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## IT I: Invited Talks I

### ***Security Issues in Network Virtualization for the Future Internet***

Sriram Natarajan (University of Massachusetts, Amherst, USA); Tilman Wolf (University of Massachusetts, USA)  
pp. 537-543

### ***Trust 2.0: Who to Believe in the Flood of Online Data?***

Mozghan Tavakolifard (Norwegian University of Science and Technology, Norway); Kevin C Almeroth (University of California, Santa Barbara, USA)  
pp. 544-550

### ***Surviving in Cyberspace***

Kevin Kwiat (Air Force Research Lab, USA)

### ***Wireless Security and Monitoring System Using Array Antenna: Array Sensor***

Tomoaki Ohtsuki (Keio University, Japan)  
pp. 551-555

## OGN: Optical & Grid Networking

### ***Isolation and Resource Efficiency of Virtual Optical Networks***

Marc De Leenheer (Ghent University & University of California - Davis, USA); Jens Buysse (Ghent University & INTEC, Belgium); Chris Develder (Ghent University - IBBT, Belgium); Biswanath Mukherjee (- University of California Davis, USA)  
pp. 840-844

### ***Experimental Analysis of 10Gbps Transfers Over Physical and Emulated Dedicated Connections***

Bradley W. Settlemyer (Oak Ridge National Laboratory, USA); Nageswara Rao (Oak Ridge National Laboratory, USA); Stephen W. Poole (Oak Ridge National Laboratory, USA); Stephen Hodson (Oak Ridge National Laboratory, USA); Susan Hicks (Oak Ridge National Laboratory, USA); Paul Newman (Oak Ridge National Laboratory, USA)  
pp. 845-850

### ***Asymptotic Analyses for Coherent and Subcarrier Modulated Wireless Optical Communications***

Mingbo Niu (University of British Columbia & Faculty of Applied Science, Canada); Julian Cheng (University of British Columbia, Canada); Jonathan F Holzman (University of British Columbia (UBC) Okanagan, Canada)  
pp. 851-855

### ***Dynamic Manycasting in Optical Split-Incapable WDM Networks for Supporting High-Bandwidth Applications***

Jeremy Plante (University of Massachusetts Dartmouth, USA); Arush G Gadkar (University of Massachusetts, Dartmouth, USA); Vinod M. Vokkarane (Massachusetts Institute of Technology (MIT) / University of Massachusetts Dartmouth, USA)  
pp. 856-860

***Dynamic Non-Continuous Single Slot Advance Reservation over Wavelength Routed Networks***

Bharath Honnenahalli Ramaprasad (University of Massachusetts Dartmouth, USA); Arun Somani (Iowa State University, USA); Vinod M. Vokkarane (Massachusetts Institute of Technology (MIT) / University of Massachusetts Dartmouth, USA)  
pp. 861-865

***Service Differentiation in OFS Network: Performance Analysis***

Iyas Khayata (University of Quebec in Montreal, Canada); Halima Elbiaze (University of Quebec at Montreal, Canada)  
pp. 866-870

## WC I: Wireless Network Design

***A Greedy Spectrum Sharing Algorithm For Cognitive Radio Networks***

Elmahdi Driouch (Universite du Quebec à Montreal, Canada); Wessam Ajib (Université du Québec à Montréal, Canada); Ahmed Ben Dhaou (University of Quebec at Montreal, Canada)  
pp. 1010-1014

***Hybrid Cooperative MAC Protocol for Wireless Ad Hoc Networks***

Yufeng Wang (University of South Florida, USA)  
pp. 1015-1019

***Topology Control in Multi-hop Wireless Networks with Multi-beam Smart Antennas***

Brendan Mumey (Montana State University, USA); Ivan Judson (WebFilings, LLC, USA); Jian Tang (Syracuse University, USA); Yun Xing (Syracuse University, USA)  
pp. 1020-1024

***Opportunistic Primary-Secondary Spectrum Sharing with a Rotating Radar***

Rathapon Saruthirathanaworakun (Carnegie Mellon University & Instituto Superior Técnico, UTL, Portugal); Jon Peha (White House Office of Science and Technology Policy & Carnegie Mellon University, USA); Luis M. Correia (IST - Technical University Lisbon, Portugal)  
pp. 1025-1030

***Using Multiple Channels to Improve SDR Flexibility and Performance***

Roberto de Matos (Federal University of Santa Catarina, Brazil); Antônio Augusto Fröhlich (Federal University of Santa Catarina, Brazil); Leandro Buss Becker (Federal University of Santa Catarina, Brazil)  
pp. 1031-1035

***Threshold Improvement of Low-Density Lattice Codes via Spatial Coupling***

Hironori Uchikawa (Tokyo Institute of Technology, Japan); Brian Michael Kurkoski (University of Electro-Communications, Japan); Kenta Kasai (Tokyo Institute of Technology, Japan); Kohichi Sakaniwa (Tokyo Institute of Technology, Japan)  
pp. 1036-1040

## **CLD: Cloud Computing and Networking**

### ***Infrastructure as a Service (IaaS) for NASA's Mission Directorate***

Keith Shackelford (NASA, USA); James Williams (NASA, USA)  
pp. 29-33

### ***Cloud Computing Infrastructure Robustness: A Game Theory Approach***

Nageswara Rao (Oak Ridge National Laboratory, USA); Stephen W. Poole (Oak Ridge National Laboratory, USA); Chris Yu Tak Ma (Advanced Digital Sciences Center, Illinois at Singapore, Singapore); Fei He (State University of New York at Buffalo, USA); Jun Zhuang (State University of New York at Buffalo, USA); David K. Y. Yau (Purdue University, USA)  
pp. 34-38

### ***Performance Analysis of a Tree-Based Consistency Approach for Cloud Databases***

Md Ashfakul Islam (University of Alabama, USA); Susan Vrbsky (The University of Alabama, USA); Mohammad Asadul Hoque (The University of Alabama, USA)  
pp. 39-44

### ***Security Architecture for Cloud Networking***

Volker Fussenig (Fraunhofer Research Institution AISEC, Germany); Ayush Sharma (Fraunhofer Research Institution AISEC, Germany)  
pp. 45-49

