

2014 International Symposium on Wireless Personal Multimedia Communications

(WPMC 2014)

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Program

T1: NanoWSN Tutorial

Nano-scale Wireless Sensor Networks: Opportunities, Challenges, and Recent Advances

T2: Cloud Tutorial

Streaming Big Data Processing in Datacenter Clouds: overview, issues, and directions

T3: M2M Tutorial

Machine-to-Machine Technologies & Markets -Shift of Industries

T4: VANET Tutorial

Vehicular Networking Technologies, Standards, Applications, Challenges and Future Directions

T5: Stream Tutorial

Video Streaming and Quality Assessment

T6: SON Tutorial

New Cellular Network Topologies: Small Cells to HetNets and the need for Self Organizing Networks

KEY-1: Opening Plenary and Keynote 1

Opening Address - Prof. Ian Oppermann, General Chair, WPMC2014

Welcome Speech - Dr. Fumihiko Tomita, VP of NICT, Japan

Welcome Speech - Prof. Dr. Mitsutoshi Hatori, Chairman, YRP, Japan

Welcome Speech - Prof. Mary O'Kane, NSW Chief Scientist, Australia

Welcome Speech - Ms. Eri Otsuka, Consul for Communications Policy, Japanese Government

Welcome Speech - Prof. Ramjee Prasad, Co-chair, WPMC Steering Board

KEYNOTE: 50 Billion M2M Devices in 5G?

Mischa Dohler (King's College London, United Kingdom)

KEYNOTE: Have We Achieved the Ultimate Wearable Computer?

Bruce Thomas (University of South Australia - Wearable Computer Lab, Australia)

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A Hybrid No-Reference Video Quality Assessment Based on Region of Interest

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Yan Meng (P. R. China, Beijing University of Posts and Telecommunications, P.R. China); Jun Liu, Dr. and Lei Zhenming (Beijing University of Posts and Telecommunications, P.R. China)
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Network Traffic Prediction Based on Hadoop

Hongyan Cui, Yuan Yao and Kuo Zhang (Beijing University of Posts and Telecommunications, P.R. China); Fangfang Sun (Beijing University of Posts and Telecommunications, P.R. China); Yunjie Liu (Beijing University of Posts and Telecommunications, P.R. China)
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Guanhong Lai, Yu Liu, Quan Wang and Lin Zhang (Beijing University of Posts and Telecommunications, P.R. China)
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Quan Wang, Xiaocheng Lin, Yu Liu, Lin Zhang and Xiaofei Wu (Beijing University of Posts and Telecommunications, P.R. China)
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Nazif E Farid (TM Research and Development, Malaysia); Siti Maisurah Mohd Hassan (TMRND Sdn. Bhd., Malaysia); Rasidah Sanusi (TM Research & Development Sdn. Bhd., Malaysia)
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Yupeng Wang (Beijing University of Posts and Telecommunications, P.R. China); Shanbao He (China Academy of Space Technology, P.R. China); Zhuqing Jiang, Chengkai Huang and Xueyang Wang (Beijing University of Posts and Telecommunications, P.R. China)
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Tatsuro Higuchi and Yutaka Jitsumatsu (Kyushu University, Japan)
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Shenghua He (Beijing University of Posts and Telecommunications, P.R. China); Zhaoming Lu (BUPT, P.R. China); Xiangming Wen, Zhicai Zhang, Yong Sun and Ling Zhang (Beijing University of Posts and Telecommunications, P.R. China)
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Chang-Woo Pyo (NICT, Japan); Fumihide Kojima (National Institute of Information and Communications Technology, Japan); Hiroshi Harada (National Institute of Information &

