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## Virtual Network Design

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Huihui Jia (Universit	ing (University of Science and Technology of China, P.R. China), Long Gong ty of Science and Technology of China, P.R. China), Zuqing Zhu (University of	
	nd Technology of China, P.R. China)	18%\$
	of parallel processing control of virtual switch architecture on large-scale network	
Service S	te (NTT, Japan), Kenichi Higuchi (NTT, Japan), Masaru Katayama (NTT Network ystems Labs, Japan), Hiroaki Ogawa (NTT, Japan)	18%*
,	ware Virtual Network Embedding to Survive Multiple Node Failures	
(Beijing U University Posts and	o (Beijing University of Posts and Telecommunications, P.R. China), Ying Wang University of Posts and Telecommunications, P.R. China), Luoming Meng (Beijing of Posts and Telecommunications, P.R. China), Qiu Xue-song (Beijing University of Telecommunications, P.R. China), Li Wenjing (Beijing University of Posts and Nunications, P.R. China)	18&'
Network Vir	rtualization with Dynamic Resource Pooling and Trading Mechanism	
Ltd., USA	Xie (University of Texas at Dallas, USA), Jiafeng Zhu (Huawei Technologies Co., ), Changcheng Huang (Carleton University, Canada), Min Luo (Huawei Technologies, I Chou (Huawei Technologies Co., Ltd., P.R. China)	18&-
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John Kaip Technolog	pallimalil (Huawei Technologies (USA), USA), H Anthony Chan (Huawei gies, USA)	18' *
VNE-RFD:V	irtual Network Embedding with Resource Fragmentation Consideration	
of Science	University of Science and Technology of China, P.R. China), Hancheng Lu (University e and Technology of China, P.R. China), Wei Zhou (Huawei, P.R. China), Peilin Hong EIS & USTC, P.R. China)	10/0
	ed Energy Consumption Optimization Algorithm for Content-Centric Networks via	
Dual Decom	•	
(Carleton	g (Beijing University of Posts and Telecommunications, Canada), F. Richard Yu University, Canada), Tao Huang (Beijing University of Posts and	
Telecomn	nunications, P.R. China), Jiang Liu (Beijing University of Posts and nunications, P.R. China), Yunjie Liu (Beijing University of Posts and	
Telecomn	nunications, P.R. China)	18(,
	vare Planning Models for Information-Centric Networking	•
France), F	langili (Université Paris-Sud & Laboratoire de Recherche en Informatique (LRI), Fabio Martignon (Université Paris-Sud, France), Antonio Capone (Politecnico di aly), Federico Malucelli (Politecnico di Milano, Italy)	18) (
	Service in an Information-Centric Network	-, (
Mays F Al Essex, Un	L-Naday (University of Essex, United Kingdom), Andreas Bontozoglou (University of nited Kingdom), Vassilios G. Vassilakis (University of Surrey, United Kingdom), Reed (University of Essex, United Kingdom)	18*%
Pending-Int	terest-Driven Cache Orchestration Through Network Function Virtualization	
Laborator	ksomboon (KDDI R&D Laboratories Inc., Japan), Masaki Fukushima (KDDI R&D ries Inc., Japan), Michiaki Hayashi (KDDI R&D Laboratories Inc., Japan), Yusheng Ji Institute of Informatics, Japan)	186+
=	Bandwidth Cost of CCN: a Coordinated In-network Caching Approach	
Yuemei X Chinese A	u (Beijing Foreign Studies University, P.R. China), Yang Li (Institute of Acoustics, Academy of Sciences, P.R. China), Wei An (High Performance Nework Lab, IOA,	
	Academy of Sciences, P.R. China), Tao Lin (Institute of Acoustics, Chinese Academy es, P.R. China), Song Ci (University of Nebraska-Lincoln, USA)	B#5

#### **Software Defined Network Design**

Control Traffic Protection in Software-Defined Networks	
Yannan Hu (Beijing University of Posts and Telecommunications, P.R. China), Wendong Wang (Beijing University of Posts and Telecommunications, P.R. China), Gong Xiangyang (Beijing University of Posts and Telecommunications P.R. China, P.R. China), Chi Harold Liu (Beijing Institute of Technology, P.R. China), Xirong Que (Institute of Networking Technology, P.R. China), Shiduan Cheng (Beijing University of Posts & Telecommunications, P.R. China)	1, +,
Flow-level consistent update in SDN based on K-prefix covering	
Kun Zhao (Tsinghua University & Graduate School at Shenzhen, P.R. China), Qing Li (Graduate School at Shenzhen, Tsinghua University, P.R. China), Yong Jiang (Graduate School at Shenzhen, Tsinghua University, P.R. China)	1, , (
Scalable and Bandwidth-Efficient Multicast for Software-Defined Networks	
Liang-Hao Huang (Academia Sinica, Taiwan), Hui-Ju Hung (Academia Sinica, Taiwan), Chih-Chung Lin (Academia Sinica, Taiwan), De-Nian Yang (Academia Sinica, Taiwan)	1, -\$
AHTM: Achieving Efficient Flow Table Utilization in Software Defined Networks	
Linlian Zhang (University of Electronic Science and Technology of China, P.R. China), Rongping Lin (University of Electronic Science and Technology of China, P.R. China), Shizhong Xu (University of Electronic Science and Technology of China, P.R. China), Sheng Wang (University of Electronic Science and Technology of China, P.R. China)	1, 9+
A Robust SDN Network Architecture for Service Providers	
Fernando López Rodríguez (Universidade de Brasilia (UNB), Brazil), Divanilson R. Campelo (Universidade Federal de Pernambuco, Brazil)	19\$3
Survivor: an Enhanced Controller Placement Strategy for Improving SDN Survivability Lucas F. Müller (Federal University of Rio Grande do Sul, Brazil), Rodrigo Ruas Oliveira (Federal University of Rio Grande do Sul (UFRGS), Brazil), Marcelo Caggiani Luizelli (Federal University of Rio Grande do Sul, Brazil), Luciano Paschoal Gaspary (Federal University of Rio Grande do Sul, Brazil), Marinho P. Barcellos (Federal University of Rio Grande do Sul, Brazil)	19\$-
Next Generation Network Design I	
Design of Bandwidth Guaranteed OpenFlow Virtual Networks Using Robust Optimization	
Steven S. W. Lee (National Chung Cheng University, Taiwan), Kuang-Yi Li (National Chung Cheng University, Taiwan), Kwan Yee Chan (National Chung Cheng University, Taiwan), Yao Chuan Chung (National Chung Cheng University, Taiwan), Guan-Hao Lai (National Chung Cheng University, Taiwan)	191*
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Leveraging Locality for FIB Aggregation	
Nadi Sarrar (TU Berlin, Germany), Robert Wuttke (TU Berlin & Telekom Innovation Laboratories, Germany), Stefan Schmid (T-Labs & TU Berlin, Germany), Marcin Bienkowski (University of Wroclaw, Poland), Steve Uhlig (UK & Queen Mary, University of London, United Kingdom)	19' \$
Flow Aggregation for Traffic Engineering	
Noriaki Kamiyama (Osaka University & NTT Network Technology Laboratories, Japan), Yousuke Takahashi (NTT, Japan), Keisuke Ishibashi (NTT, Japan), Kohei Shiomoto (NTT, Japan), Tatsuya Otoshi (Osaka University, Japan), Yuichi Ohsita (Osaka University, Japan), Masayuki Murata (Osaka University, Japan)	19' *
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Route Leak Detection Using Real-Time Analytics on local BGP Information  Muhammad Shuaib Siddiqui (Universitat Politecnica de Catalunya & CRAAX and NetIT Lab, Spain), Diego Montero (Technical University of Catalonia (UPC) & Networking and Information Technology Lab NetIT Lab, Spain), Marcelo Yannuzzi (Technical University of Catalonia (UPC) & Networking and Information Technology Lab, Spain), René Serral-Gracià (Technical University of Catalunya (UPC), Spain), Xavier Masip-Bruin (Universitat Politècnica de Catalunya & Advanced Network Architectures Lab (CRAAX), Spain), Wilson Ramirez (Technical University of Catalonia (UPC) & CRAAX, Networking and Information Technology Lab, Spain)  A Fast Lagrangian Relaxation Algorithm for Finding Multi-Constrained Multiple Shortest Paths Gang Feng (University of Wisconsin, Platteville, USA)	
Next Generation Network Design II	
Adding Geographic-awareness to DHT-based Object Naming Service Architectures Ahmed Jedda (University of Ottawa, Canada), Hussein T Mouftah (University of Ottawa, Canada)	B <i>#</i> 5
FlowCover: Low-cost Flow Monitoring Scheme in Software Defined Networks  Zhiyang Su (Hong Kong University of Science and Technology, Hong Kong), Ting Wang (Hong Kong University of Science and Technology, Hong Kong), Yu Xia (Hong Kong University of Science and Technology, P.R. China), Mounir Hamdi (Hong Kong University of Science and Technology, P.R. China)	19) *
Efficient Integration of Software Defined Networking and Information-Centric Networking with CoLoR  Luo Hongbin (Beijing Jiaotong University, P.R. China), Jianbo Cui (Beijing Jiaotong University, P.R. China), Zhe Chen (Beijing Jiaotong University, P.R. China), Mingshuang Jin (Beijing	
Jiaotong University, P.R. China), Zhang Hongke (Beijing Jiaotong University, P.R. China)	
Lei (National Taiwan University, Taiwan)  Reliable Video over Software-Defined Networking (RVSDN)  Harold Owens, II (IUPUI, USA), Arjan Durresi (Indiana Un. Purdue University Indianapolis, USA), Raj Jain (Washington University in St. Louis, USA)	
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Forwarding Design and Next Generation Network Management	
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Dong Ma (Soochow University, P.R. China), Maode Ma (Nanyang Technological University, Singapore)	%

An Architecture for Dynamic Resource Adjustment in VSDNs based on Traffic Demand	
Rafael Gomes (University of Campinas (UNICAMP) & UCLA, Brazil), Luiz F. Bittencourt (University of Campinas, Brazil), Edmundo Madeira (State University of Campinas, Brazil), Eduardo Cerqueira (Federal University of Para & UCLA & UFPA & UCLA, Brazil), Mario Gerla (University of California at Los Angeles, USA)	&\$\$)
Joint Resource Allocation for eICIC in Heterogeneous Networks	
Weijun Tang (South China University of Technology, P.R. China), Rongbin Zhang (South China University of Technology & School of Electronic and Information Engineering, P.R. China), Yuan Liu (South China University of Technology, P.R. China), Suili Feng (South China University of Technology, P.R. China)	20%
Experimental evaluation of a Recursive InterNetwork Architecture prototype	
Sander Vrijders (Ghent University - iMinds, Belgium), Dimitri Staessens (Ghent University - iMinds, Belgium), Didier Colle (iMinds - Ghent University, Belgium), Francesco Salvestrini (Nextworks s. r. l., Italy), Vincenzo Maffione (Nextworks, Italy), Leonardo Bergesio (i2CAT, Spain), Miquel Tarzan-Lorente (i2Cat Foundation, Spain), Bernat Gastón (Fundació i2CAT, Internet i Innovació Digital a Catalunya, Spain), Eduard Grasa (Fundació i2CAT, Internet i	
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## **Switching and Routing in Optical Networks**

