of Quebec, Canada)
pp. 5451-5456

A Proportional Fair Radio Resource Allocation for Heterogeneous Cellular Networks with Relays

Qian (Clara) Li (Intel Corporation, P.R. China); Rose Qingyang Hu (Utah State University, USA); Yi Qian (University of Nebraska-Lincoln, USA); Geng Wu (Intel Corporation, USA)
pp. 5457-5463

Robust Multicasting in Micro Base Station Aided Wireless Cellular Networks

Izhak Rubin (University of California at Los Angeles, USA); Hung-Bin Chang (University of California, Los Angeles, USA); Reuven Cohen (Technion, Israel)
pp. 5464-5469

WN10: Medium Access Control**Compressive Sensing Medium Access Control for Wireless LANs**

Tsung-Han Lin (Harvard University, USA); Ht Kung (Harvard University, USA)
pp. 5470-5475

Lifetime Extended Cooperative MAC Protocol for Wireless LANs

Jing Liu (Shanghai Jiao Tong University, P.R. China); Wenlin Wang (Shanghai Jiao Tong University, P.R. China); Zhongming Zheng (University of Waterloo, Canada); Xiaoxia Zhang (University of Waterloo, Canada); Chen Chen (Samsung Telecom R&D Center, Korea); Sherman Shen (University of Waterloo, Canada)
pp. 5476-5481

Performance Analysis of Cooperative ADHOC MAC for Vehicular Networks

Sailesh Bharati (University of Waterloo & Broadband Communications Research (BBCR) Group, Canada); Weihua Zhuang (University of Waterloo, Canada)
pp. 5482-5487

A Novel Collision Probability based Adaptive Contention Windows Adjustment for QoS fairness on Ad Hoc Wireless network

Hengheng Xie (Paradise Research Lab, Canada); Azzedine Boukerche (University of Ottawa, Canada); Richard W. Pazzi (University of Ontario Institute of Technology, Canada)
pp. 5488-5493

Retransmission Rate Selection for Block-based Partial Packet Recovery

Haonan Lu (Florida State University, USA); Shuaiyuan Zhou (Florida State University, USA); Zhenghao Zhang (Florida State University, USA)
pp. 5494-5499

Prototyping of Time-Division Unbalanced Carrier Sense Multiple Access and First Experiments

Andrea Vesco (Istituto Superiore Mario Boella, Italy); Gian Marco Toso (Istituto Superiore Mario Boella, Italy); Riccardo M. Scopigno (Istituto Superiore Mario Boella, Italy)
pp. 5500-5505

WN11: Power Control and Resource Management***Optimal Transmission Power Control in the Presence of a Smart Jammer***

Dejun Yang (Arizona State University, USA); Jin Zhang (Google, USA); Xi Fang (Arizona State University, USA); Andrea Richa (Arizona State University, USA); Guoliang Xue (Arizona State University, USA)
pp. 5506-5511

Joint Optimization of Cluster Formation and Power Control for Interference-Limited Machine-to-Machine Communications

Shih-En Wei (National Taiwan University, Taiwan); Hung-Yun Hsieh (National Taiwan University, Taiwan); Hsuan-Jung Su (National Taiwan University, Taiwan)
pp. 5512-5518

Joint Power Control and Scheduling for Minimizing Broadcast Delay in Wireless Mesh Networks

Yanan Chang (City University of Hong Kong, Hong Kong); Qin Liu (Wuhan University, P.R. China); Xiaohua Jia (City University of Hong Kong, Hong Kong); Xing Tang (City University of Hong Kong, Hong Kong); Kunxiao Zhou (City University of Hong Kong, Hong Kong)
pp. 5519-5524

Joint Handoff and Resource Management for Throughput Fairness in a Wireless Mesh Network

Lei Qin (McMaster University, Canada); Yang Yang (McMaster University, Canada); Dongmei Zhao (McMaster University, Canada)
pp. 5525-5530

Shadow Chasing Enhancement in Resource Allocation For Heterogeneous Networks

Ahmed Elsherif (University of California, Davis, USA); Zhi Ding (University of California at Davis, USA); Xin Liu (UC Davis, USA); Jyri Hämäläinen (Aalto University, Finland)
pp. 5531-5536