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Mingfei Wan (Beijing University of Post and Telecommunications, P.R. China); Zhaoming Lu (BUPT, P.R. China); Luhan Wang, Xiuyan Xia and Xiangming Wen (Beijing University of Posts and Telecommunications, P.R. China)
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Waheed Ur Rehman (Beijing University of Posts and Telecommunications, P.R. China); Tabinda Salam (Beijing University of Posts and Telecommunications, Beijing, P.R. China); Xiaofeng Tao (Beijing University of Posts and Telecommunications, P.R. China)
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Shiyu Zhou, Zhaoming Lu, Xiangming Wen and Hua Shao (Beijing University of Posts and Telecommunications, P.R. China); Yangchun Li (Beijing University of Posts and Telecommunications, P.R. China); Yawen Chen (Beijing University of Posts and Telecommunications, P.R. China)
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Xin Su (Beijing University of Posts and Telecommunications, P.R. China); Muqing Wu (BUPT, P.R. China); Jiaqi Xu and Xiao Xiang (Beijing University of Posts and Telecommunications, P.R. China)
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Chengkai Huang (Beijing University of Posts and Telecommunications, P.R. China); Gong Zhang (China Academy of Space Technology, P.R. China); Zhuqing Jiang, Chao Li, Yupeng Wang and Xueyang Wang (Beijing University of Posts and Telecommunications, P.R. China)
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Masahiro Umehira, Gen Saito, Sho Wada, Shigeki Takeda, Teruyuki Miyajima and Kenichi Kagoshima (Ibaraki University, Japan)
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Takashi Ozaki, Yusuke Kozawa and Yohtaro Umeda (Tokyo University of Science, Japan)
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Xueyang Wang (Beijing University of Posts and Telecommunications, P.R. China); Chonghua Liu (China Academy of Space Technology, P.R. China); Yupeng Wang and Chengkai Huang (Beijing University of Posts and Telecommunications, P.R. China)
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Nianfei Fan, Yu Liu, Quan Wang and Lin Zhang (Beijing University of Posts and Telecommunications, P.R. China)
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A Centralized Adaptive Hybrid Routing Mechanism for Ad Hoc Networks

Jiaqi Xu, Chunxiu Xu, Zhang Xijie and Xiao Xiang (Beijing University of Posts and Telecommunications, P.R. China)

Offloading Based Load Balancing for the Small Cell Heterogeneous Network

Yu Sun (Beijing University of Posts and Telecommunications, P.R. China); Xiaodong Xu (Beijing University of Posts and Telecommunications & Wireless Technology Innovation Institute, P.R. China); Zhang Rao (Beijing University of Posts and Telecommunications, P.R. China); Rui Gao (Beijing University of Posts and Telecommunications, P.R. China)
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KEYNOTE: The Path to 5G - New Spectrum Access Paradigms and Mobile Device Reconfigurability

Markus Dominik Mueck (Intel Mobile Communications, Germany)

KEYNOTE: 5G - Spectrum Sharing Below 6 GHz Vs. New Spectrum Allocation Above 6 GHz

Matti Latva-aho (UoOulu, Finland)

KEYNOTE: 5G - The Future of Communication Networks

Werner Mohr (Nokia Siemens Networks, Germany)

M2M-1: Internet of Things and M2M Communications

Ad hoc networks and sensor networks.

A New Physical Downlink Control Channel Design for MTC in LTE-Advanced

Qin Mu and Liu Liu (DOCOMO Beijing Communications Laboratories Co., Ltd, P.R. China); Huiling Jiang (DOCOMO Beijing Communications Laboratories Co., Ltd., P.R. China); Shinpei Yasukawa (NTT DOCOMO, INC., Japan)
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Performance Analysis for Time Synchronization of D2D Communication in Heterogeneous Networks

Jihyung Kim and Moonsik Lee (ETRI, Korea)
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Performance Analysis for Channel Estimation in Partial Co-channel Environments

Jihyung Kim and Moonsik Lee (ETRI, Korea)
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Liumeng Song, Kok Keong Chai and Yue Chen (Queen Mary University of London, United Kingdom); John Schormans (Queen Mary, University of London, United Kingdom)
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Malyala Pavana Ravi Sai Kiran (IIT Hyderabad, India); Pachamuthu Rajalakshmi and Jagadish Bandaru (Indian Institute of Technology Hyderabad, India)
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Nahina Islam, Sithamparanathan Kandeepan and James Scott (RMIT University, Australia)
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Min Jia, Xinyu Wang, Qing Guo, Xuemai Gu and ZengYuan Yu (Harbin Institute of Technology, P.R. China)
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Ugljesa Urosevic (University of Montenegro & Centre for Telecommunications, Montenegro); Zoran Veljovic (University of Montenegro, Montenegro); Milica Pejanovic-Djurisic (University of Montenegro & Centre for Telecommunications, Montenegro)
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Nasir Hussain (Queensland University of Technology & IEEE Student Member, Australia); Karla Ziri-Castro (QUT, Australia); Dhammika Jayalath (Queensland University of Technology, Australia); MohammedAmer Mohammed A Arafah (King Saud University, Saudi Arabia)
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Kazusa Yagishita (Tokyo City University, Japan); Yuichi Kakishima (NTT DOCOMO, Inc., Japan); Mamoru Sawahashi (Tokyo City University, Japan)
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Adaptive Coordinated Scheduling/Beamforming Scheme for Downlink LTE-Advanced System with Non-Ideal Backhaul