Minimum-Cost Survivable Virtual Optical Network Mapping in Flexible Bandwidth Optical Networks	
Bowen Chen (School of Electronic and Information Engineering, Soochow University & Beijing University of Posts and Telecommunications, P.R. China), Jie Zhang (Beijing University of Posts and Telecommunications, P.R. China), Weisheng Xie (University of Texas at Dallas, USA), Jason P. Jue (University of Texas at Dallas, USA), Yongli Zhao (Beijing University of Posts and Telecommunications, P.R. China), Shanguo Huang (Beijing University of Posts and Telecommunications, P.R. China), Wanyi Gu (Key Laboratory of Optical Communication and Lightwave Technologies, Ministry of Education, Beijing U, P.R. China)	
Grooming Demands instead of Traffic: Benefits of a Choice-Based Approach to Green Optical Networks	
Ahmet C Babaoglu (North Carolina State University, USA), Rudra Dutta (North Carolina State University, USA)	20&-
Metropolitan and Access Network Architecture Design for Optical Flow Switching	
Anny Xijia Zheng (Massachusetts Institute of Technology, USA), Lei Zhang (MIT, USA), Vincent Chan (Massachusetts Institute of Technology, USA)	20' *
Virtual Optical Network Embedding in Multi-Domain Optical Networks	
Sangjin Hong (University of Texas at Dallas, USA), Jason P. Jue (University of Texas at Dallas, USA), Qiong Zhang (Fujitsu Laboratories of America, USA), Xi Wang (Fujitsu Laboratories of America, USA), Hakki Candan Cankaya (Fujitsu Network Communications & Southern Methodist University, USA), Qingya She (Fujitsu Network Communications, USA), Motoyoshi Sekiya (Fujitsu Laboratories of America, Inc., USA)	20( &
Design of Optical and Electronic Combined Buffer Architecture for Optical Packet Switches	•
Takahiro Hirayama (National Institute of Information and Communications Technology, Japan), Takaya Miyazawa (National Institute of Information and Communications Technology (NICT), Japan), Hiroaki Harai (National Institute of Information and Communications Technology, Japan)	207
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Capacity Bounds for Dimmable Visible Light Communications Using PIN Photodiodes with Input Dependent Gaussian Noise	
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Analysis of downlink transmission in DCO-OFDM-based optical attocell networks	
Cheng Chen (University of Edinburgh, United Kingdom), Muhammad Ijaz (University of Edinburgh, United Kingdom), Dobroslav A. Tsonev (University of Edinburgh, United Kingdom Harald Haas (The University of Edinburgh, United Kingdom)	
Secret Key Agreement for Free-Space Optical Communications Over Strong Turbulence Channels	
Ning Wang (The University of British Columbia, Canada), Xuegui Song (University of British Columbia, Canada), Julian Cheng (University of British Columbia, Canada), Victor CM Leung (The University of British Columbia, Canada)	2\$+,
On the Performance of Single- and Multi-carrier Modulation Schemes for Indoor Visible Light Communication Systems	. ,
Mohammadreza Aminikashani (The Pennsylvania State University, USA), Mohsen Kavehrad (The Pennsylvania State University University Park, USA)	2\$, (
Quadrature Diversity Combining for Pulse-Amplitude Modulated DMT in IM/DD Channels	., (
Celio K H Vasconcelos (University of Brasilia (UnB), Brazil), Andre N Barreto (University of Brasilia (UnB), Brazil), Darli Mello (University of Campinas (UNICAMP), Brazil)	2\$-\$
Wireless-Optical Communications  A Compact Signal Constellation for Wireless Optical Communications	
Xian Liu (University of Arkansas at Little Rock, USA)	2\$- *
Hadamard Coded Modulation: An Alternative to OFDM for Wireless Optical Communications	
Mohammad Noshad (University of Virginia, USA), Maite Brandt-Pearce (University of Virginia USA)	
Single Photon Avalanche Diode (SPAD) VLC System and Application to Downhole Monitoring Yichen Li (The University of Edinburgh, United Kingdom), Stefan Videv (University of Edinburgh, United Kingdom), Mohamed M. Abdallah (Texas A&M University at Qatar & Cairo University at Cairo, Qatar), Khalid A. Qaraqe (Texas A&M University at Qatar, USA), Murat Uysal (Ozyegin University, Turkey), Harald Haas (The University of Edinburgh, United Kingdom)	21\$.
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Chen Gong (University of Science and Technology of China, P.R. China), Zhengyuan Xu (University of Science and Technology of China, P.R. China)	21%(
On the Performance of Hybrid Line of Sight RF and RF-FSO Fixed Gain Dual-Hop Transmission Systems	
Emna Zedini (KAUST, Saudi Arabia), Imran Shafique Ansari (King Abdullah University of Science and Technology, Saudi Arabia), Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)	21%-
A Novel Double-Source Cell Configuration for Indoor Optical Attocell Networks	
Zhe Chen (University of Edinburgh, United Kingdom), Dobroslav A. Tsonev (University of	21&)

### Optical Access Network, Metro Area Network, and Elastic Optical Network

Advanced Sleep-Aware Dynamic Bandwidth Allocation for 10G-EPONs  Dung Pham Van (Scuola Superiore Sant'Anna, Italy), Maluge Pubuduni Imali Dias (NICTA Victoria Research Laboratory, Australia), Koteswararao Kondepu (Scuola Superiore Sant'Anna, Italy), Piero Castoldi (Scuola Superiore Sant'Anna, Italy), Elaine Wong (The University of Melbourne, Australia), Luca Valcarenghi (Scuola Superiore Sant'Anna, Italy)	<b>21</b> ' %
Optimal FSO Relay Nodes Placement With Link Obstacles and Infeasible Regions	/0
Bingcheng Zhu (Southeast University, Canada), Julian Cheng (University of British Columbia, Canada), Lenan Wu (Southeast University, P.R. China)	21' 7
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Abu Bakar Siddique (Pakistan Telecommunication Company Limited, Pakistan), Muhammad Tahir (University of Engineering and Technology Lahore, Pakistan)	214'
A Techno-Economic Study of Network Coding Protection Schemes Wilson Ramirez (Technical University of Catalonia (UPC) & CRAAX, Networking and Information Technology Lab, Spain), Xavier Masip-Bruin (Universitat Politècnica de Catalunya & Advanced Network Architectures Lab (CRAAX), Spain), Eva Marín-Tordera (Technical University of Catalonia UPC, Spain), Marcelo Yannuzzi (Technical University of Catalonia (UPC) & Networking and Information Technology Lab, Spain), Anny Martinez (Technical University of Catalunya (UPC), Spain), Sergio Sánchez-López (Technical University of Catalonia, Spain), Muhammad Shuaib Siddiqui (Universitat Politecnica de Catalunya & CRAAX and NetIT Lab, Spain), Victor López (Telefonica I+D, Spain)	21(8
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Ken'ichi Kitayama (Osaka University, Japan), Akihiro Maruta (Osaka University, Japan), Yuki Yoshida (Osaka University, Japan), Nikolaos Panteleimon Diamantopoulos (Osaka University, Japan), Masaya Nakazawa (Osaka University, Japan), Tomoki Isoda (Osaka University, Japan)	215(
Virtual Network Embedding and Reconfiguration in Elastic Optical Networks	215(
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center, and Cloud  Field Trial of a Software Defined Network (SDN) using Carrier Ethernet and Segment Routing in	
a Tier-1 Provider	
Sarvesh Sanjay Bidkar (University of Bristol, United Kingdom), Ashwin A Gumaste (Indian Institute of Technology, Bombay, India), Puneet Ghodasara (Indian Institute of Technology Bombay, India), Saurabh Hote (Indian Institute of Technology Bombay, India), Aniruddha Kushwaha (IIT-Bombay, India), Geetha Patil (BARC, India), Shivaprasad Sonnis (BARC, India), Rishav Ambasta (ECIL, India), Braja Nayak (ECIL, India), Peeyush Agrawal (MTNL, India)	20/* *
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Halima Elbiaze (University of Quebec at Montreal, Canada), Karim Idoudi (UQAM, Canada), Mahmoud Bahnasy (UQAM, Canada)	21+'
Holding-Time-Aware Routing, Modulation, and Spectrum Assignment for Elastic Optical Networks	211
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Inc. LICA)	<b>3</b> 0/ *

Abdelbaset S. Hamza (University of Nebraska-Line	er Architecture Design with Fully Connected Racks ersity of Nebraska-Lincoln, USA), Jitender Singh Deogun coln, USA), Dennis Alexander (University of Nebraska-Lincoln,	2% &
Augmenting Data Center Netv	works with a Fast Reconfigurable Optical Multistage Interconnect University, USA), Yuanyuan Yang (Stony Brook University, USA)	
	and Systems: Globecom 2014 - Symposium on ations: GC14 SAC Access Networks and Systems	6
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(University of Leeds, United	of Leeds & University of Leeds, United Kingdom), Li Zhang   Kingdom)	2&‰
	r System for Future Mobile Fronthauling	
Tien Dat Pham (National Ins Iwao Hosako (National Insti Tetsuya Kawanishi (Nationa Japan), Hiroyo Ogawa (Nati	stitute of Information and Communications Technology, Japan), stitute of Information and Communications Technology, Japan), itute of Information & Communications Technology, Japan), all Institute of Information and Communications Technology, onal Institute of Information and Communications Technology & ries and Businesses, Japan)	22%
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Mamoun Guenach (Bell Labo, Labs, Alcatel-Lucent, USA),	oratories, Alcatel-Lucent, Antwerp, Belgium), Carl Nuzman (Bell Paschalis Tsiaflakis (Bell Labs, Alcatel-Lucent, Belgium), Jochen abs, Belgium)	22&-
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College Cork, Ireland), Keni	sity College Cork & CTVR, Ireland), Xiuchao Wu (University neth N Brown (University College Cork, Ireland), Cormac J. cork, Ireland)	22&'
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Dynamic Topology Management in Optical Datacenter Networks  Yangming Zhao (University of Electronic Science and Technology of China, P.R. China), Sheng Wang (University of Electronic Science and Technology of China, P.R. China), Shouxi Luo (University of Electronic Science and Technology of China, P.R. China), Hongfang Yu (University of Electronic Science and Technology of China, P.R. China), Shizhong Xu (University of electronic science and Technology, P.R. China), Xiaoning Zhang (University of Electronic Science and Technology of China, P.R. China)  NovaCube: A Low Latency Torus-Based Network Architecture for Data Centers  Ting Wang (Hong Kong University of Science and Technology, Hong Kong), Zhiyang Su (Hong Kong University of Science and Technology, Hong Kong), Yu Xia (Hong Kong University of Science and Technology, Hong Kong), Mounir Hamdi (Hong Kong University of Science and Technology, P.R. China)  Balancing Traffic Load for Devolved Controllers in Data Center Networks  Wanchao Liang (Shanghai Jiao Tong University, P.R. China), Xiaofeng Gao (Shanghai Jiao Tong University, P.R. China), Guihai Chan (Shanghai Jiao Tong University, P.R. China), Wei Wei (Stanford University, USA)	. 22) &
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Elephant Flow Detection in Datacenters Using OpenFlow-based Hierarchical Statistics Pulling Chun-Yu Lin (National Chiao Tung University, Taiwan), Chien Chen (National Chiao Tung University, Taiwan), Je-Wei Chang (National Chiao Tung University, Taiwan), Yu-Huang Chu (Chunghwa Telecom Co., Ltd., Taiwan)	. 2&*(
A Two-Phase Multipathing Scheme based on Genetic Algorithm for Data Center Networking	
Lyno Ferraz (Universidade Federal do Rio de Janeiro & Grupo de Teleinformática e Automação, Brazil), Diogo Mattos (Universidade Federal do Rio de Janeiro & GTA, Brazil), Otto Carlos M. B. Duarte (Universidade Federal do Rio de Janeiro, Brazil)	. 2&+\$
(Cloud): Mobile Cloud Networking	
Optimizing Mobile Computational Offloading with Delay Constraints Yi-Hsuan Kao (University of Southern California, USA), Bhaskar Krishnamachari (University of Southern California, USA)	. &&, -
Virtualization of Cellular Network EPC Gateways based on a Scalable SDN Architecture  Xueli An (DOCOMO Euro-Labs, Germany), Wolfgang Kiess (DOCOMO Euro-Labs, Germany),  David Perez-Caparros (Huawei European Research Center, Germany)	
Minimum Latency Server Selection for Heterogeneous Cloud Services	,
He Chang (Hong Kong Baptist University, Hong Kong), Hai Liu (Hong Kong Baptist University, Hong Kong), Yiu-Wing Leung (Hong Kong Baptist University, Hong Kong), Xiaowen Chu (Hong Kong Baptist University, Hong Kong)	. 2&+*
On the Statistical Multiplexing Gain of Virtual Base Station Pools	
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Traffic-Aware Graph-Based Dynamic Frequency Reuse for Heterogeneous Cloud-RAN	
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A Dynamic Execution Offloading Model For Efficient Mobile Cloud Computing	•
Yong Jiang (Graduate School at Shenzhen, Tsinghua University, P.R. China), Juhua He (Graduate School at Shenzhen, Tsinghua University, P.R. China), Qing Li (Graduate School at Shenzhen, Tsinghua University, P.R. China), Xi Xiao (Graduate School at Shenzhen, Tsinghua University, P.R. China)	. 23\$&

#### (Cloud): Virtual Machine Migration and Allocation

To Migrate or to Wait: Delay-Cost Tradeoff for Cloud Data Centers	
Xiumin Wang (Hefei University of Technology, P.R. China), Xiaoming Chen (Nanjing University of Aeronautics and Astronautics, P.R. China), Chau Yuen (Singapore University of Technology and Design, Singapore), Weiwei Wu (Southeast University of China, P.R. China), Wei Wang (Heifei University of Technology, P.R. China)	23%(
Joint Virtual Machine Placement and Migration Scheme for Datacenters	
Thuan Duong-Ba (Oregon State University, USA), Thinh Nguyen (Oregon State, USA), Bella Bose (Oregon State University, USA), Tuan Tran (University of Louisville, USA)	23&\$
XenFlow: Seamless Migration Primitive and Quality of Service for Virtual Networks	
Diogo Mattos (Universidade Federal do Rio de Janeiro & GTA, Brazil), Otto Carlos M. B. Duarte (Universidade Federal do Rio de Janeiro, Brazil)	23&6
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Jiaqiang Liu (Tsinghua University, P.R. China), Li Su (Tsinghua University, P.R. China), Yuchen Jin (Tsinghua, P.R. China), Yong Li (Tsinghua University, P.R. China), Depeng Jin (Tsinghua University, P.R. China), Lieguang Zeng (Tsinghua University, P.R. China)	233&
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John Apostolopoulos (Cisco Systems, USA)	23( (