### ***QoS and Security Aware Allocation of Directed Acyclic Graph on Heterogeneous Distributed Real-Time Systems***

Naeem Al-Oudat (Iowa State University, USA); Manimaran Govindarasu (Iowa State University, USA)  
pp. 50-56

### ***Towards Bringing Real-Time Online Applications on Clouds***

Sergey Gorlatch (University of Munster, Germany); Dominik Meilaender (Uni Muenster, Germany); Alexander Ploss (University of Muenster, Germany); Frank Glinka (University of Muenster, Germany)  
pp. 57-61

## **COG I: Cognitive Computing**

### ***Robust Video Fingerprinting Using Local Spatio-Temporal Features***

Cheng Deng (Xidian University, P.R. China); Yifan Zhang (Xidian University, P.R. China); Xinbo Gao (Xidian University, P.R. China)  
pp. 350-353

### ***Sketching the Interference Wall: A Linear Programming Approach***

Joseph Lee (CENS, USA)  
pp. 354-358

***Multi-objective Reinforcement Learning based Routing in Cognitive Radio Networks: Walking in a Random Maze***

Kun Zheng (University of Tennessee, Knoxville, USA); Husheng Li (University of Tennessee, USA); Robert Caiming Qiu (Tennessee Tech University, USA); Shuping Gong (University of Tennessee, Knoxville, USA)  
pp. 359-363

***A Novel Stochastic Discretized Weak Estimator operating in Non-Stationary Environments***

Anis Yazidi (University of Agder, Norway); John B. Oommen (Carleton University, Canada); Ole-Christoffer Granmo (University of Agder, Norway)  
pp. 364-370

***A Biological Inspired Features Based Saliency Map***

Bing Han (VIPS Lab, School of Electronic Engineering, Xidian University, P.R. China); Xinbo Gao (Xidian University, P.R. China); Xuelong Li (Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, P.R. China); Dacheng Tao (University of Technology, Sydney, Singapore)  
pp. 371-375

## **ISA: Internet Services and Applications**

***How to Prevent Identity Fraud in Locator/Identifier-Split Architectures***

Oliver Hanka (Technische Universität München, Germany)  
pp. 683-689

***Efficient Conflict Detection in Flow-Based Virtualized Networks***

Sriram Natarajan (University of Massachusetts, Amherst, USA); Xin Huang (Deutsche Telekom R&D Lab USA, USA); Tilman Wolf (University of Massachusetts, USA)  
pp. 690-696

***A Resource Management Approach to Web Browser Security***

Jun Li (University of Oregon, USA); Dongting Yu (University of Oregon, USA); Luke Maurer (University of Oregon, USA)  
pp. 697-701

***Video Quality Degradation on IPTV Networks***

Jewel Okyere-Banya (Eindhoven University of Technology, The Netherlands); Mamoon Aldiabat (Eindhoven University of Technology, The Netherlands); Vlado Menkovski (Eindhoven University of Technology, The Netherlands); George Exarchakos (Eindhoven University of Technology, The Netherlands); Antonio Liotta (Eindhoven University of Technology, The Netherlands)  
pp. 702-707

***SLAPv: A Service Level Agreement Enforcer for Virtual Networks***

Hugo Carvalho (Federal University of Rio de Janeiro & GTA - Grupo de Teleinformática e Automação - Coppe/PEE/UFRJ, Brazil); Natalia Castro Fernandes (Universidade Federal do Rio de Janeiro, Brazil); Otto Carlos M. B. Duarte (Universidade Federal do Rio de Janeiro, Brazil); Guy Pujolle (University Pierre et Marie Curie - Paris 6, France)  
pp. 708-712

***On Zap Time Minimization in IPTV Networks***

Matthew Long (University of Oklahoma, USA); Sridhar Radhakrishnan (University of Oklahoma, USA); Suleyman Karabuk (University of Oklahoma, USA); John Antonio (University of Oklahoma, USA)  
pp. 713-718

**IT II: Invited Talks II**

***Towards A Large-Scale Cognitive Radio Network: Testbed, Intensive Computing, Frequency Agility and Security***

Zhe Chen (Tennessee Technological University, USA); Changchun Zhang (Tennessee Technological University, USA); Feng Lin (Tennessee Technological University, USA); Jingzhi Yu (Tennessee Technological University, USA); Xia Li (Tennessee Technological University, USA); Yu Song (Tennessee Technological University, USA); Raghuram Ranganathan (Tennessee Tech University, USA); Nan Guo (Tennessee Tech University, USA); Robert Caiming Qiu (Tennessee Tech University, USA)  
pp. 556-562

***Spectrum Sensing for Cognitive Radio: A Signal-Processing Perspective on Signal-Statistics Exploitation***

Chad M Spooner (NorthWest Research Associates, USA); Nilesh V Khambekar (University at Buffalo, USA)  
pp. 563-568

***Group Decoding for Interference Channels***

Chen Gong (Columbia University, USA); Ali Tajer (Princeton University, USA); Xiaodong Wang (Columbia University, USA)  
pp. 569-572

***An Overview of Synchronization Algorithms for IR-UWB Systems***

Rizwan Akbar (Université de Bretagne Occidentale, France); Emanuel Radoi (University of Brest & Lab-STICC UMR CNRS 3192, France)  
pp. 573-577

**GCNC: Green Computing, Networking and Communications**

***Outage-Storage Tradeoff in Smart Grid Networks with Renewable Energy Sources***

Kai Yang (Bell Labs, Alcatel-Lucent, USA); Anwar Walid (Bell-labs, Alcatel Lucent, USA)  
pp. 517-521

***GreenVLAN: An Energy-Efficient Approach for VLAN Design***

Keqiang He (Tsinghua University, P.R. China); Yi Wang (Tsinghua University, P.R. China); Xiaofei Wang (Dublin City University, P.R. China); Wei Meng (Tsinghua University, P.R. China)  
pp. 522-526

***Wake Transition Decision algorithm for energy saving in OBS network with LPI***

Dong-Ki Kang (Korea Advanced Institute of Science and Technology & Advanced Network and Computing Lab., Korea); Won-Hyuk Yang (Chonbuk National University, Korea); Jin-hyo Jung (Chonbuk National University, Korea); Young-Chon Kim (Chonbuk National University, Korea)  
pp. 527-531