Weijuan Gao and Qimei Cui (Beijing University of Posts and Telecommunications, P.R. China)
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WN-4: Localization and Mobility

Improving Accuracy for OTD Based 3G Geolocation in Real Urban/Suburban Environments

Pedro Vieira (Instituto de Telecomunicações and ISEL, Portugal); Nuno Silva (CELFINET, Consultoria em Telecomunicacoes, Lda. & CELFINET, Consultoria em Telecomunicacoes, Lda., Portugal); Nuno Fernandes (CELFINET, Consultoria em Telecomunicacoes, Lda., Portugal); António J. Rodrigues (IT / Instituto Superior Técnico, Portugal); Luís Varela (CELFINET, Consultoria em Telecomunicacoes, Lda., Portugal)
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Oleksandr Artemenko (Ilmenau University of Technology, Germany); Alina Rubina (Technical University of Ilmenau, Germany); Oleg Golokolenko and Andreas Mitschele-Thiel (Ilmenau University of Technology, Germany)
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A Scoring Method Improvement of Analytic Hierarchy Process Using Linear Programming Technique for Vertical Handover Decision

Wittaya Panjanda and Olarn Wongwirat (King Mongkut's Institute of Technology Ladkrabang, Thailand)
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Qiujian Lv, Zongshan Mei, Yuanyuan Qiao and Yufei Zhong (Beijing University of Posts and Telecommunications, P.R. China); Zhenming Lei (University of Posts and Telecommunications, P.R. China)
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Wireless Sensor Network Using Hybrid TDOA/RSS Tracking of Uncooperative Targets

Mark Hedley (CSIRO, Australia); Qiwei Zhai (University of Sydney, Australia)
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Amarlingam Madapu (IIT HYDERABAD, India); Pachamuthu Rajalakshmi (Indian Institute of Technology Hyderabad, India); Vinod Kumar Netad (IIT Hyderabad, India); Masaya Yoshida (KDDI R&D Laboratories, Inc., Japan); Kiyohito Yoshihara (KDDI R&D Laboratories Inc., Japan)
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PHY-5: Interference Coordination

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A Method for Analyzing the Impact of Interference on a Wireless Link with OFDM, AMC, HARQ, and a Finite Queue

Zaid Hijaz (University of Kansas, USA); Victor S. Frost (University Kansas & EECS, USA)
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The Projection-based Self-interference Cancellation Scheme in the Polarization Domain

Yao Liu and Caili Guo (Beijing University of Posts and Telecommunications, P.R. China)
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The Polarization-Enabled Digital Self-Interference Cancellation Scheme for the Full Duplex Communication

Yao Liu and Caili Guo (Beijing University of Posts and Telecommunications, P.R. China)
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Huifa Lin, Koji Ishibashi and Takeo Fujii (The University of Electro-Communications, Japan)
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Downlink Capacity in Cloud Radio Access Networks with Fractional Frequency Reuse

Ying He (Macquarie University & Institute of Computer Technology, Chinese Academy of Sciences, Australia); Eryk Dutkiewicz and Gengfa Fang (Macquarie University, Australia); Jinglin Shi (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)
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Fa Liu, Honglin Zhao and Chuang Zhang (Harbin Institute of Technology, P.R. China)
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Performance Evaluation of Spectrum Sensing Based on Wavelet Entropy for Cognitive Radio Networks

Guangqian Chu, Kai Niu, Weiling Wu, Fangliao Yang and Weipeng Jiang (Beijing University of Posts and Telecommunications, P.R. China)
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Joint Antenna Selection and Power Allocation for Distributed-STBC Cognitive Small Cell Networks

Massa Ndong and Takeo Fujii (The University of Electro-Communications, Japan)
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Resource Allocation for Chunk-based Multi-carrier Cognitive Radio Networks

Ding Xu and Qun Li (Nanjing University of Posts and Telecommunications, P.R. China); Xiaochuan Sun (Hebei United University & College of Information Engineering, P.R. China)
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Adaptive Spectrum Sensing for Cognitive Radio Systems in a Fading Environment