# GC14 SAC Data Storage: Globecom 2014 - Symposium on Selected Areas in Communications: GC14 SAC Data Storage

#### **Data Storage**

Fundamental Limits on Communication for Oblivious Updates in Storage Networks  Preetum Nakkiran (University of California, Berkeley, USA), Nihar B Shah (University of California, Berkeley, USA), K. v. Rashmi (University of California at Berkeley, USA)	. &' *'
New MDS Array Code Correcting Multiple Disk Failures	
Hanxu Hou (Peking University Shenzhen Graduate School, P.R. China), Kenneth W. Shum (Institute of Network Coding, Hong Kong), Minghua Chen (The Chinese University of Hong Kong, P.R. China), Hui Li (Peking University Shenzhen Graduate School, P.R. China)	. &' *-
Modelling of the Threshold Voltage Distributions of Sub-20nm NAND Flash Memory	
Thomas Parnell (IBM Research - Zurich, Switzerland), Nikolaos Papandreou (IBM Research - Zurich, Switzerland), Thomas Mittelholzer (IBM Zurich Research Laboratory, Switzerland), Haralampos Pozidis (IBM Research - Zurich, Switzerland)	. 2')%
Polar Code Design for Intersymbol Interference Channels	
Ubaid Ullah Fayyaz (Georgia Institute of Technology, USA), John Barry (Georgia Institute of Technology, USA)	. 2')+
On the Latency of Heterogeneous MDS Queue	
Akshay Kumar (Virginia Polytechnic Institute and State University, USA), Ravi Tandon (Virginia Tech, USA), T. Charles Clancy (Virginia Tech, USA)	. 2' +)
Beyond Proofs of Data Possession: Finding Defective Blocks in Outsourced Storage	
Juan Camilo Corena (Personal, Japan), Anirban Basu (KDDI R&D Laboratories Inc., Japan), Shinsaku Kiyomoto (KDDI R&D Laboratories Inc., Japan), Yutaka Miyake (KDDI R&D Laboratories Inc., Japan), Tomoaki Ohtsuki (Keio University, Japan)	. <b>2'</b> , %

# GC14 SAC e-Health: Globecom 2014 - Symposium on Selected Areas in Communications: GC14 SAC e-Health

## (eHealth): Body Area Networks

	Cooperative Compressed Sensing schemes for Telemonitoring of Vital Signals in WBANs Aris S. Lalos (Technical University of Catalonia (UPC), Spain), Elli Kartsakli (Universitat Politècnica de Catalunya (UPC), Spain), Angelos Antonopoulos (Telecommunications Technological Centre of Catalonia (CTTC), Spain), Stefano Tennina (University of L'Aquila,	
	Italy), Marco Di Renzo (French National Center for Scientific Research (CNRS), France), Luis Alonso (Universidad Politecnica de Catalunya-BarcelonaTECH & Telecommunications and Aerospatial Engineering School of Castelldefels, Spain), Christos Verikoukis	
	(Telecommunications Technological Centre of Catalonia, Spain)  Prioritized Payload Tuning Mechanism for Wireless Body Area Network-Based Healthcare	2' 8+
	Systems Soumen Moulik (Indian Institute of Technology, Kharagpur, India), Sudip Misra (Indian Institute of Technology-Kharagpur, India), Chandan Chakraborty (IIT Kharagpur, India), Mohammad S. Obaidat (Monmouth University, USA)	2' - 3
	Cost-Effective Reliability-and Energy-Based Intra-WBAN Interference Mitigation	
	Hassine Moungla (University of Paris Descartes, France), Abdallah Jarray (University of Ottawa, Canada), Ahmed Karmouch (University of Ottawa, Canada), Ahmed Mehaoua (University of Paris Descartes, France)	2'
	Adaptive BCH Code for High Throughput of IEEE802.15.6 based WBAN	—
	Pham Thanh Hiep (Yokohama National University, Japan), Ryuji Kohno (Yokohama National University, Japan)	2446
(eHealth):	AIM: Adaptive Internetwork Interference Mitigation Amongst Co-existing Wireless Body Area Networks  Samaneh Movassaghi (Australian National University & NICTA, Australia), Mehran Abolhasan (University of Technology Sydney, Australia), David B Smith (National ICT Australia, Australia), Abbas Jamalipour (University of Sydney, Australia)  Body Area Networks	&(*\$
(01100111)1		
	An Energy-Efficient Leader Election Mechanism for Wireless Body Area Networks Rongrong Zhang (University of Paris Descartes, France), Hassine Moungla (University of Paris Descartes, France), Ahmed Mehaoua (University of Paris Descartes, France)	&( %%
Selected A	Areas in Communications Interactive Presentations I: (eHealth) (Human Centric Computi	ng)
	Energy Efficient in Medical Ad Hoc Sensors Network by Exploiting Routing Protocols	
	Pascal Lorenz (University of Haute Alsace, France), Sofiane Hamrioui (USTHB, Algeria), Jaime Lloret (Universidad Politécnica de Valencia, Spain), Lalam Mustapha (University of Tizi, Algeria)	24%+
	Context-Driven Online Learning for Activity Classification in Wireless Health	
	Jie Xu (University of California, Los Angeles, USA), James Xu (University of California, Los Angeles, USA), Linqi Song (University of California, Los Angeles, USA), Gregory Pottie (University of California at Los Angeles, USA), Mihaela van der Schaar (University of	2461
	California, Los Angeles (UCLA), USA)	24&

## (eHealth): eHealth Communications

Analysis of Dependency Evaluation Models for eHealth Services  Haider Mshali (CampusFranc, University of Bordeaux and Rennes 1- LaBRI/IRISA Labs, France), Tayeb Lemlouma (IRISA Lab and Rennes 1 University, France), Damien Magoni (University of Bordeaux, France)	24&-
A Cloud-based Interference-aware Remote Health Monitoring System for Non-hospitalized Patients	
Ghada Almashaqbeh (University of Notre Dame, USA), Thaier Al-Hayajneh (Hashemite University, Jordan), Athanasios V. Vasilakos (National Technical University of Athens & Kuwait University, Greece)	24' *
Energy-efficient In-network Encryption/Decryption for Wireless Body Area Sensor Networks	
Ye Yan (Oakland University, USA), Tao Shu (Oakland University, USA)	24(&
eBPlatform: An IoT-based System for NCD Patients Homecare in China	
Yu Liu (Beihang University, P.R. China), Jianwei Niu (Beihang University, P.R. China), Lianjun Yang (Institute of Microelectronics of CAS, P.R. China), Lei Shu (Guangdong University of Petrochemical Technology, P.R. China)	24(,
Comparison of Situation Awareness Algorithms for Remote Health Monitoring with Smartphones	ζ,
Igor Bisio (University of Genoa, Italy), Fabio Lavagetto (University of Genoa, Italy), Mario Marchese (DIST- University of Genoa, Italy), Andrea Sciarrone (University of Genoa, Italy)	2(5(
(eHealth): Body Area Networks	
Analysis of Reliability and Throughput under Saturation Condition of IEEE 802.15.6 CSMA/CA for Wireless Body Area Networks	
Subhadeep Sarkar (Indian Institute of Technology, Kharagpur, India), Sudip Misra (Indian Institute of Technology-Kharagpur, India), Chandan Chakraborty (IIT Kharagpur, India), Mohammad S. Obaidat (Monmouth University, USA)	2(\$5
GC14 SAC Green Communication Systems and Networks: Globecom 2014 - Symposium on Selected Areas in Communications: GC14 SAC Green Communication Systems and Networks  Green Cellular Networks	
Cost-Efficient Radio Resource Allocation in Hybrid Energy Cellular Networks  Hussein Al Haj Hassan (Telecom Bretagne, France), Alexander Pelov (Institut Mines-Telecom  / Telecom Bretagne, France), Loutfi Nuaymi (Telecom Bretagne, France)	2( +&
Green Wireless Networks I	
Traffic Management for Sustainable LTE Networks  Andres Kwasinski (Rochester Institute of Technology, USA), Alexis Kwasinski (University of Texas, USA)	&* %

## **Green Cellular Networks**

Coalition-Assisted Energy Efficiency Optimization via Uplink Macro-Femto Cooperation Xiao Tang (Xi'an Jiaotong University, P.R. China), Pinyi Ren (Xi'an Jiaotong University, P.R. China), Yichen Wang (Xi'an Jiaotong University, P.R. China), Qinghe Du (Xi'an Jiaotong University, P.R. China), Li Sun (Xi'an Jiaotong University, P.R. China)	8.( ±-
Reducing the Energy Consumption of Small Cell Networks subject to QoE constraints	(4)
Nikolaos Sapountzis (EURECOM, France), Stylianos Sarantidis (EURECOM, France), Thrasyvoulos Spyropoulos (EURECOM, France), Navid Nikaein (Eurecom, France), Umer Salir (Intel Mobile Communications, France)	
Efficient Packet Detection for D2D Power-Saving Communications Over Mobile Wireless Cellular Networks	
Fan Yang (University of Electronic Science and Technology of China, P.R. China), Xi Zhang (Texas A&M University, ECE Department, USA)	2( - &
Resource Provisioning and Dimensioning for Solar Powered Cellular Base Stations	
Vinay Chamola (National University of Singapore, Singapore), Biplab Sikdar (Rensselaer Polytechnic Institute, USA)	24- ,
Green Clouds and Data Centers	
Scalable Workload Management for Water Efficiency in Data Centers	
Lanchao Liu (University of Houston, USA), Shaolei Ren (Florida International University, USA), Zhu Han (University of Houston, USA)	25\$(
A General Framework For Performance Guaranteed Green Data Center Networking	
Ting Wang (Hong Kong University of Science and Technology, Hong Kong), Yu Xia (Hong Kong University of Science and Technology, P.R. China), Jogesh K. Muppala (Hong Kong University of Science and Technology, Hong Kong), Mounir Hamdi (Hong Kong University of Science and Technology, P.R. China)	25%\$
Dynamic Power Capping for Multilayer Hybrid Power Networks	
Jacek Rzasa (AGH University of Science and Technology, Poland), Piotr Boryło (AGH University of Science and Technology, Poland), Artur Lason (AGH University of Science and Technology, Poland), Andrzej Szymanski (AGH University of Science and Technology, Poland)Andrzej Jajszczyk (AGH University of Science and Technology, Poland)	
Optimizing Rule Placement in Software-Defined Networks for Energy-aware Routing	
Frederic Giroire (CNRS, France), Joanna Moulierac (MASCOTTE, I3S (CNRS UNS) INRIA, France), Truong Khoa Phan (MASCOTTE, CNRS-UNS, INRIA, France)	25&'
A Green Network-Aware VMs Placement Mechanism	
Albert P. M. De La Fuente Vigliotti (University of São Paulo, Brazil), Daniel M. Batista (University of São Paulo, Brazil)	25' \$
Achieving Energy-Proportionality in Fat-tree DCNs	
Qing Yi (Portland State University, USA), Suresh Singh (Portland State University, USA)	25' *
Selected Areas in Communications Interactive Presentations II: Green Communication Systems Networks	s and
Experimental Study of Concurrent Data and Wireless Energy Transfer for Sensor Networks	
M. Yousof Naderi (Northeastern University, USA), Kaushik Chowdhury (Northeastern University, USA), Stefano Basagni (Northeastern University, USA), Wendi Heinzelman (University of Rochester, USA), Swades De (Indian Institute of Technology Delhi, India),	
Soumya Jana (Indian Institute of Technology, Hyderabad, India)	25( '
Energy-Harvesting Powered Transmissions of Delay-limited Data Packets Xiaojing Chen (Fudan University, P.R. China), Xin Wang (Fudan University, P.R. China)	25) ¢
made in the control of the control o	23) 4

Wireless Information and Energy Transfer in Interference Aware Massive MIMO Systems	
Hengzhi Wang (Zhejiang University, P.R. China), Wei Wang (Zhejiang University, P.R. China), Xiaoming Chen (Nanjing University of Aeronautics and Astronautics, P.R. China), Zhaoyang Zhang (Zhejiang University, P.R. China)	&))*
A Game Theoretical Approach for Energy Trading in Wireless Networks Powered by Green Energy	
Zhongming Zheng (University of Waterloo, Canada), Lin X. Cai (Illinois Institute of Technology, USA), Ning Zhang (University of Waterloo, Canada), Ran Zhang (University of Waterloo, Canada), Sherman Shen (University of Waterloo, Canada)	&) * &
Joint Link Selection and Relay Power Allocation for Energy Harvesting Relaying Systems	
Yuyi Mao (Hong Kong University of Science and Technology, Hong Kong), Jun Zhang (The Hong Kong Kong University of Science and Technology, Hong Kong), Shenghui Song (The Hong Kong University of Science and Technology, Hong Kong), Khaled B. Letaief (The Hong Kong University of Science and Technology, Hong Kong)	2) 6,
Energy-Efficient Antenna Selection and Power Allocation for Large-Scale Multiple Antenna Systems with Hybrid Energy Supply	
Zhenyu Zhou (North China Electric Power University & Waseda University, P.R. China), Sheng Zhou (Tsinghua University, P.R. China), Jie Gong (Tsinghua University, P.R. China), Zhisheng Niu (Tsinghua University, P.R. China)	2) +(
Green Optical Networking	
Energy-aware de-allocation of lightpaths in WDM networks	
Juliana De Santi (State University of Campinas, Brazil), Nelson L. S. da Fonseca (State University of Campinas, Brazil)	&) , *
Fitting Green Anycast Strategies to Cloud Services in WDM Hybrid Power Networks	
Piotr Boryło (AGH University of Science and Technology, Poland), Artur Lason (AGH University of Science and Technology, Poland), Jacek Rzasa (AGH University of Science and Technology, Poland), Andrzej Szymanski (AGH University of Science and Technology, Poland), Andrzej Jajszczyk (AGH University of Science and Technology, Poland)	&) - &
Fine-Grain Power Control for Combined Input-Crosspoint Queued Switches	,
Yu Xia (Hong Kong University of Science and Technology, P.R. China), Ting Wang (Hong Kong University of Science and Technology, Hong Kong), Zhiyang Su (Hong Kong University of Science and Technology, Hong Kong), Mounir Hamdi (Hong Kong University of Science and Technology, P.R. China)	&) <sub>-</sub> -
Radio over Fiber Based Networks for the Smart Grid	۵,
Abolfazl Ghassemi (University of Tehran, Iran), T. Aaron Gulliver (University of Victoria, Canada), John Cioffi (Stanford University, USA), George K. Karagiannidis (Aristotle University of Thessaloniki, Greece)	&* \$)
On Forecasting the ONU Sleep Period in XG-PON Systems Using Exponential Smoothing Techniques	·
Panagiotis Sarigiannidis (University of Western Macedonia, Greece), Athanasios Gkaliouris (University of Western Macedonia, Greece), Vasiliki Kakali (Aristotle University of Thessaloniki, Greece), Malamati Louta (University of Western Macedonia, Greece), Georgios Papadimitriou (Aristotle University, Greece), Petros Nicopolitidis (Aristotle University, Greece), Mohammad S. Obaidat (Monmouth University, USA)	2) , \$
Energy consumption of Indoor Radio-over-Fiber Distribution Links: Experimental Findings	
Apurva Gowda (Stanford University, USA), Hejie Yang (Corning Incorporated, USA), Solomon Abraha (Corning Incorporated, USA), Anthony Ng'oma (Corning Incorporated, USA), Ahmad R. Dhaini (American University of Beirut, Lebanon), Leonid Kazovsky (Stanford University, USA), Kadir Albeyoglu (Stanford University, USA)	260/0
USA), Radii Albeyogid (Stalliold Ulliversity, USA)	ZO%&