***DDoS Discrimination by Linear Discriminant Analysis (LDA)***

Theerasak Thapngam (Deakin University, Australia); Shui Yu (Deakin University, Australia); Wanlei Zhou (Deakin University, Australia)  
pp. 532-536

**IP I: Invited Papers I**

***Trends and Opportunities in Consumer Video Content Navigation and Analysis***

Junfeng Jiang (Ryerson University, Canada); Xiao-Ping Zhang (Ryerson University, Canada)  
pp. 578-582

***Data Organization in a hybrid storage system***

Xiaojian Wu (Texas A&M University, USA); Narasimha Reddy (Texas A & M University, USA)  
pp. 583-587

***Noise and Interference Characterization for MLC Flash Memories***

Jaekyun Moon (KAIST, Korea); Jaehyeong No (KAIST, Korea); Sangchul Lee (Hynix Semiconductor, Korea); Sangsik Kim (Hynix Semiconductor, Korea); Joongseob Yang (Hynix Semiconductor, Korea); Seung Ho Chang (Hynix, Korea)  
pp. 588-592

***Research on Wireless Multi-hop Networks: Current State and Challenges***

Guoqiang Mao (The University of Sydney, Australia)  
pp. 593-598

**SPC I: Signal Processing for Communications I**

***Time and frequency synchronization for ultra-high speed OFDM systems***

Michael Dreschmann (Karlsruhe Institute of Technology, Germany); Joachim Meyer (Karlsruhe Institute of Technology (KIT), Germany); Michael Hübner (Karlsruhe Institute of Technology (KIT), Germany); Rene Schmogrow (Karlsruhe Institute of Technology, Germany); David Hillerkuss (Karlsruhe Institute of Technology (KIT), Germany); Juergen Becker (University of Karlsruhe, Germany); Juerg Leuthold (University of Karlsruhe, Germany); Wolfgang Freude (Karlsruhe Institute of Technology (KIT) & Institute of Photonics and Quantum Electronics, Germany)  
pp. 871-875

**On The Performance of Joint Channel Estimation and PAPR Reduction Scheme**

Youssef Nasser (American University of Beirut, Lebanon); Anh-Tai Ho (INSA, France); Jean-François Hélard (IETR, France); Yves Louët (SUPELEC-Rennes Campus, France)  
pp. 876-882

**A Novel channel allocation scheme in IEEE 802.22 systems**

Seung-Hoon Hwang (Dongguk University, Korea)  
pp. 883-886

**Wideband compressed sensing for Cognitive Radios using optimum detector with no reconstruction**

Jonathan Verlant-Chenet (Université Libre de Bruxelles, Belgium); Andre Bourdoux (IMEC, Belgium); Jean-Michel Dricot (Université Libre de Bruxelles, Belgium); Philippe De Doncker (ULB, Belgium); François Horlin (Université Libre de Bruxelles, Belgium)  
pp. 887-891

**Performance Analysis of Orthogonal Matching Pursuit under General Perturbations**

Ding (Tsinghua University, P.R. China); Laming Chen (Tsinghua University, P.R. China); Yuantao Gu (Tsinghua University, P.R. China)  
pp. 892-896

**Greedy Pursuits: Stability of Recovery Performance against General Perturbations**

Laming Chen (Tsinghua University, P.R. China); Jiong Chen (Tsinghua University, P.R. China); Yuantao Gu (Tsinghua University, P.R. China)  
pp. 897-901

## WN1: Wireless Networks I

**Deadline-aware Broadcasting in Wireless Networks with Local Network Coding**

Pouya Ostovari (Temple University & Computer and Information Sciences, USA); Jie Wu (Temple University, USA); Abdallah A Khreishah (Temple University, USA)  
pp. 1123-1127

**A Proposal of Power Saving Scheme for Wireless Access Networks with Access Point Sharing**

Riichiro Nagareda (ATR, Japan); Akio Hasegawa (ATR Adaptive Communications Research Lab., Japan); Tatsuo Shibata (ATR Adaptive Communications Research Laboratories, Japan); Sadao Obana (Advanced Telecommunication Research Institute International, Japan)  
pp. 1128-1132

**Capacity Analysis of Best-Effort Broadcasting Services with Reliability Constraint**

Minho Kim (Seoul National University, Seoul, Korea); Eun-Chan Park (Dongguk University, Korea); Kyung-Joon Park (DGIST, Korea); Chong-Ho Choi (Seoul National University, Korea)

pp. 1133-1137

***MAC Layer Fairness in IEEE 802.11 DCF Based Wireless Mesh Networks***

Sandip Chakraborty (Indian Institute of Technology Guwahati, India);

Sukumar Nandi (Indian Institute of Technology, Guwahati, India)

pp. 1138-1143

***Hybrid Resource Allocation Scheme in Two-hop Relaying WiMAX Networks***

Yongchul Kim (North Carolina State University, USA); Mihail Sichitiu (North Carolina State University, USA)

pp. 1144-1148

**Keynote II: The Coming Decade of Data Center Networking Discontinuities**

Speaker: Renato Recio, CTO, System Networking, IBM, USA

**DSTA II: Codes and Algorithms for NVM and Storage Systems**

***Characterization and Error-Correcting Codes for TLC Flash Memories***

Eitan Yaakobi (Caltech/UCSD, USA); Laura M Grupp (University of California, San Diego, USA); Paul H. Siegel (University of California, San Diego, USA); Steven Swanson (University of California, San Diego, USA); Jack Wolf (UCSD, USA)  
pp. 486-491

***Robust Decoder Architecture for Multi-level Flash Memory Storage Channels***

Ravi Hiranand Motwani (Intel Corporation, USA); Chong Ong (Intel Corporation, USA)

pp. 492-496

***An Improved Analytic Expression for Write Amplification in NAND Flash***

Xiang Luojie (University of Electro-Communications, Japan); Brian Michael Kurkoski (University of Electro-Communications, Japan)  
pp. 497-501

***Dynamic Data Replication on Flash SSD Assisted Video-on-Demand Servers***

Ramya Manjunath (Teradata Corporation, USA); Tao Xie (San Diego State University, USA)  
pp. 502-506

***Low-Redundancy Two-Dimensional RAID Arrays***

Jehan-Francois Pâris (University of Houston, USA); Ahmed Amer (University of California, Santa Cruz, USA); Thomas J.E. Schwarz (Santa Clara University, USA)  
pp. 507-511