Not Every Bit Counts: A Resource Allocation Problem for Data Gathering in Machine-to-Machine Communications

Chih-Hua Chang (National Taiwan University, Taiwan); Hung-Yun Hsieh (National Taiwan University, Taiwan)
pp. 5537-5543

WN12: Vehicular Networks***Modeling of Intervehicle Communication***

Youngmin Jeong (Kyung Hee University, Korea); Jo Woon Chong (Massachusetts Institute of Technology, USA); Hyundong Shin (Kyung Hee University, Korea); Moe Win (Massachusetts Institute of Technology, USA)
pp. 5544-5549

The Latency of Gaining alpha-Reliability for Message Dissemination in Vehicle-to-Vehicle Networks

Yujin Li (North Carolina State University, USA); Wenye Wang (NC State University, USA); Alexandra Duel-Hallen (North Carolina State University, USA)
pp. 5550-5555

Scheduling of Connected Autonomous Vehicles on Highway Lanes

Jiajun Hu (Shanghai Jiao Tong University, P.R. China); Linghe Kong (Shanghai Jiao Tong University, P.R. China); Wei Shu (The University of New Mexico, USA); Min-You Wu (Shanghai JiaoTong University, P.R. China)
pp. 5556-5561

A Cooperative Message Authentication Protocol in VANETs

Yong Hao (Illinois Institute of Technology, USA); Tingting Han (Illinois Institute of Technology, USA); Yu Cheng (Illinois Institute of Technology, USA)
pp. 5562-5566

Enabling Relay-aided IP Communications in 802.11p/WAVE Networks

Sandra Céspedes (Icesi University & University of Waterloo, Colombia); Sherman Shen (University of Waterloo, Canada)
pp. 5567-5572

Improving Highway Traffic through Partial Velocity Synchronization

Markus Forster (University of Luxembourg, Luxemburg); Raphael Frank (University of Luxembourg, Luxemburg); Mario Gerla (University of California at Los Angeles, USA); Thomas Engel (University of Luxembourg, Luxemburg)
pp. 5573-5578

WN13: Cognitive Networking

Exploring Frequency Diversity with Interference Alignment in Cognitive Radio Networks

Youwen Yi (Huawei Technologies CO., LTD., P.R. China); Jin Zhang (Hong Kong University of Science and Technology, P.R. China); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong); Tao Jiang (Huazhong University of Science and Technology, P.R. China)
pp. 5579-5583

Efficient Spectrum Utilization with Selfish Secondary Users in Cognitive Radio Networks

Gaofei Sun (Shanghai Jiao Tong University, P.R. China); Youyun Xu (Shanghai Jiaotong University, P.R. China); Xinxin Feng (Shanghai Jiao Tong University, P.R. China); Xinbing Wang (Shanghai Jiaotong University, P.R. China); Yu Cheng (Illinois Institute of Technology, USA)
pp. 5584-5589

Network Coding-aware Channel Allocation and Routing in Cognitive Radio Networks

Zhihui Shu (University of Nebraska-Lincoln, USA); Jiazhen Zhou (University of Wisconsin - Whitewater, USA); Yaoqing (Lamar) Yang (University of Nebraska-Lincoln, USA); Hamid Sharif (University of Nebraska-Lincoln, USA); Yi Qian (University of Nebraska-Lincoln, USA)
pp. 5590-5595

Constructing Backbone of a Multi-hop Cognitive Radio Network with Channel Bonding

Feng Ye (University of Nebraska-Lincoln, USA); Jiazhen Zhou (University of Wisconsin - Whitewater, USA); Yaoqing (Lamar) Yang (University of Nebraska-Lincoln, USA); Hamid Sharif (University of Nebraska-Lincoln, USA); Yi Qian (University of Nebraska-Lincoln, USA)
pp. 5596-5601

Service Response time of Elastic Data Traffic in Cognitive Radio Networks with SPT Service Discipline