## **Green Wireless Networks I**

Joint Energy and Delay-aware Scheme for 5G Mobile Cognitive Radio Networks	
Constandinos X. Mavromoustakis (University of Nicosia, Cyprus), George Mastorakis	
(Technological Educational Institute of Crete, Greece), Athina Bourdena (Technological	
Educational Institute of Crete, Greece), Evangelos Pallis (Technological Educational Institute of	
Crete, Greece), Georgios Kormentzas (University of the Aegean, Greece), Christos Dimitriou	2607
(Dept. of Computer Science, University of Nicosia, Cyprus)	26&(
Energy-Efficient Resource Allocation in Shared Full-Duplex Relaying Cellular Networks	
Gang Liu (Beijing University of Posts and Telecommunications, P.R. China), F. Richard Yu	
(Carleton University, Canada), Hong Ji (Beijing University of Posts and Telecommunications, P.R. China), Victor CM Leung (The University of British Columbia, Canada)	261.0/
	26 %
A Stochastic Power Control Game for Two-Tier Cellular Networks with Energy Harvesting Small- Cells	
Kien Tran (University of Manitoba, Canada), Hina Tabassum (University of Manitoba, Canada), Ekram Hossain (University of Manitoba, Canada)	26' ±
Joint Uplink and Downlink Cell Selection in Cognitive Small Cell Heterogeneous Networks	20 +
Agapi Mesodiakaki (Universitat Politècnica de Catalunya, Spain), Ferran Adelantado (Universitat Oberta de Catalunya, Spain), Luis Alonso (Universidad Politecnica de Catalunya-	
BarcelonaTECH & Telecommunications and Aerospatial Engineering School of Castelldefels,	
Spain), Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)	26('
Smart Grid Communications	
Optimal Joint Transmission Scheduling for Green Energy Powered Coordinated Multi-Point	
Transmission System	
Zejue Wang (Institute of Acoustics, Chinese Academy of Sciences, P.R. China), Hongjia Li	
(Institute of Acoustics, Chinese Academy of Sciences & Beijing University of Posts and	
Telecommunications, P.R. China), Xin Chen (Chinese Academy of Sciences, P.R. China), Song	
Ci (University of Nebraska-Lincoln, USA)	&* - \$
Green Wireless Networks I	
Green Wireless Networks I	
Sharing the Small Cells for Energy Efficient Networking: How much does it cost?	
Alexandra Bousia (UPC, Spain), Elli Kartsakli (Universitat Politècnica de Catalunya (UPC),	
Spain), Angelos Antonopoulos (Telecommunications Technological Centre of Catalonia	
(CTTC), Spain), Luis Alonso (Universidad Politecnica de Catalunya-BarcelonaTECH &	
Telecommunications and Aerospatial Engineering School of Castelldefels, Spain), Christos	0 * /
Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)	&^(-
Green Wireless Networks II	
December Allegation in Calif Containable Containable Allegation National and the Complication of the	
Resource Allocation in Self-Sustainable Green Wireless Networks with Combinatorial Auction	
Wenbo Wang (Rochester Institute of Technology, USA), Andres Kwasinski (Rochester	2*\\
Institute of Technology, USA), Alexis Kwasinski (University of Texas, USA)	2^))
Offloading With IFOM: The Uplink Case	
Vasileios Miliotis (Universitat Politècnica de Catalunya, Spain), Luis Alonso (Universidad	
Politecnica de Catalunya-BarcelonaTECH & Telecommunications and Aerospatial Engineering	
School of Castelldefels, Spain), Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)	2**%
or Catalorna, Spain)	<i>L</i> /0

Antenna Selection and Power Splitting for Simultaneous Wireless Information and Power Transfer in Interference Alignment Networks	
Xuanheng Li (Dalian University of Technology, P.R. China), Yi Sun (Dalian University of Technology, P.R. China), F. Richard Yu (Carleton University, Canada), Nan Zhao (Dalian University of Technology, P.R. China)	2**7
Green communication via Type-I ARQ: Finite block-length analysis	
Behrooz Makki (Chalmers University of Technology, Sweden), Tommy Svensson (Chalmers University of Technology, Sweden), Michele Zorzi (Università degli Studi di Padova, Italy)	
Low Complexity Energy-Efficient Design for OFDMA Systems with an Elaborate Power Model	
Qingqing Wu (Shanghai Jiao Tong University, P.R. China), Wen Chen (Shanghai Jiao Tong University, P.R. China), Jun Li (University of Sydney, Australia), Jinsong Wu (Bell Laboratories, Alcatel-Lucent, P.R. China)	2*7.
HePNC: Design of Physical Layer Network Coding with Heterogeneous Modulations	<i>-</i> ,,
Haoyuan Zhang (UVic, Canada), Lei Zheng (UVic, Canada), Lin Cai (University of Victoria,	
Canada)	2*, (
Smart Grid Communications	
Cooperative Energy Trading in CoMP Systems Powered by Smart Grids	
Jie Xu (National University of Singapore, Singapore), Rui Zhang (National University of Singapore, Singapore)	2* - +
Economic Coalition Strategies for Cost Reductions in Microgrids Distribution Networks	
Yi Xu (New Jersey Institute of Technology, USA), Edwin Hou (New Jersey Institute of Technology, USA), Nirwan Ansari (NJIT, USA)	27\$'
SmartCar: Smart Charging and Driving Control for Electric Vehicles in the Smart Grid	
Lei Rao (General Motors Research Lab, USA), Jianguo Yao (Shanghai Jiao Tong University, P.R. China)	270-
Self-Sustaining Wireless Neighborhood Area Network Design for Smart Grid	
Feng Ye (University of Nebraska-Lincoln, USA), Yi Qian (University of Nebraska-Lincoln, USA), Rose Qingyang Hu (Utah State University, USA)	27%5
Data Offloading with Renewable Energy Powered Base Station Connected to a Microgrid	
Yeow-Khiang Chia (Institute for Infocomm Research & Agency for Science, Technology and Research, Singapore), Chin Keong Ho (Institute for Infocomm Research, A*STAR, Singapore) Sumei Sun (Institute for Infocomm Research, Singapore)	re),
Green Cellular Networks	
Energy Efficient Smart Metering for Green Smart Grid Communication	
Samaresh Bera (Indian Institute of Technology Kharagpur, India), Sudip Misra (Indian Institute of Technology-Kharagpur, India), Mohammad S. Obaidat (Monmouth University, USA)	2(**

# GC14 SAC Human Centric Computing: Globecom 2014 - Symposium on Selected Areas in Communications: GC14 SAC Human Centric Computing

Selected Areas in Communications Interactive Presentations I: (eHealth) (Human Centric Computing)

A novel location prediction based on activity patterns  Yang Liu (Huazhong University of Science and Technology, P.R. China), Chen Yu (Huazhong University of Science and Technology & School of Computer Science and Technology, P.R. China), Dezhong Yao (Huazhong University of Science and Technology, P.R. China), Hai Jin (Huazhong University of Science and Technology, P.R. China), Hanhua Chen (HUST, P.R. China), Qiang Ding (Huawei Technologies Co., P.R. China)  Cloud Augmentative and Alternative Communication for People with Complex Communication Needs	. B <i>#</i> 5
Rosanna Yuen-Yan Chan (The Chinese University of Hong Kong, Hong Kong)	27&+
Kaikai Sheng (Shanghai Jiao Tong University, P.R. China), Zhicheng Gu (Shanghai Jiao Tong University, P.R. China), Xueyu Mao (Shanghai Jiao Tong University, P.R. China), Xiaohua Tian (Shanghai Jiao Tong University, P.R. China), Xiaoying Gan (Shanghai Jiao Tong University, P.R. China), Xinbing Wang (Shanghai Jiaotong University, P.R. China)	. 27' '
State-machine driven Opportunistic Sensing by Mobile Devices	
Radhika Loomba (TSSG, Waterford Institute of Technology, Ireland), Lei Shi (Waterford Institute of Technology, Ireland), Brendan Jennings (Waterford Institute of Technology,	
Institute of Technology, Ireland), Brendan Jennings (Waterford Institute of Technology,  Ireland)	. 27' -
(IoT) Extending the Internet of Things through Mobile Wireless Networks, RFID, and Cloud Compu	ting
A Mechanism for Uplink Packet Scheduler in LTE Network in the Context of Machine-to-Machine Communication	
Adyson Magalhães Maia (Federal University of Ceará, Brazil), Dario Vieira (EFREI, France), Miguel Franklin de Castro (Federal University of Ceará, Brazil), Yacine Ghamri-Doudane (University of la Rochelle, France)	. &++*
(IoT) Managing and Building New Internet of Things Applications	
DeepSense: A Novel Learning Mechanism for Traffic Prediction with Taxi GPS Traces  Xiaoguang Niu (Wuhan University, P.R. China), Ying Zhu (Wuhan University, P.R. China),	2 / 5
Xining Zhang (Wuhan University, P.R. China)	. 2+(5
Sara Hachem (University of California Berkeley, France), Animesh Pathak (Inria Paris-Rocquencourt, France), Valerie Issarny (INRIA, France)	. B <i>#</i> 5
(IoT) Extending the Internet of Things through Mobile Wireless Networks, RFID, and Cloud Compu	ting
DTNs BACK: DTNs Broadcasting ACK	
Patrice Raveneau (Université de Toulouse - IRIT - ENSEEIHT, France), Riadh Dhaou (IRIT/ ENSEEIHT, University of Toulouse, France), Emmanuel Chaput (Irit-Enseeiht, France), André- Luc Beylot (University of Toulouse, France)	8ı+ −

# (IoT) Managing and Building New Internet of Things Applications

	Privacy-Preserving Aggregation for Participatory Sensing with Efficient Group Management Jianwei Chen (Beijing University of Posts and Telecommunications, P.R. China), Huadong Ma (Beijing University of Posts and Telecommunications, P.R. China)  Distinguishing Uncertain Objects with Multiple features for Crowdsensing  Bin Liu (UESTC & HUAWEI, P.R. China), Chao Song (University of Electronic Science and Technology of China, P.R. China), Ming Liu (University of Electronic Science and Technology of China, P.R. China), Nianbo Liu (University of Electronic Science and Technology of China,	&+) +
	P.R. China)	2+) %
(IoT) Extend	ding the Internet of Things through Mobile Wireless Networks, RFID, and Cloud Comput	ing
,	A CoAP-compliant solution for efficient inclusion of RFID in the Internet of Things Ivan Farris (University Mediterranea of Reggio Calabria, Italy), Antonio Iera (University Mediterranea of Reggio Calabria, Italy), Antonella Molinaro (University Mediterranea of Reggio Calabria, Italy), Sara Pizzi (University "Mediterranea" of Reggio Calabria, Italy)	&+-)
(IoT) Manag	ging and Building New Internet of Things Applications	
,	A case for ICN usage in IoT environments  José Quevedo (Instituto de Telecomunicações & Universidade de Aveiro, Portugal), Daniel Corujo (Instituto de Telecomunicações Aveiro & Universidade de Aveiro, Portugal), Rui L Aguiar (University of Aveiro & Instituto de Telecomunicações, Portugal)	&++\$
(IoT) Extend	ding the Internet of Things through Mobile Wireless Networks, RFID, and Cloud Comput	ing
(	Google Cloud Messaging (GCM): An Evaluation  Yavuz Selim Yilmaz (University at Buffalo, SUNY, USA), Bahadir I Aydin (Uniersity at Buffalo, SUNY, USA), Murat Demirbas (University at Buffalo, SUNY, USA)	2. <b>\$</b> _
	Transient Clouds: Assignment and Collaborative Execution of Tasks on Mobile Devices  Terry Penner (LeTourneau University, USA), Alison Johnson (Texas State University, USA),  Brandon Van Slyke (Texas State University, USA), Mina Guirguis (Texas State University,	
,	USA), Qijun Gu (Texas State University, USA)  A User-Satisfaction Based Offloading Technique for Smart City Applications  Daniela Mazza (University of Bologna, Italy), Daniele Tarchi (University of Bologna, Italy),  Giovanni Emanuele Corazza (University of Bologna, Italy)	
(IoT) Manag	ging and Building New Internet of Things Applications	
,	ADHT: Agent-based DHT Architecture for Constrained Devices  Erkki Harjula (University of Oulu, Finland), Teemu Leppänen (University of Oulu & Intelligent Systems Group, Finland), Timo Ojala (University of Oulu, Finland), Mika Ylianttila (University of Oulu, Finland)	&+*'