***A Novel Approach to Estimating Current and Future States of Technical Systems***

Kirill Bushminkin (Lancaster University, United Kingdom); Denis Kolev (Moscow State University, Russia); Denis Rodionov (Lancaster University, United Kingdom); Lyudmila Mihaylova (Lancaster University, United

Kingdom); Alexandra Vikhoreva (Institute of Physics of the Earth of Russian Academy of Science, Russia)  
pp. 512-516

## IT III: Invited Talks III

### ***Constrained Resource Optimization in Wireless Sensor Networks with Mobile Sinks***

Weifa Liang (Australian National University, Australia)  
pp. 599-603

### ***Concurrent Bandwidth Aggregation over Wireless Networks***

Dilip Krishnaswamy (Qualcomm Research Center, USA); Danlu Zhang (Qualcomm, USA); Samir S. Soliman (Qualcomm, Inc, USA); Bibhu Mohanty (Qualcomm, USA); Dirceu Cavendish (Qualcomm, USA); Weiyan Ge (Corporate R&D, Qualcomm Inc., USA); Srinivasa Eravelli (Qualcomm, USA)  
pp. 604-610

### ***Better Energy-Delay Tradeoff via Server Resource Pooling***

Ioannis Kamitsos (Princeton University, USA); Lachlan L. H. Andrew (Swinburne University of Technology, Australia); Hongseok Kim (Sogang University, Korea); Sangtae Ha (Princeton University, USA); Mung Chiang (Princeton University, USA)  
pp. 611-616

### ***Towards a global IoT: Resource Re-utilization in WSNs***

Sharief M.A. Oteafy (Queen's University, Canada); Hossam S. Hassanein (Queen's University, Canada)  
pp. 617-622

## MCC: Multimedia Computing and Communications

### ***Subjective Study on Asymmetric Stereoscopic Video with Low-pass Filtered Slices***

Maryam Azimi (University of British Columbia, Canada); Sima Valizadeh (University of British Columbia, Canada); Xiaokang Li (University of British Columbia, Canada); Lino E. Coria (University of British Columbia, Canada); Panos Nasiopoulos (University of British Columbia, Canada)  
pp. 719-723

### ***Robust shape matching using global feature space representation of contours***

Shehzad Khalid (Bahria University, Pakistan)  
pp. 724-728

### ***Fast Diamond Search Algorithm For Real Time Video Coding***

Yasser Ismail (Umm AlQura University, Saudi Arabia); Sherif El-ertriby (Umm Al-Qura University, Saudi Arabia)  
pp. 729-733

***Bandwidth Estimation and Rate Adaptation in HTTP Streaming***

Bing Zhou (Tsinghua University, P.R. China); Jingyuan Wang (Tsinghua University, P.R. China); Zixuan Zou (Huawei Technologies Co. LTD, P.R. China); Jiangtao Wen (Tsinghua University, P.R. China)  
pp. 734-738

***Modeling, Characterizing, and Enhancing User Experience in Cloud Mobile Rendering***

Yao Liu (UC San Diego, USA); Shaoxuan Wang (University of California, San diego, USA); Sujit Dey (University of California, San Diego, USA)  
pp. 739-745

***Novel Seamless Multimedia Service Framework Based on Context-Awareness and User Mobility Pattern in Ubiquitous Environments***

Jinsung Byun (Chung-Ang University, Korea); Insung Hong (Chung-Ang University, Korea); Sehyun Park (Chung-Ang University, Korea)  
pp. 746-750

## WC II: System Performance Analysis

***Packet Error Rate-constrained Optimized Variable Rate Scheme for Convolutionally Coded M-QAM System***

Krishna Nehra (King's College, London, United Kingdom); Mohammad Shikh-Bahaei (Kings college London, United Kingdom)  
pp. 1041-1045

***Asymptotic Performance Analysis of SC over Arbitrarily Correlated Nakagami-m Channels***

Xianchang Li (University of British Columbia, Canada); Julian Cheng (University of British Columbia, Canada)  
pp. 1046-1050

***On the Performance of Redundant Residue Number System Codes Assisted STBC Design***

Avik Sengupta (Kansas State University, USA); Dalin Zhu (NEC Laboratories China, P.R. China); Bala Natarajan (Kansas State University, USA)  
pp. 1051-1055

***New Alternative Series Representations for the Generalized Nuttall Q-function with Applications***

Oluwatobi O Olabiyi (Prairie View A&M University, USA); Annamalai Annamalai (Prairie View A&M University, USA)  
pp. 1056-1060

***Applying Behavior Recognition in Road Detection Using Vehicle Sensor Networks***

Yuanyuan Zeng (Wuhan University, P.R. China); Kai Xiang (Wuhan University & Hubei University of Economics, P.R. China); Deshi Li (Wuhan University, P.R. China)  
pp. 751-755

***Analysis of Mobility Patterns for Urban Taxi Cabs***

Mohammad Asadul Hoque (The University of Alabama, USA); Xiaoyan Hong (University of Alabama, USA); Brandon Dixon (the University of Alabama, USA)  
pp. 756-760

***Transparent and Autonomous Store-carry-forward Communication in Delay Tolerant Networks (DTNs)***

Frank Nordemann (University of Applied Sciences Osnabrueck, Germany); Ralf Tönjes (University of Applied Sciences Osnabrück, Germany)  
pp. 761-765

***Intelligent Interface Switching among Heterogeneous Wireless Networks for Vehicular Communications***

Kevin Lee (Cisco, USA); Xiaoqing Zhu (Cisco Systems, USA); Lillian Dai (Cisco & MIT, USA); Jiang Zhu (Carnegie Mellon University, USA); Sateesh Addepalli (Cisco, USA); Rong Pan (Cisco Systems Inc., USA); Flavio Bonomi (Cisco Systems, USA)  
pp. 766-770

***Throughput and Delay Analysis in Aeronautical Data Networks***

Yufeng Wang (University of South Florida, USA); Mustafa Cenk Ertürk (University of South Florida, USA); Huseyin Arslan (University of South Florida, USA); Ravi Sankar (University of South Florida, USA); Inho Ra (Kunsan National University, Korea); Salvatore Mergera (Florida Atlantic University, USA)  
pp. 771-775

