The 15th International Symposium on Wireless Personal Multimedia Communications

(WPMC 2012)

Taipei, Taiwan
24-27 September 2012

Monday, September 24

08:50 - 10:20

T1-1: Tutorial 1
Small Cells Standardization in LTE Advanced
Room: 2F Convention Hall
Chair: Hsuan-Jung Su (National Taiwan University, Taiwan)

WS1-1: WWSMC
Room: 14F Conference Room

10:20 - 10:40

B1: Coffee Break

10:40 - 12:10

T1-2: Tutorial 1
Small Cells Standardization in LTE Advanced
Room: 2F Convention Hall
Chair: Hsuan-Jung Su (National Taiwan University, Taiwan)

WS1-2: WWSMC
Room: 14F Conference Room

12:10 - 13:20

L1: Lunch
Room: 1F Garden Cafeteria

13:20 - 14:50

T2-1: Tutorial 2
Perpetual Wireless Video Camera for Internet-of-Things
Room: 2F Convention Hall
Chair: Hsuan-Jung Su (National Taiwan University, Taiwan)

WS1-3: WWSMC
Room: 14F Conference Room

14:50 - 15:10

B2: Coffee Break

15:10 - 16:40

T2-2: Tutorial 2
Perpetual Wireless Video Camera for Internet-of-Things
Room: 2F Convention Hall
Chair: Hsuan-Jung Su (National Taiwan University, Taiwan)

WS1-4: WWSMC
Room: 14F Conference Room

Tuesday, September 25

08:50 - 10:20

O1: Opening
Room: 2F Convention Hall
Chair: Kwang-Cheng Chen (National Taiwan University, Taiwan)

Privacy - Utility Tradeoffs in Smart Grid Communications

H. Vincent Poor (Princeton University, USA)

10:20 - 10:40

B3: Coffee Break

10:40 - 11:25

K1: Keynote Speech 1
Room: 2F Convention Hall
Chair: Nen-Fu Huang (National Tsing Hua University, Taiwan)

The Dawn of a New Era in Warfare - Cyber Warfare - Threats, Challenges & State of the Art

Parag Pruthi (CEO and Founder of NIKSUN, USA)

11:25 - 12:10

K2: Keynote Speech 2
Room: 2F Convention Hall
Chair: Nen-Fu Huang (National Tsing Hua University, Taiwan)
A Look into the Future of Wireless Communications
Khaled B. Letaief (The Hong Kong University of Science and Technology, Hong Kong)

12:10 - 13:20

L2: Lunch
Room: 1F Garden Cafeteria

13:20 - 14:50

AS1: Applications and Service 1
Experimental Trials and Development
Room: R202
Chair: Tai-Lin Chin (National Taiwan University of Science and Technology, Taiwan)

13:20 *Traffic Engineering for Power Efficient Smartphone Communications* ¨%
Chang-Hung Hsieh (National Taiwan University, Taiwan); Yu-Yu Chen (National Taiwan University, Taiwan); Chih-Chieh Yang (National Taiwan University, Taiwan); Shih-Lung Chao (National Taiwan University, Taiwan); Hung-Yu Wei (National Taiwan University, Taiwan)

13:38 *Interference Evaluation of Terrestrial Mobile Terminals and Base Stations Using an Aircraft for Sharing Satellite and Terrestrial Mobile Communication System* ¨*
Hiroyuki Tsuji (NICT, Japan); Yoshiyuki Fujino (National Institute of Information and Communications Technology, Japan)

13:56 *Requirements on Naming Schemes Design for Future Wireless Internet* ¨%%
Nahla Abid (Orange Labs, France); Philippe Bertin (Orange Labs, France); Jean-Marie Bonnin (Institut Mines Telecom / Telecom Bretagne & IRISA, France)

14:14 *Online Dictionary Learning Based Intra-Frame Video Coding Via Sparse Representation* ¨%
Yipeng Sun (Tsinghua University, P.R. China); Mai Xu (Tsinghua University, P.R. China); Xiaoming Tao (Tsinghua University, P.R. China); Jianhua Lu (Tsinghua University, P.R. China)

IV1: Invited 1

Disaster-Resilient Networks (1)
Room: 2F Convention Hall
Chair: Vishwanath Sinha (The LNM Institute of Information Technology Jaipur, India)

13:20 *Crowdsourcing Support System for Disaster Surveillance and Response* ¨&%
Edward T.-H. Chu, Prof. (National Yunlin University of Science and Technology, Taiwan); Yi-Lung Chen (National Yunlin University of Science and Technology, Taiwan); Jyun-You Lin (National Yunlin University of Science and Technology, Taiwan); Jane Win-Shih Liu (Institute of Information Science, Academia Sinica, Taiwan)

13:38 Disaster-Tolerant Dependable Wireless Network ¨&*

Ryu Miura (NICT, Japan); Masugi Inoue (National Institute of Information and Communications Technology, Japan); Yasunori Owada (National Institute of Information and Communications Technology, Japan); Hiroyuki Tsuji (NICT, Japan); Shinsuke Hara (Osaka City University, Japan)

13:56 Multi-AP Cooperative Diversity for Disaster-resilient Wireless LAN ¨&+

Fumiyuki Adachi (Tohoku University, Japan); Shinya Kumagai (Tohoku University, Japan)