# GC14 SAC Nanotechnology: Globecom 2014 - Symposium on Selected Areas in Communications: GC14 SAC Nanotechnology

Selected Areas in Communications Interactive Presentations III: (Nanotechnology) (Power Line Communication)

Bounds on Distance Estimation via Diffusive Molecular Communication  Adam Noel (University of British Columbia, Canada), Karen C Cheung (University of British Columbia, Canada), Robert Schober (University of British Columbia, Canada)	28&\$
CC14 SAC Satellite & Space Communication: Globecom 2014 - Symposium on elected Areas in Communications: GC14 SAC Satellite & Space Communications	n
Satellite and Space Communications): Satellite Communications	
An Energy Detector based Radio Environment Mapping Technique for Cognitive Satellite Systems	
Vincenzo Icolari (University of Bologna, Italy), Daniele Tarchi (University of Bologna, Italy), Alessandro Vanelli-Coralli (University of Bologna, Italy), Matteo Vincenzi (University of Bologna, Italy)	L - &
Modeling Air-to-Ground Path Loss for Low Altitude Platforms in Urban Environments	ι, α
Akram Al-Hourani (RMIT University, Australia), Sithamparanathan Kandeepan (RMIT University, Australia), Abbas Jamalipour (University of Sydney, Australia)	ė, -,
Satellite and Space Communications) Satellite Networking	
ationite and opage communications, catemic Notworking	
On Booking for Foton dian Catallite Coming Life in LEO Catallite Naturale	
On Routing for Extending Satellite Service Life in LEO Satellite Networks  Mohammed Hussein (University of Toulouse, France), Gentian Jakllari (University of Toulouse, France), Beatrice Paillassa (ENSEEIHT, France)	k. ' &
On the delay distribution and maximum message length in DTNs with long propagation delays  Dmitri Moltchanov (Tampere University of Technology, Finland), Yevgeni Koucheryavy	
(Tampere University of Technology, Finland)	', ( (
Reducing Latency in Satellite Emergency Networks through a Cooperative Transmission Control	
Maurizio Casoni (University of Modena and Reggio Emilia, Italy), Carlo Augusto Grazia (University of Modena and Reggio Emilia, Italy), Martin Klapez (University of Modena and	
Reggio Emilia, Italy), Natale Patriciello (University of Modena and Reggio Emilia, Italy)	2, ) \$
Optimized GSE Packet Scheduling over DVB-S2	, , +
Jean-Baptiste Dupé (Université de Toulouse & TéSA, France), Emmanuel Chaput (Irit-	
Enseeiht, France), Cédric Baudoin (Thales Alenia Space, France), Caroline Bes (CNES,	
France), Arnaud Deramecourt (Centre National d'Etudes Spatial, France), André-Luc Beylot	· · ·
(University of Toulouse, France)2	., ) *

# (Satellite and Space Communications): Satellite Communications

	Performance Evaluation of Transmission System for 8K Super Hi-Vision Satellite Broadcasting Yoichi Suzuki (NHK Science & Technology Research Laboratories, Japan), Kenichi Tsuchida (NHK Science & Technology Research Laboratories, Japan), Yoshifumi Matsusaki (NHK Science & Technology Research Laboratories, Japan), Akinori Hashimoto (NHK Science and Technical Research Laboratories, Japan), Shoji Tanaka (NHK Science and Technical Research Laboratories, Japan), Tetsuomi Ikeda (Japan Broadcasting Corporation, Japan), Naoji Okumura (Association of Radio Industries and Businesses, Japan)	&, , *
(Satellit	te and Space Communications) Satellite Networking	
	Performance Analysis of Routing Algorithms in Satellite Network Under Node Failure Scenarios Ziluan Liu (Beijing University of Posts and Telecommunications, P.R. China), Jiangxue Han (Beijing University of Posts and Telecommunications, P.R. China), Ying Wang (Beijing University of Posts and Telecommunications & Beijing University of Posts and Telecommunications, P.R. China), Xin Li (Beijing University of Posts and Telecommunications, P.R. China), Shanzhi Chen (Beijing University of Posts and Telecommunications, P.R. China)	2, 3,
(Satellit	te and Space Communications): Satellite Communications	
	Enabling CP Terminals for Accessing LP Satellite Transponders via Wavefront Multiplexing Techniques  Donald Chang (Spatial Digital Systems, USA), Joe Lee (SDS, Inc., USA), Tzer-Hso Lin (SDS, USA)	<b>7</b> *
	USA)	
(Satellit	te and Space Communications) Satellite Networking	
	An Efficient Utilization of Intermittent Satellite-to-Ground Links by Using Mass Storage Device Embedded in Satellites  Kazuma Kaneko (Tohoku University, Japan), Yuichi Kawamoto (Tohoku University, Japan), Hiroki Nishiyama (Tohoku University, Japan), Nei Kato (Tohoku University, Japan), Morio Toyoshima (National Institute of Information and Communications Technology, Japan)	2, *&
(Satellit	te and Space Communications): Satellite Communications	
	Cooperative Transmission for Geostationary Orbiting Satellite Collocation System  Shengyue Dou (Beihang University, P.R. China), Lin Bai (Beihang University, P.R. China), Jindong Xie (Beihang University, P.R. China), Zhenyu Xiao (Beihang University, P.R. China)	2, , \$

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# (Social Networks): Community Enabled Networking

	Evolutionary Social Information Diffusion Analysis	
	Chunxiao Jiang (Tsinghua University, Beijing, P.R. China), Yan Chen (University of Maryland, College Park, USA), K. J. Ray Liu (University of Maryland, USA)	29%%
	Community Classification in Decentralized Social Networks Using Local Topological Information Pili Hu (The Chinese University of Hong Kong, Hong Kong), Wing Cheong Lau (The Chinese	
	University of Hong Kong, Hong Kong)	29&-
	A Neighborhood Vector Propagation Algorithm for Community Detection	
	Xiao Liang (Shanghai Jiao Tong University, P.R. China), Junhua Tang (Shanghai Jiao Tong University, P.R. China), Li Pan (Shanghai Jiao Tong University, P.R. China)	29&'
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	EMVideo: User Collaboration Framework for Generating Multimedia Contents in Social Networks	
	Suk Kyu Lee (Korea University, Korea), Seungho Yoo (Korea University, Korea), Eugene Kim (Korea University, Korea), Hyunsoon Kim (Korea University, Korea), Kangho Kim (Korea University, Korea), Hwangnam Kim (Korea University, Korea)	29(%
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	Community evolutions in social interactions	
	Zhenyu Wu (Beihang University, P.R. China), Yu Liu (Beihang University, P.R. China), Jianwei Niu (Beihang University, P.R. China), Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal)	2988
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	Chunsheng Zhu (The University of British Columbia, Canada), Hai Wang (Pohang University of Science and Technology, Korea), Victor CM Leung (The University of British Columbia, Canada), Lei Shu (Guangdong University of Petrochemical Technology, P.R. China), Laurence	201)
	T. Yang (St. Francis Xavier University, Canada)	29")
	Meng Tong (University at Buffalo, USA), Ameya M Sanzgiri (University at Buffalo, USA), Dimitrios Koutsonikolas (University at Buffalo, SUNY, USA), Shambhu Upadhyaya (University at Buffalo, USA)	B <i>#</i> 5
	k-hop Centrality Metric for Identifying Influential Spreaders in Dynamic Large-scale Social Networks	2 " 0
	Jianwei Niu (Beihang University, P.R. China), Jinyang Fan (Beihang University, P.R. China), Lei Wang (Beihang University, P.R. China), Milica Stojmenovic (Swinburne University of Technology, Australia)	&- ) (
	Distributed Discovery of User Handles with Privacy	, (
	Thomas Paul (TU Darmstadt, Germany), Marius Hornung (TU Darmstadt, Germany), Thorsten Strufe (TU Dresden, Germany)	&- ( +

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Trustworthy Crowdsourcing via Mobile Social Networks Burak Kantarci (Clarkson University, USA), Hussein T Mouftah (University of Ottawa, Canada)	&- \$)
A Mutual-Community-Aware Routing Protocol for Mobile Social Networks Pitiphol Pholpabu (University of Southampton, United Kingdom), Lie-Liang Yang (University of Southampton, United Kingdom)	
(Social Networks): Privacy, Security and Networking	
Privacy-Preserving Attribute-Based Ring Signcryption for Health Social Network Xiaoyan Zhu (Xidian University, P.R. China), Shuang Shuang Shi (Xidian University, P.R. China), Jian Sun (Xi'an Communications Institute, P.R. China), Shunrong Jiang (Xidian University, P.R. China)	B <i>#</i> 5
GC14 SAC/PLC: Globecom 2014 - Symposium on Selected Areas in Communications: Power Line Communications	
Selected Areas in Communications Interactive Presentations III: (Nanotechnology) (Power Line Communication)	
Throughput Optimization Based on Access Impedance of PLC Modems with Limited Power Consumption  George Hallak (University of Applied Sciences Ruhrwest, Germany), Gerd Bumiller (Hochschule Ruhr West & University of Applied Sciences, Germany)	&- *\$
Power Line Communications	
Narrowband-PLC/Wireless Diversity for Smart Grid Communications  Mostafa Sayed (University of Texas at Dallas, USA), Naofal Al-Dhahir (University of Texas at Dallas, USA)	&- * *
Performance of Wireless/Power Line Media Diversity in the Office Environment Stephen W. Lai (University of Calgary, Canada), Nazafarin Shabehpour (University of British Columbia, Canada), Geoffrey G. Messier (University of Calgary, Canada), Lutz Lampe (University of British Columbia, Canada)	
Threshold and Scaling Factor Optimization for Enhancing Impulsive Noise Cancellation in PLC Systems  Khaled M. Rabie (University of Manchester, United Kingdom), Emad Alsusa (Manchester	
University, United Kingdom)  Joint Robust Decoding and Parameter Estimation for Convolutionally Coded Systems Impaired by Unknown Impulse Noise	&- ++
Der-Feng Tseng (National Taiwan University of Science and Technology, Taiwan)	&- , '
Sicong Liu (Tsinghua University & Research Institute of Information Technology, Tsinghua National Laboratory of Information Science an, P.R. China), Fang Yang (Tsinghua University, P.R. China), Chao Zhang (Tsinghua University, P.R. China), Jian Song (Tsinghua University, P.R. China)	&- , -

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## **Signal Processing for Channel Estimation**

Robust Channel Estimation Strategy for Two-Way Multi-Antenna Relay Networks with Asynchronous Transmission	
Xinqian Xie (Beijing University of Posts and Telecommunications, P.R. China), Mugen Peng (Beijing University of posts & Telecommunications, P.R. China), Zhongyuan Zhao (Beijing University of Posts and Telecommunications, P.R. China)	. 30\$%
Two Channel Estimators for CP-OQAM-OFDM Systems	
DeJin Kong (Huazhong University of Science and Technology, P.R. China), Xiang-Gen Xia (University of Delaware, USA), Tao Jiang (Huazhong University of Science and Technology, P.R. China), Xiqi Gao (Southeast University, P.R. China)	30\$+
Structured Sparse Approximation Via Generalized Regularizers: with application to V2V Channel Estimation	
Sajjad Beygi (University of Southern California, USA), Erik G Ström (Chalmers University of Technology, Sweden), Urbashi Mitra (University of Southern California, USA)	30%
Blind Channel Estimation Assisted Coherent Demodulation of DPSK Modulated OFDM Systems  Semih Serbetli (NXP Semiconductors, The Netherlands)	30%9
Robust Pilot Detection Techniques for Channel Estimation and Symbol Detection in OFDM Systems	
Hongting Zhang (Louisiana State University, USA), Hsiao-Chun Wu (Louisiana State University, USA), Hong Jiang (Bell Labs & Alcatel-Lucent, USA), Scott CH Huang (National Tsing Hua University, Taiwan)	. 302)
Artificial Noise Design for Discriminatory Channel Estimation in Wireless MIMO Systems	·
Ta-Yuan Liu (National Tsing Hua University, Taiwan), Yu-Ching Chen (National Tsing Hua University, Taiwan), Yao-Win Peter Hong (National Tsing Hua University, Taiwan)	30' &
Signal Processing for Cognitive Radio I  Second-Order Statistic-Based Detection of Alamouti-Coded OFDM Signals for Cognitive Radio	
Yahia Eldemerdash (Memorial University of Newfoundland, Canada), Octavia A. Dobre (Memorial University of Newfoundland, Canada)	3\$' ,
Circular sparse rulers based on co-prime sampling for compressive power spectrum estimation  Nuria González-Prelcic (Universidad de Vigo, Spain), Elena Domínguez-Jiménez (Universidad  Politecnica de Madrid, Spain)	3¢((
Energy Detection based Spectrum Sensing In The Presence of Time-Frequency Double Selective Fading Propagations	. 54((
Bin Li (Beijing University of Posts and Telecommunications & Key Lab of Universal Wireless Communications, MOE, P.R. China), Chenglin Zhao (Beijing University of Posts and Telecommunications, P.R. China), Mengwei Sun (BUPT, P.R. China), Arumugam Nallanathan (King's College London, United Kingdom)	B <i>#</i> 5
Sum-Rate Maximization for Spectrum-Sharing Cognitive Multiple Access Channels without Successive Interference Cancellation	
Xin Kang (Institute for Infocomm Research, Singapore), Chong Hon Fah (I2R, Singapore),	