***Cognitive Multicast (CoCast) in Vehicular Networks Using OFDM Subchannels and Network Coding***

Wooseong Kim (UCLA, USA); Brian Sung Chul Choi (University of California, Los Angeles, USA); Mario Gerla (University of California at Los Angeles, USA)  
pp. 776-780

**COG II: Cognitive Networking**

***Delay Analysis and Optimal Access Strategy in Multichannel Dynamic Spectrum Access System***

Xiao Li (University of Electronic Science and Technology of China, P.R. China); Jun Wang (University of Electronic Science and Technology of China,

P.R. China); Husheng Li (University of Tennessee, USA); Shaoqian Li (University of Electronic Science and Technology of China, Taiwan)  
pp. 376-380

***Transient Analysis of Post-interruption Dynamics in Cognitive Radio Networks: An Onsager's Regression Approach***

Husheng Li (University of Tennessee, USA)  
pp. 381-385

***Sensing Parameter Optimization Using a New Detection Probability in Cognitive Radio Networks***

Jae-Kark Choi (Inha University, Korea); Sang-jo Yoo (Inha University, Korea)  
pp. 386-391

***Joint Optimization of Rate and Outer Loop Power Control for CDMA-based Cognitive Radio Network***

Mohammad Mirtavousi Mahyari (King's College London, United Kingdom)  
pp. 392-396

***Statistics of Aggregate Interference in Cognitive Wireless Ad hoc Networks***

Alireza Babaei (Auburn University, USA); Prathima Agrawal (Auburn University, USA); Bijan Jabbari (George Mason University, USA)  
pp. 397-401

***BioStaR: A Bio-inspired Stable Routing for Cognitive Radio Networks***

Mohammad Asadul Hoque (The University of Alabama, USA); Xiaoyan Hong (University of Alabama, USA)  
pp. 402-406

## IT IV: Invited Talks IV

***Applications of Fiber-connected Distributed Antenna Systems in Broadband Wireless Access***

Alireza Attar (University of British Columbia, Canada); Haoming Li (University of British Columbia, Canada); Victor CM Leung (The University of British Columbia, Canada)  
pp. 623-627

***Strategies for Fault Tolerance in Optical Grid Networks***

Ying Chen (University of Windsor, Canada); Ataul Bari (University of Western Ontario, Canada); Arunita Jaekel (University of Windsor, Canada)  
pp. 628-632

***Green IP over WDM Network Design Considering Energy-Load Proportionality***

Chankyun Lee (KAIST, Korea); Yoontae Kim (Korea Advanced Institute of Science and Technology, Korea); June-Koo Kevin Rhee (KAIST, Korea)  
pp. 633-637

***Stochastic Network Calculus for Performance Analysis of Internet Networks - An Overview and Outlook***

Yuming Jiang (Norwegian University of Science and Technology (NTNU), Norway)  
pp. 638-644

## WAHS I: Performance and Modeling

### ***Characterization and Mitigation of the Energy Hole Problem of Many-to-One Communication in Wireless Sensor Networks***

Heitor S Ramos (Universidade Federal de Minas Gerais & UFAL, Brazil); Eduardo M. R. Oliveira (Federal University of Minas Gerais, Brazil); Azzedine Boukerche (University of Ottawa, Canada); Alejandro C Frery (Universidade Federal de Alagoas, Brazil); Antonio A.F. Loureiro (Federal University of Minas Gerais, Brazil)  
pp. 954-958

### ***Constructing a Load-Balanced Virtual Backbone in Wireless Sensor Networks***

Jing (Selena) He (Georgia State University, USA); Shouling Ji (Georgia State University, USA); Pingzhi Fan (Southwest Jiaotong University, P.R. China); Yi Pan (Georgia State University, USA); Yingshu Li (Georgia State University, USA)  
pp. 959-963

### ***A Routing-Algorithm-Aware Design Tool for Indoor Wireless Sensor Networks***

Alberto Puggelli (University of California - Berkeley, USA); Mohammad Mozumdar (University of California, Berkeley, USA); Alberto Sangiovanni-Vincentelli (University of California at Berkeley, USA); Luciano Lavagno (Politecnico di Torino, Italy)  
pp. 964-969

### ***Modeling and Analysis of a Solar Powered Wireless Sensor Node***

Hengzhao Yang (Georgia Institute of Technology, USA); Ying Zhang (Georgia Institute of Technology - Savannah, USA)  
pp. 970-974

### ***Real-Time Estimation of Wireless Ground-to-Air Communication Parameters***

Anthony J. Carfang, Jr. (University of Colorado at Boulder, USA); Eric W. Frew (University of Colorado, USA)  
pp. 975-979

## IP II: Invited Papers II

### ***Taxonomy and Challenges of Rendezvous Algorithms in Cognitive Radio Networks***

Hai Liu (Hong Kong Baptist University, Hong Kong); Zhiyong Lin (Hong Kong Baptist University, Hong Kong); Xiaowen Chu (Hong Kong Baptist University, Hong Kong); Yiu-Wing Leung (Hong Kong Baptist University, Hong Kong)  
pp. 645-649

### ***Cognitive Radio Technology : Principles and Practice***

Youping Zhao (Beijing Jiaotong University, P.R. China); Lizdabel Morales-Tirado (University of Puerto Rico & Mayaguez Campus, USA)  
pp. 650-654

***Coexistence in two-tier femtocell networks: cognition and optimization***

Siew Eng Nai (Institute for Infocomm Research, Singapore); Tony Q. S. Quek (Institute for Infocomm Research, Singapore)  
pp. 655-659

**NAPP: Network Architectures & P2P Protocols**

***PeerMate: A Malicious Peer Detection Algorithm for P2P Systems based on MSPCA***

Xianglin Wei (PLA University of Science and Technology, P.R. China); Tarem Ahmed (International Islamic University Malaysia, Malaysia); Ming Chen (Institute of Communications Engineering, P.R. China); Al-Sakib Khan Pathan (International Islamic University Malaysia (IIUM), Malaysia)  
pp. 815-819

***Efficient and Flexible Inter-Overlay Scheduling of Media Streams for Multi-Channel P2P Streaming***

Xin Jin (The University of Hong Kong, Hong Kong); Yu-Kwong Kwok (University of Hong Kong, Hong Kong)  
pp. 820-824