Subodha Gunawardena (University of Waterloo, Canada); Weihua Zhuang (University of Waterloo, Canada)
pp. 5602-5607

Singleton Spectrum Mobility Games With Incomplete Information

Qingkai Liang (Shanghai Jiao Tong University, P.R. China); Xinbing Wang (Shanghai Jiaotong University, P.R. China); Zhiyong Feng (Beijing University of Posts and Telecommunications, P.R. China)
pp. 5608-5613

WN14: Network Coding

HopCaster: A Network Coding-Based Hop-by-Hop Reliable Multicast Protocol

Rami Halloush (Michigan State University, USA); Hang Liu (InterDigital Communications, USA); Lijun Dong (InterDigital, USA); Mingquan Wu (Huawei Technologies, USA); Hayder Radha (Michigan State University, USA)
pp. 5614-5620

Adaptive Scheduling for Multicasting Hard Deadline Constrained Prioritized Data via Network Coding

Tuan T. Tran (University of Louisville, USA); Hongxiang Li (University of Louisville, USA); Weiyao Lin (Shanghai Jiao Tong University, P.R. China); Lingjia Liu (University of Kansas, USA); Samee U. Khan (North Dakota State University, USA)
pp. 5621-5626

Greedy Strategy for Network Coding Based Reliable Broadcast in Wireless Mesh Networks

Xiaobin Tan (University of Science and Technology of China, P.R. China); Hao Yue (University of Florida, USA); Yuguang Fang (University of Florida, USA); Wenfei Cheng (University of Science and Technology of China, P.R. China)
pp. 5627-5632

Clustering Based Space-Time Network Coding

Wei Guan (University of Maryland, College Park, USA); K. J. Ray Liu (University of Maryland, USA)
pp. 5633-5638

Efficient Scheduling Scheme for Multi-Way Relay Systems with Physical-Layer Network-Coding

Kun Yan (Gulin University of Electrical Technology, P.R. China); Hsiao-Chun Wu (Louisiana State University, USA); Xiangli Zhang (Gulin University of Electronic Technology, P.R. China); Tiansong Li (Gulin University of Electronic Technology, P.R. China); Haiyan Zhou (Gulin University of Electronic Technology, P.R. China)
pp. 5639-5643

Mitigating the Impact of Asynchronous ACKs on the Performance of Opportunistic Network Coding

Qinglong Liu (University of Electronic Science and Technology of China, P.R. China); Gang Feng (University of Electronic Science and Technology of China, P.R. China)
pp. 5644-5649

WN15: Wireless Relay Networks

Employing Coded Relay in Multi-hop Wireless Networks

Zhenghao Zhang (Florida State University, USA); Wei Hu (Florida State University, USA); Jin Xie (Florida State University, USA)
pp. 5650-5656

Power Allocation/Beamforming for DF MIMO Two-Way Relaying: Relay and Network Optimization

Jie Gao (University of Alberta, Canada); Jianshu Zhang (Ilmenau University of Technology, Germany); Sergiy A. Vorobyov (University of Alberta, Canada); Hai Jiang (University of Alberta, Canada); Martin Haardt (Ilmenau University of Technology, Germany)
pp. 5657-5662

A Novel Multi-Objective Relay-Jammer Pair Selection Scheme in Wireless Cooperative Networks

Li Wang (Beijing University of Posts and Telecommunications, P.R. China); Xi Zhang (Texas A&M University, ECE Department, USA); Mei Song (, P.R. China); Tenghui Ke (Beijing University of Posts and Telecommunications, P.R. China)
pp. 5663-5668

Reducing End-to-End Distortion in Noisy Wireless Relay Networks

James Ho (University of Waterloo, Canada); Pin-Han Ho (University of Waterloo, Canada)
pp. 5669-5674

All-to-All Throughput Maximization in Wireless Relay Networks with Multiple Packet Reception

Deze Zeng (School of Computer Science and Engineering, The University of Aizu & School of Computer Science and Engineering, Huazhong University of Science and Technology, Japan); Song Guo (The University of Aizu, Japan); Mohsen Guizani (QU, USA); Baoliu Ye (Nanjing University, P.R. China)
pp. 5675-5680