Detection of Primary User's Signal in Cognitive Radio Networks: Angle of Arrival Based Approach	
Yanxiao Zhao (South Dakota School of Mines and Technology, USA), Jun Huang (Chongqing University of Posts and Telecomm, P.R. China), Wei Wang (San Diego State University, USA), Rafida Zaman (South Dakota School of Mines and Technology, USA)	
Listen-and-Talk: Full-duplex Cognitive Radio Networks	
Yun Liao (Peking University, P.R. China), Tianyu Wang (Peking University, P.R. China), Lingyang Song (Peking University, P.R. China), Zhu Han (University of Houston, USA)	3\$*,
Signal Processing for Cognitive Radio II	
Secured Cooperative Cognitive Radio Networks with Relay Selection	
Trung Q. Duong (Queen's University Belfast, United Kingdom), Tran Trung Duy (Posts and Telecommunications Institute of Technology, Vietnam), Maged Elkashlan (Queen Mary, University of London, United Kingdom), Nghi H Tran (University of Akron, USA), Octavia A. Dobre (Memorial University of Newfoundland, Canada)	3\$+(
Cooperative Bargaining Resource Allocation for Cognitive Small Cell Networks	•
Haijun Zhang (The University of British Columbia, Canada), Chunxiao Jiang (Tsinghua University, Beijing, P.R. China), Norman Beaulieu (Beijing University of Posts and Telecommunication, Canada), Suqin He (Beijing University of Chemical Technology, P.R. China), Viagli Chy (University of Cheffield, United Kingdom)	ጋው ው
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Energy-Efficiency and Spectrum-Efficiency trade off in OFDM-based cognitive radio systems  Weijia Shi (Nanjing University, P.R. China), Shaowei Wang (Nanjing University, P.R. China),  Dageng Chen (Huawei Technologies Co., Ltd., P.R. China)	
Novel Hilbert Spectrum-based Specific Emitter Identification for Single-hop and Relaying Scenarios	J
Jingwen Zhang (Beijing Jiaotong University, P.R. China), Fanggang Wang (Beijing Jiaotong University, P.R. China), Zhangdui Zhong (Beijing Jiaotong University, P.R. China), Octavia A. Dobre (Memorial University of Newfoundland, Canada)	B <i>#</i> 5
Resource Management in Cognitive Opportunistic Access Femtocells with Imperfect Spectrum Sensing	
Haijun Zhang (The University of British Columbia, Canada), Chunxiao Jiang (Tsinghua University, Beijing, P.R. China), Xiaotao Mao (Beijing University of Chemical Technology, P.R. China), Arumugam Nallanathan (King's College London, United Kingdom)	' \$- ,
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Decentralized Bayesian Learning of Jointly Sparse Signals Saurabh Khanna (Indian Institute of Science, India), Chandra R Murthy (Indian Institute of	24.61
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A Low-Complexity Bayesian Approach to Large-Scale Sparse Image Reconstruction with Structured Constraints	
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	Opportunistic Relay Selection in Multicast Relay Networks using Compressive Sensing Khalil Elkhalil (King Abdullah University of Science and Technology, Tunisia), Mohammed Eltayeb (The University of Akron & King Fahd University of Petroleum & Minerals, USA), Hussain J. Shibli (King Abdullah University of Science and Technology, Saudi Arabia), Hamid Reza Bahrami (The University of Akron, USA), Tareq Y. Al-Naffouri (King Abdullah University of Science and Technology, USA)	3%2*
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	Deborah Cohen (Technion - Israel Institute of Technology, Israel), Yonina C. Eldar (Technion- Israel Institute of Technology, Israel)	31' &
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	idely linear sphere decoding by exploiting the hidden properties of PSK signals	
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	oft-iterative Magnitude Demodulation	
	Marco A. C. Gomes (University of Coimbra, Portugal), Vitor Silva (Institute of Telecommunications, Portugal), Francisco Cercas (ISCTE-IUL & Instituto de Telecomunicações, Portugal), Martin Tomlinson (University of Plymouth, United Kingdom)	. 3&&)
	n Enhanced Fixed-Complexity LLL Algorithm for MIMO Detection	,
	Qingsong Wen (Georgia Institute of Technology, USA), Qi Zhou (Georgia Institute of Technology, USA), Xiaoli Ma (Georgia Institute of Technology, USA)	. 3&' %
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	Weiwei Zhou (George Mason University, USA), Jill Nelson (George Mason University, USA)	. 3&' +
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10	ow Complexity Precoder and Equalizer for DMT Systems with Insufficient Cyclic Prefix	
	Igor Freire (Federal University of Pará, Brazil), Chenguang Lu (Ericsson Research, Sweden), Per-Erik Eriksson (Ericsson Research, Sweden), Aldebaro Klautau (Universidade Federal do Para, Brazil)	. 3&( '
In	nterference Suppression Using EM Algorithm in OFDM Transmissions	
	Naotoshi Yoda (Keio University, Japan), Tomoaki Ohtsuki (Keio University, Japan), Jun Mashino (NTT, Japan), Takatoshi Sugiyama (NTT, Japan)	. 3&( -
M	aximum A-Posteriori Based Modulation Detection in Adaptive OFDM Systems	
	Yun Chen (Fraunhofer Institute for Embedded Systems and Communication Technologies ESK, Germany), Barbara Staehle (Fraunhofer ESK, Germany), Ahmad Saad (Fraunhofer Institute for Embedded Systems and Communication Technologies ESK, Germany), Mike Heidrich (Fraunhofer Institute for Communication Systems (ESK), Germany)	. B <i>#</i> 5
	oosting Factor Estimation for LTE Control Channel	-
	Dongwoon Bai (Samsung US R&D Center, USA), Jungwon Lee (Samsung US R&D Center, USA), Inyup Kang (Samsung Electronics, USA)	. 3&))

	Iterative Detection for Unique Word OFDM	
	Werner Haselmayr (Johannes Kepler University Linz, Austria), Christian Hofbauer (Johannes Kepler University Linz, Austria), Bernhard Etzlinger (Johannes Kepler University Linz, Austria), Andreas Springer (Johannes Kepler University Linz, Austria), Mario Huemer (Johannes Kepler University Linz, Austria)	3&* %
	OFDM-based analog multiband: a scalable design for indoor mm-wave wireless communication Hossein Roufarshbaf (University of California, Santa Barbara, USA), Upamanyu Madhow (University of California, Santa Barbara, USA), Sridhar Rajagopal (Samsung Electronics & Samsung Research America - Dallas, USA)	
Signal F	Processing for Massive MIMO	& 1
	Multiuser Detection in Massive Spatial Modulation (SM-) MIMO with Low-Resolution ADCs Wang Shengchu (Tsinghua University, P.R. China), Yunzhou Li (Tsinghua University, P.R. China), Jing Wang (Tsinghua University, P.R. China), Xibin Xu (Tsinghua University, P.R.	
	China)	' &+'
	Uplink Rate Analysis of Multicell Massive MIMO Systems in Ricean Fading Qi Zhang (Nanjing University of Posts and Telecommunications, P.R. China), Shi Jin (Southeast University, P.R. China), Yongming Huang (Southeast University, P.R. China), Hongbo Zhu (Nanjing University of Posts and Telecommunications, P.R. China)	3&+-
	Pilot Decontamination Through Pilot Sequence Hopping in Massive MIMO Systems	
	Jesper H Sørensen (Aalborg University, Denmark), Elisabeth de Carvalho (Aalborg University, Denmark)	3&. )
	Matrix Inversion-Less Signal Detection Using SOR Method for Uplink Large-Scale MIMO Systems Xinyu Gao (Tsinghua University, P.R. China), Linglong Dai (Tsinghua University, P.R. China), Yuting Hu (Tsinghua University, P.R. China), Zhongxu Wang (Tsinghua University, P.R. China), Zhaocheng Wang (Tsinghua University, P.R. China)	,
	Multiuser Massive MIMO Uplink Performance with Mutual Coupling Effects	JQ- 70
	Ran Zi (Huazhong University of Science and Technology, P.R. China), Ge Xiaohu (Huazhong University of Science & Technology, P.R. China), Haichao Wang (Huazhong University of Science and Technology, P.R. China), Jing Zhang (HUST, P.R. China), Chengxiang Wang (Heriot-Watt University, United Kingdom)	<b>⋜</b> ₽. ★
	Antenna Group Selection based User Scheduling for Massive MIMO Systems	Ja-
	Byungju Lee (Seoul National University, Korea), Byonghyo Shim (Seoul National University, Korea), Lua Ngo (Korea University, Korea)	33¢ ø.
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	AMMSE Optimization for Multiuser MISO Systems with Imperfect CSIT and Perfect CSIR	
	Hamdi Joudeh (Imperial College London, United Kingdom), Bruno Clerckx (Imperial College London & Korea University, United Kingdom)	33\$
	Low-Complexity Transceiver Design and Antenna Subset Selection for Cooperative Half- and Full-Duplex Relaying Systems	3347
	Xiaochen Xia (College of Communication Engineering, PLA University of Science and Technology, P.R. China), Kui Xu (College of Communications Engineering, PLAUST, P.R. China), Dongmei Zhang (PLA University of Science and Technology, P.R. China), Youyun Xu (PLA Uuniversity of Science & Technology & Shanghai Jioatong University, P.R. China)	3' %(
	Enhanced MIMOME Wiretap Channel via Adopting Full-Duplex MIMO Radios	
	Yongkai Zhou (Shanghai Jiaotong University, P.R. China), Yan Zhu (University of Shang Hai JiaoTong, P.R. China), Zhi Xue (Shanghai Jiao Tong University, P.R. China)	3' &\$
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Joint Power Allocation and Mapping Strategy Design for MIMO Two-Way Relay Channels with Finite-Alphabet Inputs	
Hao Feng (Shanghai Jiao Tong Univerisity, P.R. China), Zhiyong Chen (Shanghai Jiao Tong University, P.R. China), Hui Liu (Shanghai JiaoTong University, P.R. China)	3' ' &
Downlink Blind Interference Alignment for Cellular Networks	
Yi Lu (The University of New South Wales, USA), Wei Zhang (The University of New South Wales, Australia)	3' ' +
Signal Processing for Multi-Antenna Systems I	
Selective Vector Perturbation for Low-Power Small Cell MISO Downlinks	
Christos Masouros (University College London, United Kingdom), Mathini Sellathurai (Heriot-Watt University, United Kingdom), Tharmalingam Ratnarajah (The University of Edinburgh, United Kingdom)	3' ('
Limited Feedback Vector Perturbation Precoding By MinMax Optimization	
Christos Masouros (University College London, United Kingdom), Mathini Sellathurai (Heriot- Watt University, United Kingdom), Tharmalingam Ratnarajah (The University of Edinburgh, United Kingdom)	3' ( -
Sum Rate Maximizing Multigroup Multicast Beamforming under Per-antenna Power Constraints	
Dimitrios Christopoulos (University of Luxembourg & SnT, Luxemburg), Symeon Chatzinotas (University of Luxembourg, Luxemburg), Björn Ottersten (University of Luxembourg, Luxemburg)	3' ) (
Min-Max Robust Transmit Beamforming for Power Efficient Quality of Service Guarantee	- , (
Saba Nasseri (King's COLLEGE LONDON, United Kingdom), Mohammad Reza Nakhai (King's College London, United Kingdom)	3' *\$
Sum-Rate Improved Interference Alignment in Wireless MIMO Interference Networks	
Hongchao Chen (Institute of Computing Technology, P.R. China), Yiqing Zhou (Chinese Academy of Science, P.R. China), Lin Tian (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China), Zhiguo Liu (ICT/CAS, P.R. China), Yanan Ma (ICT/CAS, P.R. China)	<b>3</b> ' ∗∗
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Distributed Multiuser MMSE Relaying Strategies for AF Wireless Relay Networks	
Kanghee Lee (Wichita State University, USA), Hyuck Kwon (Wichita State University, USA), Jie Yang (Wichita State University, USA), Hyuncheol Park (KAIST, Korea)	3' +&
Optimal Sampling of Random Processes under Stochastic Energy Constraints	
Jing Yang (University of Arkansas, USA), Jingxian Wu (University of Arkansas, USA)	3' ++
Physical Layer Binary Consensus Over Fading Wireless Channels and With Imperfect CSI  Venugopalakrishna Y R (Indian Institute of Science, India), Chandra R Murthy (Indian	
Institute of Science, India)	3' , '
Narrowband Cooperative Network Localization	
Nikos Fasarakis-Hilliard (University of Alberta, Canada), Panos N. Alevizos (Technical University of Crete, Greece), Aggelos Bletsas (Technical University of Crete, Greece)	3' , -
Factor Graph-Based Distributed Frequency Allocation in Wireless Sensor Networks	
Panos N. Alevizos (Technical University of Crete, Greece), Efthymios Vlachos (Technical University of Crete, Greece), Aggelos Bletsas (Technical University of Crete, Greece)	3' -)
Controlled Sensing: A Myopic Fisher Information Sensor Selection Algorithm	
Daphney-Stavroula Zois (University of Southern California, USA), Urbashi Mitra (University of Southern California, USA)	34\$%