***P2P Streaming; Impact of Bandwidth Throttling on QoS***

Jalal N Almhana (Universite de Moncton, Canada); Zikuan Liu (NRC, Canada)  
pp. 825-829

***P2P Packet Cache Router for Network-Wide Traffic Redundancy Elimination***

Shu Yamamoto (University of Tokyo, Japan); Akihiro Nakao (University of Tokyo, Japan)  
pp. 830-834

***A Novel Cost-Effective Architecture and Deployment Strategy for Integrated RFID and WSN Systems***

Fadi M. Al-Turjman (Queen's University, Canada); Ashraf E. Al-Fagih (Queen's University, Canada); Hossam S. Hassanein (Queen's University, Canada)  
pp. 835-839

**SPC II: Signal Processing for Communications II**

***Aspects Related to Geo Localization Based on Mobiles' Measurements in WCDMA Wireless Networks***

Irina C Cotanis (Ascom Network Testing, USA); Le Le (Ascom Netwrok Testing Inc., USA)  
pp. 902-906

***Beamforming-based Interference Cancellation for Multiuser MIMO Downlink Communications***

Yen-Hsu Chiang (National Tsing Hua University, Taiwan); Hsi-Pin Ma (National Tsing Hua University, Taiwan)

pp. 907-911

**Achievable Rate for Amplify and Forward Relay System at Low SNR**

Yu Bi (Wichita State University, USA); Yanwu Ding (Wichita state university, USA); Hyuck Kwon (Wichita State University, USA)  
pp. 912-916

**Capacity Analysis of Relay Channels for Medium Voltage Powerline Access Network**

Kyong-Hoe Kim (Seoul National University, Korea); Han-Byul Lee (Seoul National University, Korea); Yong-Hwa Kim (Seoul National University, Korea); Jong-Ho Lee (Kongju National University, Korea); Seong-Cheol Kim (Seoul National University, Korea)  
pp. 917-921

**Capacity and Modeling of Nonlinear Fiber Optic Communications as a Frequency-Selective Fading Channel**

Salam Elahmadi (Menara Networks, USA); Mandyam Srinath (Southern Methodist University, USA); Dinesh Rajan (Southern Methodist University, USA); Richard Haberman (SMU, USA)  
pp. 922-928

## WN2: Wireless Networks II

**Game Theoretic Analysis of Users and Providers Behavior in Network under Scarce Resources**

Charles A Kamhoua (Air Force Research Laboratory & Information Directorate, USA); Niki Pissinou (Florida International University, USA); Kia Makki (Technological University of America (TUA), USA)  
pp. 1149-1155

**Scheduling of Wireless Metering for Power Market Pricing in Smart Grid**

Husheng Li (University of Tennessee, USA)  
pp. 1156-1160

**Design and Implementation of Industrial Network Monitoring Protocol for Networked Industrial Sensors**

Daegil Yoon (Samsung Electro Mechanics, Korea); Hee Seok Ho (Samsung Electro Mechanics, Korea); Jaehee Park (Samsung Electro Mechanics, Korea)  
pp. 1161-1166

**A Tale of Four Cities: Wireless Security & Growth in New Zealand**

Alastair Nisbet (Unitech, New Zealand)  
pp. 1167-1171

**Framework for Co-operative RFID Tag Reading in Mobile Environments with Multiple Readers**

Chandrika Satyavolu (The University of Oklahoma, USA); Sridhar Radhakrishnan (University of Oklahoma, USA); Venkatesh Sarangan (Oklahoma State University, USA); Thomas Landers (University of Oklahoma, USA)  
pp. 1172-1177

## **Keynote III: When Coding Met Video QoE**

Speaker: Muriel Medard, Professor, MIT, USA

## **CQSM**

### ***RocketTC: A High Throughput Traffic Classification Architecture***

Zhou Zhou (Beijing Institute of Technology, P.R. China); Tian Song (Beijing Institute of Technology, P.R. China); Wenliang Fu (Beijing Institute of Technology, P.R. China)  
pp. 407-411

### ***Packet Reception Ratios in Two-Dimensional Broadcast Ad Hoc Networks***

Xiaomin Ma (Oral Roberts University, USA)  
pp. 412-416

### ***Optimised network resource exploitation in interactive broadcasting environments via P2P constellations***

Evangelos Markakis (University of the Aegean, Greece); Evangelos Pallis (Technological Educational Institute of Crete, Greece); Harry Skianis (University of the Aegean, Greece); Vassilios Zacharopoulos (Technological Educational Institute of Crete, Greece)  
pp. 417-420

### ***Inter-Domain Service Alignment Using Consensus***

Vitor Jesus (Universidade de Aveiro & Instituto de Telecomunicações, Portugal); Rui L Aguiar (University of Aveiro & Instituto de Telecomunicações, Portugal); Peter Steenkiste (Carnegie Mellon University, USA)  
pp. 421-427

### ***Performance of Multiuser CDMA Receivers With Bursty Traffic and Delay Constraints***

Kashif Mahmood (Norwegian University Of Science and Technology, Norway); Mikko Vehkaperä (Royal Institute of Technology (KTH), Sweden); Yuming Jiang (Norwegian University of Science and Technology (NTNU), Norway)  
pp. 428-433

### ***Cycle Time Distribution and Control for the Deficit Round Robin Packet Scheduler***

Gary Chang (Northwestern University, USA); Chung-Chieh Lee (Northwestern University, USA)  
pp. 434-440

## **CSS: Communication Services and Applications**

### ***Performance Evaluation of a Context Provisioning Middleware***

Eike Reetz (University of the West of England & University of Applied Sciences Osnabrück, United Kingdom); Michael Knappmeyer (University of Applied Sciences Osnabrück & University of the West of England, Germany); Saad Liaquat Kiani (University of the West of England & UWE, United

Kingdom); Nigel Baker (University of the West of England, United Kingdom); Ralf Tönjes (University of Applied Sciences Osnabrück, Germany)  
pp. 441-445

#### **A CoAP-Gateway for Smart Homes**

Olaf Bergmann (Universitaet Bremen, Germany); Kai Hillmann (Universitaet Bremen, Germany); Stefanie Gerdes (Universitaet Bremen, Germany)  
pp. 446-450