Yin Hui Chye, Eryk Dutkiewicz and Rein Vesilo (Macquarie University, Australia); Ren Ping Liu (CSIRO, Australia)
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Guolin Sun (University of Electronic Science and Technology of China, P.R. China); Feng Liu, Nengfeng Liu and Guisong Liu (UESTC, P.R. China)
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Nils Morozs and David Grace (University of York, United Kingdom); Tim Clarke (York University, United Kingdom)
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Field Experiment of Long-distance Broadband Communications in TV White Space Using IEEE 802.22 and IEEE 802.11af

Kentaro Ishizu (National Institute of Information and Communications Technology, Japan); Keigo Hasegawa (Hitachi Kokusai Electric Inc., Japan); Keiichi Mizutani (National Institute of Information and Communications Technology, Japan); Hirokazu Sawada (NICT, Japan); Kei Yanagisawa and Keat-Beng Toh (Hitachi Kokusai Electric Inc., Japan); Takeshi Matsumura (National Institute of Information and Communications Technology (NICT), Japan); Seishi Sasaki and Masahiro Asano (Hitachi Kokusai Electric Inc., Japan); Homare Murakami (National Institute of Information and Communications Technology, Japan); Hiroshi Harada (National Institute of Information & Communications Technology (NICT), Japan)
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Mary Claire Barela (University of the Philippines - Diliman, Philippines); Joel Joseph Jr. S. Marciano (University of the Philippines & Wireless Communications Engineering Laboratory, Philippines)
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Power and Latency Limitations in Secondary Spectrum Reuse for Mobile and Home Wireless Systems

Pierce Rixon and Michael Heimlich (Macquarie University, Australia)
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SDN: Special Session on Software Defined Networks

INVITED PAPER: Software Defined Network and Identifier-based Network

Zhang Hongke and Fei Song (Beijing Jiaotong University, P.R. China)

SDN Based Load Balancing Mechanism for Elephant Flow in Data Center Networks

Jing Liu (Beijing University of Posts and Telecommunications, P.R. China); Jie Li (Beijing University of Post and Telecommunication, P.R. China); Guochu Shou, Yihong Hu and Zhigang Guo (Beijing University of Posts and Telecommunications, P.R. China); Wei Dai (Beijing University of Posts and Telecommunications & Beijing Key Laboratory of Network System Architecture and Convergence, P.R. China)
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Extending SDN Network with Recursive Architecture

Wei Dai (Beijing University of Posts and Telecommunications & Beijing Key Laboratory of Network System Architecture and Convergence, P.R. China); Guochu Shou, Yihong Hu, Zhigang Guo and Jing Liu (Beijing University of Posts and Telecommunications, P.R. China)
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NO Stack: A SDN-based Framework for Future Cellular Networks

Xiang Mi, Zhigang Tian, Xibin Xu and Ming Zhao (Tsinghua University, P.R. China); Jing Wang (EE, Tsinghua University, P.R. China)
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Wi-SUN-2: Wi-SUN Workshop Panel

CB: Conference Banquet

Award Student Travel Grant - Prof. Eryk Dutkiewicz, Macquarie University

Award Best Student Papers and Travel Grants - Prof. Dr. Mitsutoshi Hatori, Chairman, YRP R&D Promotion Committee

Award Best Papers - Prof Ren Ping Liu, CSIRO, Australia

WPMC2015 Presentation - Organizing Committee WPMC2015

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KEYNOTE: Neuronal Communication Networks: Modeling and Simulation for Memory Formation and Plasticity

Ilangko Balasingham (Norwegian University of Science and Technology, Norway)

KEYNOTE: On the Advanced 5G Infrastructure for Anything as a Service

David Soldani (Huawei Technologies Duesseldorf GmbH & European Research Centre, Germany)

KEYNOTE: Dependable BAN of Things - Sustainable Machine Centric Communications Based on Regulatory Science for Medicine, Energy, Cars, Smart City

Ryuji Kohno (Yokohama National University, Japan)

PHY-6: LTE and Heterogenous Networks

INVITED PAPER: Performance Analysis of Asynchronous ABSF Configuration in Large-Scale Femtocell Networks

He Wang (University of New South Wales & Australian National University, Australia); Mark C Reed (University of New South Wales, Australia); Xiangyun Zhou (The Australian National University, Australia); Wei Bai (Beijing University of Posts and Telecommunications, P.R. China)
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