## **Signal Processing for Synchronization**

Joint Synchronization and Equalization in the Uplink of Multi-user OPRFB Transceivers	
Siavash Rahimi (McGill University, Canada), Benoit Champagne (McGill University, Canada)	34\$+
Employing ICA for Inter-Carrier Interference Cancellation and Symbol Recovery in OFDM	
Systems	
Zhongqiang Luo (University of Electronic Science and Technology of China, P.R. China), Lidong Zhu (University of Electronic Science and Technology of China, P.R. China), Li	
Chengjie (University of Electronic Science and Technology of China, P.R. China)	3( %
Low power synchronization design for large bandwidth wireless LAN systems	
Sridhar Rajagopal (Samsung Electronics & Samsung Research America - Dallas, USA), Shadi Abu-Surra (Samsung Research America - Dallas, USA), Eran Pisek (Samsung Research America - Dallas, USA)	3(%
Channel Estimation and Carrier Recovery in the Presence of Phase Noise in OFDM Relay	
Systems	
Rui Wang (Tongji University, P.R. China), Hani Mehrpouyan (California State University, USA), Meixia Tao (Shanghai Jiao Tong University, P.R. China), Yingbo Hua (University of California, Riverside, USA)	3( &(
ICA Based Joint Semi-Blind Equalization and CFO Estimation for OFDMA Systems	
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), Yi Huang (University of Liverpool, United Kingdom), Hai Lin (Osaka Prefecture University, Japan)	3('\$
Carrier Frequency Recovery in Wireless Transceivers with Transient Impairments	•
Jin Yuan (University of Texas at Dallas, USA), Murat Torlak (The University of Texas at Dallas,	3(')
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#### MIMO I

Linear Precoder for Codeword Error Minimization in MIMO Systems with Channel Estimation Errors	
Boon Sim Thian (Institute for Infocomm Research, Singapore), Hieu Duy Nguyen (Institute for Infocomm Research (I2R), The Agency for Science, Technology and Research (ASTAR), Singapore), Sumei Sun (Institute for Infocomm Research, Singapore)	3, 2+
Degrees of Freedom of Relay-Assisted MIMO Interfering Broadcast Channels	
Lu Yang (University of New South Wales, Australia), Wei Zhang (The University of New South Wales, Australia)	3, 3'
Joint Transmit and Receive Antennas Selection for Full Duplex MIMO Systems	
Mingxin Zhou (Peking University, P.R. China), Lingyang Song (Peking University, P.R. China), Yonghui Li (University of Sydney, Australia)	3, ' ,
Asynchronous Orthogonal Differential Modulation for MAC Systems	
Sina Poorkasmaei (University of California, Irvine, USA), Hamid Jafarkhani (University of California, Irvine, USA)	3, ((
A POMDP Solution to Antenna Selection for PER Minimization	
Sinchu P (NPOL, India), Reuben G. Stephen (National University of Singapore, Singapore), Chandra R Murthy (Indian Institute of Science, India), Marceau Coupechoux (Telecom ParisTech, France)	3, ) \$
Globally Optimal Antenna Selection and Power Allocation for Energy Efficiency Maximization in Downlink Distributed Antenna Systems	
Yuzhou Li (Xidian University, P.R. China), Min Sheng (Xidian University, P.R. China), Xijun Wang (Xidian University, P.R. China), Yan Shi (Xidian University, P.R. China), Yan Zhang (Xidian University, P.R. China)	3, ) *

# **Modulation and Transmission Processing**

	Performance and Spectral Analysis of Q2PSK and CEQ2PSK Systems in Ideal Bandlimited Channels	
	Milton Quinteros (University of New Orleans, USA), Edit J. Kaminsky (University of New Orleans, USA), Kenneth V. Cartwright (College of The Bahamas, Bahamas)	3 * &
	Pseudo-random Phase Precoded Spatial Modulation and Precoder Index Modulation	J, Q
	T. Lakshmi Narasimhan (Indian Institute of Science, Bangalore, India), Yalagala Naresh (Indian Institute of Science, India), Tanumay Datta (Indian Institute of Science, India), A. Chockalingam (Indian Institute of Science, India)	3, *,
	A Low-Complexity Rate Compatible Modulation via Variable Weight Sets	
	Wengui Rao (Huazhong University of Science and Technology & South-Central University for Nationalities, P.R. China), Fang Lu (Huazhong University of Science and Technology, P.R. China), Shaoping Chen (South-Central University for Nationalities, P.R. China), Yan Dong (Huazhong University of Science and Technology, P.R. China), Shu Wang (Huazhong University of Science and Technology, P.R. China)	3, +(
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	Rui Fan (Nanyang Technological University, Singapore), Ya Jun Yu (Nanyang Technological University, Singapore), Yong Liang Guan (Nanyang Technological University, Singapore)	38, \$
	Continuous Phase Modulated Orthogonal Multiple Access Scheme	
	Li Bing (Xidian University, P.R. China), Tor M. Aulin (Chalmers University of Technology & AUCOM International Consulting Telecomm, Sweden), Baoming Bai (Xidian University, P.R. China)	3 *
	Method of Simultaneous Transmission to Coherent and Non-coherent Receivers Using Ternary Sequences	<b>3</b> , ,
	Sujit Jos (Samsung Advanced Institute of Technology India Labs & Samsung R&D Institute Bangalore, India), Chandrashekhara Thejaswi (Indian Institute of Science, India), Kiran Bynam (Samsung India, India), Young-Jun Hong (Samsung Electronics & Samsung Advanced Institute of Technology, Korea), Chang Soon Park (SAIT, Korea), Manoj Choudhary (Samsung India Software Operations, India)	3, - &
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	Precoding for Multiuser MIMO Systems with Single-Fed Parasitic Antenna Arrays	
	George C. Alexandropoulos (Huawei Technologies Co. Ltd., Greece), Vlasis Barousis (Athens Information Technology, Greece), Constantinos B. Papadias (Athens Information Technology, Greece)	3 9+
	Continuous and Discrete Sum-Rate Maximization for Multiuser MIMO-OFDM Systems with CoMP	3, 3.
	Chih-yu Hsu (University of Melbourne, Australia), Meng Wang (University of Melbourne, Australia), Phee Lep Yeoh (University of Melbourne, Australia), Brian Krongold (University of Melbourne, Australia)	3₋ ¢'
	Fairness Based Resource Allocation for Multiuser MIMO Communication Networks	J- y
	Hsin-Jui Chou (National Tsing Hua University, Taiwan), Che-Jui Tsao (National Tsing Hua University, Taiwan), Jen-Ming Wu (National Tsing Hua University, Taiwan), Jen-Yuan Hsu (Industrial Technology Research Institute, Taiwan), Pangan Ting (Tsing Hua University, Taiwan)	3- %\$
	Energy Efficiency Maximization in Downlink Multiuser MIMO Systems: An Asymptotic Analysis Approach	
	Liwei Yan (Tsinghua University, P.R. China), Bo Bai (Tsinghua University, P.R. China), Wei Chen (Tsinghua University, P.R. China)	3- %*
	Optimal Linear Precoding in Multi-User MIMO Systems: A Large System Analysis	
	Luca Sanguinetti (University of Pisa & SUPELEC, Italy), Emil Björnson (Linköping University, Sweden), Mérouane Debbah (Supelec, France), Aris Moustakas (University of Athens, Greece)	<b>3_</b> <i>ዩ.ዩ.</i>
		J - WW

	Complex Gaussian Belief Propagation Algorithms for Distributed Multicell Multiuser MIMO Detection	
	Ziqi Yue (Harbin Institute of Technology, P.R. China), Qing Guo (Harbin Institute of Technology, P.R. China), Wei Xiang (University of Southern Queenslan, Australia)	3- &,
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	Hosein Nikopour (Huawei Technologies Canada, Canada), Eric Yi (Huawei Technologies Canada Co., LTD, Canada), Alireza Bayesteh (Huawei Technologies Co., Ltd., Canada), Kelvin Au (Huawei Technologies, Canada), Mark Hawryluck (Huawei, Canada), Hadi Baligh (Huawei Canada, Canada), Jianglei Ma (Huawei, Canada)	' - ( <b>\$</b>
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	Tianlong Song (Michigan State University, USA), Zhaoxi Fang (Zhejiang Wanli University, P.R. China), Jian Ren (Michigan State University, USA), Tongtong Li (Michigan State University, USA)  USA)	' \
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	Totally Distributed Energy-Efficient Transmission Design in MIMO Interference Channels Cunhua Pan (Southeast University, P.R. China), Wence Zhang (Southeast University, P.R.	
	China), Bo Du (Southeast University, P.R. China), Hong Ren (Southest University, P.R. China), Ming Chen (Southeast University, P.R. China)	3- * (
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	Novel Unified Expressions for Error Rates and Ergodic Channel Capacity Analysis over Generalized Fading Subject to AWGGN	
	Ehab Salahat (Khalifa University, UAE), Ali Hakam (UAE University, UAE)	3- +*
	BER and SER Analyses for M-ary Modulation Schemes Under Symmetric Alpha-Stable Noise Fan Yang (University of Electronic Science and Technology of China, P.R. China), Xi Zhang (Texas A&M University, ECE Department, USA)	3- '
	Multi-User Coverage Probability of Uplink Cellular Systems: a Stochastic Geometry Approach	5 ,
	Francisco Javier Martin-Vega (University of Málaga & IEEE Student Member, Spain), Francisco Javier Lopez-Martinez (Universidad de Malaga & Stanford University, Spain), Gerardo Gomez (University of Málaga, Spain), Mari Carmen Aguayo-Torres (University of Malaga, Spain)	39, -
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	Indrakshi Dey (University of Calgary, Canada), Geoffrey G. Messier (University of Calgary, Canada). Sebastian Magierowski (York University, Canada)	3 )

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1	I/Q Imbalance in Two-Way AF Relaying: Performance Analysis and Detection Mode Switch	
	Jingya Li (Chalmers University of Technology, Sweden), Michail Matthaiou (Queen's University Belfast, United Kingdom), Tommy Svensson (Chalmers University of Technology, Sweden)	(\$\$%
9	Single User Detection of Continuous Phase Modulated Multiuser Systems	
	Li Bing (Xidian University, P.R. China), Tor M. Aulin (Chalmers University of Technology & AUCOM International Consulting Telecomm, Sweden), Baoming Bai (Xidian University, P.R. China)	(\$\$.
	Energy-Delay Tradeoffs in Impulse-based Ultra-Wideband Body Area Networks with Voncoherent Receivers	(++1
	Mohammad Sadegh Mohammadi (Aarhus University & Macquary University, Denmark), Qi Zhang (Aarhus University, Denmark), Eryk Dutkiewicz (Macquarie University, Australia), Xiaojing Huang (University of Technology, Sydney, Australia), Rein Vesilo (Macquarie University, Australia)	(\$%(
1	New Asymptotics for Performance of Energy Detector	
	Vesh Raj Sharma Banjade (University of Alberta, Canada), Chintha Tellambura (University of Alberta, Canada), Hai Jiang (University of Alberta, Canada)	(\$&\$
9	Sum Rate Analysis of Coordinated Beamforming in Multi-Cell Downlink with Imperfect CSI	
	Xiaoming Chen (Nanjing University of Aeronautics and Astronautics, P.R. China), Huazi Zhang (Zhejiang University, P.R. China), Xiumin Wang (Hefei University of Technology, P.R. China), Chau Yuen (Singapore University of Technology and Design, Singapore)	( \$&)
	Two-Way Relaying Networks with Wireless Power Transfer: Policies Design and Throughput Analysis	
	Yuanwei Liu (Queen Mary, University of London, United Kingdom), Lifeng Wang (Queen Mary, University of London, United Kingdom), Maged Elkashlan (Queen Mary, University of London, United Kingdom), Trung Q. Duong (Queen's University Belfast, United Kingdom), Arumugam Nallanathan (King's College London, United Kingdom)	
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(	OMP-Based Detector Design for Space Shift Keying in Large MIMO Systems	
	Chien-Hsien Wu (Academia Sinica & Research Center for Information Technology Innovation, Taiwan), Wei-Ho Chung (Academia Sinica, Taiwan), Han-Wen Liang (Academia Sinica,	<b>/ d n</b>
-	Taiwan) Time Reversal for Ant Trails in wireless networks	( \$+&
,	Dinh-Thuy Phan-Huy (Orange-France Telecom, France), Nadine Malhouroux (France Telecom Research & Development, France), Maryline Hélard (INSA Rennes & IETR Institute of	
	Electronics and Telecommunications of Rennes, France)	(\$++
	Closed-Form Cramér-Rao Lower Bounds for CFO and Phase Estimation from Turbo-Coded Square-QAM-Modulated signals	
	Faouzi Bellili (INRS, Canada), Achref Methenni (Institut National de la Recherche Scientifique, INRS-EMT, Montreal, Canada), Sofiene Affes (INRS-EMT, Canada)	(\$, '
1	Investigation of Short-range High Precision 3D Localization via UWB Radio	
	Hailiang Xiong (The School of Information Science and Engineering, Shandong University, P.R. China), Julian Cheng (University of British Columbia, Canada)	(\$-\$
j	Joint Equalization and Phase Drift Estimation for Underwater Acoustic Communications	
	Pedro Pedrosa (Instituto de Telecomunicações - Lisboa & Instituto Superior Tecnico, Portugal), Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal), Fernando Nunes (Instituto Superior Técnico & Instituto de Telecomunicações, Portugal)	(¢ *
,	Channel Training Procedures for MIMO Interfering Point-to-Multipoint Channel	( ⊅-
	Adrian Agustin (Universitat Politècnica de Catalunya (UPC), Spain), Sandra Lagen (Universitat  Politècnica de Catalunya, Spain), Josep Vidal (Universitat Politècnica de Catalunya, Spain)	( %\$ &