#### **Characterizing Top User Behavior of Sina Microblogging in the Context of Different Events**

Yubao Zhang (National University of Defense Technology, P.R. China); Hui Wang (National University of Defense Technology, P.R. China); Zhihong Jiang (National University of Defence Technology, P.R. China); Pei Li (National University of Defense Technology, P.R. China)  
pp. 451-455

#### **FoSSicker: A Personalized Search Engine by Location-Awareness**

Mingyang Sun (Dalian University of Technology, P.R. China); Weifeng Sun (Dalian University of Technology, P.R. China); Lei Shu (Osaka University, Japan); Mingchu Li (Dalian University of Technology, Canada); Lei Xue (Dalian University of Technology, P.R. China)  
pp. 456-460

### **IP III: Invited Papers III**

#### **Vehicular Networks and Applications: Challenges, Requirements and Service Opportunities**

Junyi Li (Qualcomm, USA); Michal Wodczak (Ericsson, Poland); Xinzhou Wu (Qualcomm, USA); T. Russell Hsing (Telcordia Technologies, USA)  
pp. 660-664

#### **Vehicular Testbeds - Validating Models and Protocols before Large Scale Deployment**

Mario Gerla (University of California at Los Angeles, USA); Jui-Ting Weng (University of California, Los Angeles, USA); Eugenio Giordano (University of California at Los Angeles & Università di Bologna, USA); Giovanni Pau (UCLA, USA)  
pp. 665-669

#### **MIMO VANETS: Research Challenges and Opportunities**

Amr El-Keyi (Nile University, Egypt); Tamer ElBatt (Nile University, Egypt); Fan Bai (General Motors, USA); Cem Saraydar (General Motors R&D, USA)  
pp. 670-676

#### **Modeling of Packet Dropout for UAV Wireless Communications**

Yifeng Zhou (Communications Research Centre, Canada); Jun Li (Communications Research Centre of Canada, Canada); Louise Lamont (Communications Research Centre Canada, Canada); Camille-Alain Rabbath (Defence R&D Canada, Canada)  
pp. 677-682

## WC III: MIMO technology

### ***Coordinated MultiPoint Uplink Capacity over a MIMO Composite Fading Channel***

Symeon Chatzinotas (University of Luxembourg, Luxembourg); Björn Ottersten (KTH Royal Institute of Technology, Sweden)  
pp. 1061-1065

### ***Lattice Reduction-Aided Minimum Mean Square Error K-Best Detection for MIMO Systems***

Sébastien Aubert (Research unit IETR, France); Youssef Nasser (American University of Beirut, Lebanon); Fabienne Nouvel (INSA, France)  
pp. 1066-1070

### ***Layered Block Diagonalization for Base Station Cooperated Multiuser MIMO with Partial Channel State Information Feedback***

Kenichi Higuchi (Tokyo University of Science, Japan)  
pp. 1071-1076

### ***MISO Amplify Forward Scheme and its Viability***

Narayanan Krishnan (WINLAB, Rutgers, The State University of New Jersey, USA); Bala Natarajan (Kansas State University, USA)  
pp. 1077-1080

### ***Multiple Input Multiple Output Dirty Paper Coding: System Design and Performance***

Zouhair J. Al-qudah (/EE/southern Methodist University/Dallas, USA); Dinesh Rajan (Southern Methodist University, USA)  
pp. 1081-1086

### ***Multiuser MIMO Capacity with Limited Feedback Trellis Exploration Based Precoder***

Sayak Bose (Kansas State University, USA); Dalin Zhu (NEC Laboratories China, P.R. China); Bala Natarajan (Kansas State University, USA)  
pp. 1087-1091

## CIS: Secure Communications and Networking

### ***On the use of Enhanced Bogon Lists (EBLs) to detect malicious traffic***

Ravi Vaidyanathan (Telcordia Technologies Inc., USA); Abhrajit Ghosh (Applied Communication Sciences, USA); Yukiko Sawaya (KDDI R&D Laboratories, Inc., Japan); Ayumu Kubota (KDDI R&D Laboratories Inc., Japan)  
pp. 1-6

### ***Gabor-Based RF-DNA Fingerprinting for Classifying 802.16e WiMAX Mobile Subscribers***

Donald Reising (AF Institute of Technology, USA); Michael A Temple (Air Force Institute of Technology, USA); Mark E Oxley (Air Force Institute of Technology, USA)  
pp. 7-13

**A Physical Layer Security Analysis on the Electric-Field Intra-Body Communication**

Hongjie Zhu (University of Pennsylvania & Hong Kong University of Science and Technology, USA); Wai Chiu Ng (Hong Kong University of Science & Technology, Hong Kong); Hengying Shan (Hong Kong University of Science & Technology, Hong Kong); Jie George Yuan (Hong Kong University Science and Technology, P.R. China)  
pp. 14-17

**Achievable Secrecy Rates in Physical Layer Secure Systems with a Helping Interferer**

Arsenia Chorti (Princeton University & University College London, USA); H. Vincent Poor (Princeton University, USA)  
pp. 18-22

**Intrusion Detection in IT Networks with Limited Observations**

Praveen Bommannavar (Stanford University, USA); Nicholas Bambos (Stanford University, USA)  
pp. 23-28

**NAPE: Network Algorithms & Performance Evaluation**

**Call Admission Control with Resource Reservation for Multi-service OFDM Networks**

Mehdi Khabazian (QUWIC, Qatar); Osama Kubbar (QU Wireless Innovation Centre & Senior IEEE Member, Qatar); Hossam S. Hassanein (Queen's University, Canada)  
pp. 781-785

**Self-tuning Batching in Total Order Broadcast Protocols via Analytical Modelling and Reinforcement Learning**

Paolo Romano (Inesc-ID, Portugal); Matteo Leonetti (Sapienza Rome University, Italy)  
pp. 786-792

**Survivable Routing Using Path Criticality**

Alireza Bigdeli (University of Toronto, Canada); Ali Tizghadam (University of Toronto, Canada); Alberto Leon-Garcia (University of Toronto, Canada)  
pp. 793-797

**Effect of Mobility on the Performance of Amplify-and-Forward Cooperation in SC-FDMA System**

Youssef Nasser (American University of Beirut, Lebanon); Joumana Farah (Holy-Spirit University of Kaslik, Lebanon); Joseph Kirillo (USEK, Lebanon); Stephanie Bassil (USEK, Lebanon); Maryline Hélard (INSA Rennes & IETR Institute of Electronics and Telecommunications of Rennes, France)  
pp. 798-803