A Resource Allocation Algorithm for SVC Multicast over Wireless Relay Networks based on Cascaded Coverage Problem

Hao Zhou (University of Science and Technology of China, P.R. China); Yusheng Ji (National Institute of Informatics, Japan); Yu Gu (National Institute of Informatics, Japan); Baohua Zhao (, P.R. China)
pp. 5681-5686

WN16: Routing and Multicasting

CPTT: A High-throughput Coding-aware Routing Metric for Multi-hop Wireless Networks

Hao Yue (University of Florida, USA); Xiaoyan Zhu (Xidian University, P.R. China); Chi Zhang (University of Science of Technology of China, USA); Yuguang Fang (University of Florida, USA)
pp. 5687-5692

Heat Diffusion Algorithm for Resource Allocation and Routing in Multihop Wireless Networks

Reza Banirazi (University of Southern California, USA); Edmond Jonckheere (USC, USA); Bhaskar Krishnamachari (University of Southern California, USA)
pp. 5693-5698

Joint Topology Control and Routing Assignment for Wireless Mesh with Directional Antennas

Wangkit Wong (The Hong Kong University of Science and Technology, Hong Kong); Xun Chen (Hong Kong University of Science and Technology, Hong Kong); Fei Long (Hong Kong University of Science and Technology, Hong Kong); Gary Chan (The Hong Kong University of Science and Technology, P.R. China)
pp. 5699-5704

Group Aware Cooperative Routing for Opportunistic Networks under Resource Constraints

Honglong Chen (The Hong Kong Polytechnic University, Hong Kong); Wei Lou (The Hong Kong Polytechnic University, Hong Kong)
pp. 5705-5710

UNCLE: A Unified Unicast and Multicast Label Forwarding Architecture in MANETs

Wen-Kang Jia (National Chiao Tung University, Taiwan); Li-Chun Wang (National Chiao Tung University, Taiwan)
pp. 5711-5716

Transmission Scheduling Based on a New Conflict Graph Model for Multicast in Multihop Wireless Networks

Maggie Cheng (Missouri University of Science and Technology, USA); Quanmin Ye (Missouri University of Science and Technology, USA)
pp. 5717-5722

WN17: Network Performance Optimization

A Novel Cross Layer TCP Optimization Protocol over Wireless Networks by Markov Decision Process

Hengheng Xie (Paradise Research Lab, Canada); Richard W. Pazzi (University of Ontario Institute of Technology, Canada); Azzedine Boukerche (University of Ottawa, Canada)
pp. 5723-5728

Joint Optimization of TCP Congestion Control and Distributed CSMA Scheduling

Xin Wang (Florida Atlantic University, USA); Zhaoquan Li (Florida Atlantic University, USA)
pp. 5729-5733

A Flow Admission Control Scheme for QoS in Wireless Ad Hoc Networks

Yang Qin (HIT Shenzhen Graduate School, P.R. China); Yuanyuan Yang (Stony Brook University, USA); Gwee Choon Lim (Nanyang Technological University, Singapore); Xiang He (HIT Shenzhen Graduate School, P.R. China)
pp. 5734-5739

Improving Throughput by Fine-grained Channel Allocation in Cooperative Wireless Networks

Peng Li (The University of Aizu, Japan); Song Guo (The University of Aizu, Japan); Victor CM Leung (The University of British Columbia, Canada)
pp. 5740-5744

Rate Adaptation Strategy for Video Streaming over Multiple Wireless Access Networks

Min Xing (University of Victoria, Canada); Siyuan Xiang (University of Victoria, Canada); Lin Cai (University of Victoria, Canada)
pp. 5745-5750

Practical Coding-based Multi-hop Reliable Data Transfer for Underwater Acoustic Networks

Haining Mo (University of Connecticut, USA); Zhong Zhou (University of Connecticut, USA); Michael Zuba (University of Connecticut, USA); Zheng Peng (University of Connecticut, USA); Jun-Hong Cui (University of Connecticut, USA); Yantai Shu (Tianjin University, P.R. China)
pp. 5751-5756