# **Physical Layer Security**

Secrecy Outage of a Two-User Slow Fa	ding Broadcast Channel
Bo Wang (Xi'an Jiaotong University, P.R. China), Hui-Ming Wang (Xi'an Ji	P.R. China), Pengcheng Mu (Xi'an Jiaotong University, aotong University, P.R. China), Qinye Yin (Xi'an Jiaotong (%,
Channel-based Physical Layer Authent	icaiton
Canada), Sherman Shen (University	loo, Canada), Ning Zhang (University of Waterloo, of Waterloo, Canada), Jon Mark (University of Waterloo, (%(
Secure Multiuser Multiple Amplify-and- Eavesdroppers	Forward Relay Networks in Presence of Multiple
Q. Duong (Queen's University Belfas University of London, United Kingdor	R. China), Xianfu Lei (Utah State University, USA), Trung t, United Kingdom), Maged Elkashlan (Queen Mary, m), George K. Karagiannidis (Aristotle University of
Analyzing Mobile Phone Vulnerabilities	·
(Beijing University of Posts and Tele Massachusetts Lowell, USA), Ralph N	), Xiaojiang Du (Temple University, USA), Li Wang communications, P.R. China), Xinwen Fu (University of Mbouna (Temple University, USA), Seong Kong (Temple (%*
Secure Wireless Information and Powe Imperfect CSI	r Transfer in Large-Scale MIMO Relaying Systems with
(Nanjing University of Aeronautics a	of Aeronautics and Astronautics, P.R. China), Jian Chen and Astronautics, P.R. China), Tao Liu (Nanjing University . China) (% %
Relaying I	
and Interference from Primary User	Selection Networks with Imperfect Channel Estimation
Zummo (KFUPM, Saudi Arabia)	y of Petroleum & Minerals, Saudi Arabia), Salam A(% +
	tive Relaying in a Poisson Field of Interferers
for Scientific Research (CNRS), Franc	Sud, France), Marco Di Renzo (French National Center ce)
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	ity, Canada), Jacek Ilow (Dalhousie University, Canada) (%) \$ uplex Single Relay Selection Network Using Buffer-Aided
University Erlangen-Nüurnberg, Gerr	Columbia, Canada), Vahid Jamali (Friedrich-Alexandermany), Robert Schober (University of British Columbia,
	ptive Mode Selection for Bidirectional Relay Networks
(University of British Columbia, Cana	niversity Erlangen-N¨urnberg, Germany), Nikola Zlatanov ada), Robert Schober (University of British Columbia, (%* &
	ations in LTE-Advanced Networks with Decode-and-
	o, Canada), Sherman Shen (University of Waterloo, of Waterloo, Canada)(%*,

# Relaying III

Resource

Performance Analysis of Multiuser 2-hop Systems with Random Placement of Relay Nodes	
Alberto Zanella (Istituto di Elettronica e di Ingegneria dell'Inform. e delle Telecomunicazioni, Italy), Alessandro Bazzi (WiLab, IEIIT-BO/CNR, University of Bologna, Italy), Barbara M Masini (CNR - IEIIT & University of Bologna, Italy), Gianni Pasolini (University of Bologna,	(0/. (
Italy)	( %+(
Zhaoxi Fang (Zhejiang Wanli University, P.R. China), Xiaojun Yuan (ShanghaiTech University, P.R. China), Xin Wang (Fudan University, P.R. China)	
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Riccardo Andreotti (University of Pisa, Italy), Leonardo Marchetti (Università di Pisa, Italy), Luca Sanguinetti (University of Pisa & SUPELEC, Italy), Mérouane Debbah (Supelec, France)	(% *
The Impact of Relay Selection on the Tradeoff Between Information Transmission and Wireless Energy Transfer	
Diomidis S. Michalopoulos (University of Erlangen-Nuremberg & Institute for Digital Communications, Germany), Himal A Suraweera (University of Peradeniya, Sri Lanka), Robert Schober (Universität Erlangen-Nürnberg, Germany)	
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Ali Chelli (King Abdullah University of Science and Technology (KAUST), Saudi Arabia), Hamidou Tembine (Supelec, France), Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia)	(%- +
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Li Li (University of Delaware, USA), Leonard Cimini (University of Delaware, USA), Yao Xiao (University of Delaware, USA)	( &\$'
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Joint Downlink and Uplink Resource Allocation for Energy-efficient Carrier Aggregation	
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Majid Ghanbarinejad (University of Alberta, Canada), Christian Schlegel (Dalhousie University, Canada), Majid Khabbazian (University of Alberta, Canada)	( &%)
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Seok-Chul Kwon (Georgia Institute of Technology, USA)	( &&%
Resource Allocation for HARQ-IR Systems with QoS Constraints and Limited Feedback	
Duc To (Aeroflex Limited, United Kingdom), Huan X Nguyen (Middlesex University, United Kingdom), Quoc-Tuan Vien (Middlesex University, United Kingdom), Li-Ke Huang (Aeroflex, United Kingdom)	( &&*
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Chunshan Liu (Macquarie University, Australia), Philip Whiting (Macquarie University, Australia), Stephen Hanly (Macquarie University, Australia)	( &' &
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Shan Zhang (Tsinghua University, P.R. China), Jian Wu (Tsinghua University, P.R. China), Jie Gong (Tsinghua University, P.R. China), Sheng Zhou (Tsinghua University, P.R. China), Zhisheng Niu (Tsinghua University, P.R. China)	(&' -

## **Small Cells**

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Approach Ali Y. Al-Zahrani (Carleton University, Canada), F. Richard Yu (Carleton University, Canada) ( &(	<b>(</b> )
Designing Femtocell Exclusion Zones to Minimize Power in a Heterogeneous Network	
Chenlong Jia (National University of Singapore, Singapore), Teng Joon Lim (National	
University of Singapore, Singapore)(8)	) %
Power Control and Rate Allocation for Outage Balancing in Femtocell Networks	
Haining Wang (University of California, Davis, USA), Zhi Ding (University of California at Davis, USA)(8)	) +
Areal Capacity Limit on the Growth of Small Cell Density in Heterogeneous Networks	
Jaewon Kim (Samsung Electronics, Korea), Cheol Jeong (Samsung Electronics, Korea), Hyunkyu Yu (Samsung Electronics, Korea), Jeongho Park (Samsung Electronics, Korea)	* I
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Lu Yang (The Hong Kong University of Science and Technology, Hong Kong), Shenghui Song (The Hong Kong University of Science and Technology, Hong Kong), Khaled B. Letaief (The Hong Kong University of Science and Technology, Hong Kong)	* _
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Effect of Opportunistic Scheduling on the Efficiency of Wireless Power Transfer	
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Optimal Energy-Efficient Transmission for Fading Channels with an Energy Harvesting Transmitter	
Qingqing Wu (Shanghai Jiao Tong University, P.R. China), Meixia Tao (Shanghai Jiao Tong University, P.R. China), Wen Chen (Shanghai Jiao Tong University, P.R. China), Jinsong Wu (Bell Laboratories, Alcatel-Lucent, P.R. China)	- (
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Tao Li (Tsinghua University, P.R. China), Pingyi Fan (Tsinghua University, P.R. China), Khaled B. Letaief (The Hong Kong University of Science and Technology, Hong Kong)(' S	\$\$
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Weiliang Zeng (Missouri University of Science and Technology, USA), Yahong Rosa Zheng (Missouri University of Science and Technology, USA), Chengshan Xiao (Missouri University of Science and Technology, USA)(' S	\$*
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Multi-Objective Clustering Optimization for Multi-Channel Cooperative Sensing in CRNs Abdulkadir Celik (Iowa State University, USA), Ahmed E. Kamal (Iowa State University, USA) 3((	(%

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Beeshanga Abewardana Jayawickrama (Macquarie University, Australia), Eryk Dutkiewicz (Macquarie University, Australia), Markus Dominik Mueck (Intel Mobile Communications, Germany)	. B <i>#</i> 5
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Gozde Ozcan (Syracuse University, USA), M. Cenk Gursoy (Syracuse University, USA)	. '()'
LTE in the Unlicensed Spectrum: A Novel Coexistence Analysis with WLAN Systems	
Jeongho Jeon (Intel Corporation, USA), Qian (Clara) Li (Intel Corporation, USA), Huaning Niu (Intel, USA), Apostolos Papathanassiou (Intel Corporation & Intel Architecture Group, USA),  Geng Wu (Intel Corporation, USA)	. ' () -
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China)	. ' ( * )
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Bach Vu (The University of Aizu, Japan), Truong Cong Thang (The University of Aizu, Japan), Anh T. Pham (The University of Aizu, Japan)	. ' ) , )
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Congmin Fan (The Chinese University of Hong Kong, Hong Kong), Ying Jun (Angela) Zhang (The Chinese University of Hong Kong, Hong Kong), Xiaojun Yuan (ShanghaiTech University, P.R. China)	' ) - %
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Yamuna Dhungana (University of Alberta, Canada), Chintha Tellambura (University of Alberta, Canada)	. ' ) - +
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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 B. Letaief (The Hong Kong University of Science and Technology, Hong Kong)	. ' *\$'
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Doo-hyun Sung (University of Maryland, College Park, USA), John S. Baras (University of Maryland College Park, USA)	. ' * %)

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	Analytical Modeling of Cognitive Heterogeneous Cellular Networks over Nakagami-m Fading	uu
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	Fitting Determinantal Point Processes to Macro Base Station Deployments	,
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	Meisam Mirahsan (Carleton University, Canada), Rainer Schoenen (RWTH Aachen University, Faculty 6, Germany), Halim Yanikomeroglu (Carleton University, Canada)	* (+
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	Duy H. N. Nguyen (McGill University, Canada), Long Bao Le (INRS, University of Quebec, Canada), Tho Le-Ngoc (McGill University, Canada)	' *)'
	Overlaid Device-to-Device Communication in Cellular Networks	
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	Service Time Prediction Based Dynamic Resource Allocation for Device-to-Device Communication Underlaying Cellular Networks
	Jun Zheng (Southeast University, P.R. China), Renpeng Chen (Southeast University, P.R. China), Yuan Zhang (Southeast University, P.R. China)
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	Provisioning Green Energy for Small Cell BSs
	Tao Han (New Jersey Institute of Tech, USA), Nirwan Ansari (NJIT, USA)
	Asymptotic Behavior of Ultra-Dense Cellular Networks and Its Economic Impact
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	He Li (University of Aizu, Japan), Peng Li (The University of Aizu, Japan), Song Guo (The University of Aizu, Japan)
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	Gang Liu (Beijing University of Posts and Telecommunications, P.R. China), F. Richard Yu (Carleton University, Canada), Hong Ji (Beijing University of Posts and Telecommunications, P.R. China), Victor CM Leung (The University of British Columbia, Canada)
	Predictive Allocation of Resources in the LTE Uplink Based on Maximum Likelihood Estimation of Event Propagation Characteristics for M2M Applications
	Jason Brown (University of Newcastle, Australia), Jamil Y Khan (The University of Newcastle, Australia)
iroloss (	Computing and Scheduling
ireiess C	omputing and scheduling
	You Better Be Honest: Discouraging Free-Riding and False-Reporting in Mobile Crowdsourcing
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	Joint Cloud Computing and Wireless Networks Operations: A Game Theoretic Approach
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	BIRD-VNE: Backtrack-Avoidance Virtual Network Embedding in Polynomial Time
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	Cloud Server Job Selection and Scheduling in Mobile Computation Offloading
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	iCoMe: A Novel Incentivized Cooperative Mobile Resource Management Mechanism
	Hamed Shah-Mansouri (University of British Columbia, Canada), Vincent W.S. Wong (University of British Columbia, Canada)

#### **User Cooperation and Incentive Schemes**

Completion Time Reduction in Instantly Decodable Network Coding Through Decoding Delay Control	
Ahmed Douik (King Abdullah University of Science and Technology (KAUST), Saudi Arabia), Sameh Sorour (King Fahd University of Petroleum and Minerals (KFUPM), Saudi Arabia), Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia), Tareq Y. Al-Naffouri (King Abdullah University of Science and Technology, USA)	) \$\$,
A Bayesian Game Analysis of Cooperative MAC with Incentive for Wireless Networks	
Peijian Ju (University of New Brunswick, Canada), Wei Song (University of New Brunswick, Canada), A-Long Jin (University of New Brunswick, Canada)	) \$%(
An incentive-based evolutionary algorithm for participatory sensing	
Teerawat Kumrai (Chiang Mai University, Thailand), Kaoru Ota (Muroran Institute of Technology, Japan), Mianxiong Dong (Muroran Institute of Technology, Japan), Paskorn Champrasert (Chiang Mai University, Thailand)	) \$&%

#### **Vehicular Networks**

Game-Theoretic Source Selection and Power Control for Quality-Optimized Wireless Multimedia Device-to-Device Communications

#### **User Cooperation and Incentive Schemes**

A Novel Double-threshold User Division Method Based on Channel Isolation and Scheduling for Downlink CoMP

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