**A Client-side Split-ACK Tool for TCP Slow Start Investigation**

Michael Welzl (University of Oslo, Norway); Rolf Normann (University of Oslo, Norway)  
pp. 804-808

**Solving Many to Many Multicast QoS Routing Problem using DCA and Proximal Decomposition Technique**

Anh Son Ta (CRP Henri Tudor, Luxemburg); Hoai-An Le Thi (Laboratory of Theoretical and Applied Computer Science, France); Dinh Tao Pham (Laboratory of Modelling, Optimization and Operations Research, France); Djamel Khadraoui (CRP Henri Tudor, Luxemburg)  
pp. 809-814

**WAHS II: Performance and Security**

***Improving Robustness of Key Extraction from Wireless Channels with Differential Techniques***

Bin Zan (RUTGERS, USA); Marco Gruteser (WINLAB / Rutgers University, USA); Fei Hu (University of Alabama, USA)  
pp. 980-984

***Simultaneous Optimization of Transmission Range and Actor Movement in WSANs***

Hyunbum Kim (The University of Texas at Dallas, USA); Jorge A. Cobb (The University of Texas at Dallas, USA)  
pp. 985-989

***On the Analysis of Identity Delegation Attacks***

Issa M Khalil (United Arab Emirates University & Faculty of Information Technology, UAE); Abdallah A Khreichah (Temple University, USA)  
pp. 990-994

***E-BOP: A Simple and Efficient Enhancement of ZigBee's BOP protocol***

Shunsuke Takagawa (University of Doshisha, Japan); Mehdad N. Shirazi (NICT, Japan); Jun Cheng (Doshisha University, Japan)  
pp. 995-999

***Utilizing Silent Negative Voting and Sleep/Wakeup Method for Power Efficient Data Fusion***

Ramon Sandoval (Lamar, USA); S. Kami Makki (Lamar University, USA); Bo Sun (Lamar University, USA)  
pp. 1000-1004

***Channel Assignment for WLAN by Considering Overlapping Channels in SINR Interference Model***

Kunxiao Zhou (City University of Hong Kong, Hong Kong); Xiaohua Jia (City University of Hong Kong, Hong Kong); Liming Xie (City University of Hong Kong, P.R. China); Yanan Chang (City University of Hong Kong, Hong Kong); Xing Tang (City University of Hong Kong, Hong Kong)  
pp. 1005-1009

## WC IV: Channel Assesment and design

### ***Iterative Nonlinear Precoding and Link Adaptation for MU-MIMO with CSI Impairments***

Hongsan (Harry) Sheng (InterDigital Communications LLC, USA); Yingxue Li (InterDigital Comm LLC, USA)  
pp. 1092-1097

### ***Channel Estimation for TDS-OFDM Transmit Diversity Systems over Doubly Selective Channels***

Lujing Geng (Tsinghua, P.R. China); Jintao Wang (Tsinghua University, P.R. China); Changyong Pan (Tsinghua University, P.R. China); Ai Bo (Beijing Jiaotong University, P.R. China)  
pp. 1098-1102

### ***Closed-Form Evaluation of Area under the ROC of Cooperative Relay-Based Energy Detection in Cognitive Radio Networks***

Oluwatobi O Olabiyi (Prairie View A&M University, USA); Annamalai Annamalai (Prairie View A&M University, USA)  
pp. 1103-1107

### ***Error Performance of Cooperative Diversity with Distributed Space-Time Code***

Peng Huo (University of Mississippi, USA); Lei Cao (The University of Mississippi, USA)  
pp. 1108-1112

### ***Dynamic Spectrum Access Analysis in a Multi-User Cognitive Radio Network using Markov Chains***

H. Patrick Ngalemo (Université du Québec à Montréal, Canada); Wessam Ajib (Université du Québec à Montréal, Canada); Halima Elbiaze (University of Quebec at Montreal, Canada)  
pp. 1113-1117

### ***Noise Impact Factor in the Performance of Interference-Limited Diversity Combining Antenna Arrays***

Sebastien Roy (Laval University, Canada)  
pp. 1118-1122

## IT V: Invited Talk - Distributed Beamforming in Relay-Interference Networks

Speaker: Hamid Jafarkhani, Univ. California, Irvine, USA

## N2Women: N2Women Meeting

## SCLD: Special Session on Cloud Media

### ***Cloud Mobile Media: Opportunities, Challenges, and Directions***

Sujit Dey (University of California, San Diego, USA)  
pp. 929-933

***CoDaaS: An Experimental Cloud-Centric Content Delivery Platform for User-Generated Contents***

Yichao Jin (Nanyang Technological University, Singapore); Yonggang Wen (Nanyang Technological University, Singapore); Guangyu Shi (Huawei Technologies Co., Ltd, P.R. China); Guoqiang Wang (Huawei, USA); Athanasios V. Vasilakos (National Technical University of Athens, Greece)  
pp. 934-938

***Toward Green Service in Cloud: From the Perspective of Scheduling***

Liang Zhou (Nanjing University of Posts and Telecommunications, P.R. China); Baoyu Zheng (Nanjing University of Posts and Telecommunications, P.R. China); JingWu Cui (Nanjing University of Posts And Telecomm, P.R. China); Sulan Tang (Nanjing University of Posts and Telecommunications, P.R. China)  
pp. 939-943

***Efficient and Scalable Cloud-Assisted SVC Video Streaming Through Mesh Networks***

Suoheng Li (University of Science and Technology of China, P.R. China); Zuqing Zhu (University of Science and Technology of China, P.R. China); Weiping Li (University of Science and Technology of China, P.R. China); Houqiang Li (University of Science and Technology of China, P.R. China)  
pp. 944-948

***Cloud-Assisted Streaming for Low-Latency Applications***

Xiaoqing Zhu (Cisco Systems, USA); Jiang Zhu (Carnegie Mellon University, USA); Rong Pan (Cisco Systems Inc., USA); Mythili Suryanarayana Prabhu (Advanced Architecture and Research & Cisco Systems, USA); Flavio Bonomi (Cisco Systems, USA)  
pp. 949-953