14:14 Controlling Networks with an Intelligent Power System ¨&

Hirohito Yamada (Tohoku University, Japan)

14:32 57-66GHz Wireless PAN Systems B#5

Masashi Nakagawa (Ministry of Internal Affairs and Communications, Japan)

WC1: Wireless Communications 1

Cognitive Radios (1)
Room: R201
Chair: Pin-Hsun Lin (National Taiwan University, Taiwan)

13:20 A Study on Channel Prediction for Dynamic Spectrum Control Aided Spectrum Sharing ¨' $

Quang Thang Duong (Osaka University, Japan); Shinsuke Ibi (Osaka University, Japan); Seiichi Sampei (Osaka University, Japan)

13:38 Degree of Polarization Spectrum Sensing Algorithm for Cognitive Radios ¨')

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

13:56 A Novel Interference Avoidance Scheme Based on Blind Polarization Signal Processing for Cognitive Femtocell Network ¨($

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

14:14 An Alternative Implementation of a Cyclostationary Detector ¨( )

Francisco Paisana (Instituto Superior Técnico & Aalborg Universitet, Denmark); Neeli Rashmi Prasad (Center for TeleInFrastructure (CTIF), Denmark); António J. Rodrigues (IT / Instituto Superior Técnico, Portugal); Ramjee Prasad (Aalborg University, Denmark)

14:32 An Enhanced Feature Detection Method for DTV Signals ¨) $

Chunyi Song (National Institute of Information and Communications Technology, Japan); Hiroshi Harada (National Institute of Information & Communications Technology (NICT), Japan)

WN1: Wireless Networks 1
VANET
Room: R203
Chair: Chun-Cheng Lin (National Chiao Tung University, Taiwan)

13:20 An Adaptive and Reliable MAC Mechanism for IEEE 1609.4 and 802.11p VANETs ¨))

Guo Jinjie (Beijing University of Posts and Telecommunications, P.R. China); Huo Yiding (Beijing University of Posts and Telecommunications, P.R. China); Hu Chang (Beijing University of Posts and Telecommunications, P.R. China); Liang Tianning (Beijing University of Posts and Telecommunications, P.R. China); Yu Liu (Beijing University of Posts and Telecommunications, P.R. China); Lin Zhang (Beijing University of Posts and Telecommunications, P.R. China)

13:38 Network Coded File Sharing in Vehicular Ad-Hoc Networks ¨* $

Tai-Lin Chin (National Taiwan University of Science and Technology, Taiwan); Yeong-Sheng Chen (National Taipei University of Education, Taiwan); Hsing-Chang Du (National Taiwan University of Science and Technology, Taiwan); Yu-Shan Li (National Taiwan University of Science and Technology, Taiwan); Wan-Chen Chuang (National Taiwan University of Science and Technology, Taiwan)

13:56 Information Sharing Service in VANETs with Enhanced Two-Tier P2P Communications ¨*)

Guo Jinjie (Beijing University of Posts and Telecommunications, P.R. China); Hu Chang (Beijing University of Posts and Telecommunications, P.R. China); Huo Yiding (Beijing University of Posts and Telecommunications, P.R. China); Yu Liu (Beijing University of Posts and Telecommunications, P.R. China); Lin Zhang (Beijing University of Posts and Telecommunications, P.R. China)

14:14 Affinity Propagation with File Similarity Based Clustering for P2P File Sharing in VANET ¨+$
Hung-Chin Jang (National Chengchi University, Taiwan); Li-Ji Tzeng (National Chengchi University, Taiwan)

14:50 - 15:10

B4: Coffee Break

15:10 - 16:40

P1: Panel Session 1

Reunion for the birth of cognitive radio
Room: 2F Convention Hall

Chair: Kwang-Cheng Chen (National Taiwan University, Taiwan)

IV2: Invited 2

M2M and D2D Communications
Room: R203
Chair: Tony Q. S. Quek (Singapore University of Technology and Design (SUTD) & Institute for Infocomm Research, Singapore)

15:10 *Intelligent Resource Management for Device-to-Device (D2D) Communications in Heterogeneous Networks* ¨+)
Ang-Hsun Tsai (National Chiao Tung University, Taiwan); Li-Chun Wang (National Chiao Tung University, Taiwan); Jane-Hwa Huang (National Chi Nan University, Taiwan); Tzu-Ming Lin (ITRI, Taiwan)

15:28 *Exploiting Spatial Reuse Gain Through Joint Mode Selection and Resource Allocation for Underlay Device-to-Device Communications* ¨, $
Hung-Yun Hsieh (National Taiwan University, Taiwan); Cheng-Pang Chien (National Taiwan University, Taiwan); Yu-Chung Chen (National Taiwan University, Taiwan)

15:46 *Device-to-Device Assisted Downlink Broadcast Channel in Cellular Networks* ¨,)
Chun-Che Chien (National Taiwan University, Taiwan); Hsuan-Jung Su (National Taiwan University, Taiwan); Hsueh-Jyh Li (National Taiwan University, Taiwan)

16:04 *Opportunistic Routing with Adaptive Harvesting-aware Duty Cycling in Energy Harvesting WSN* ¨-$

Sanam Shirazi Beheshtiha (Amirkabir University of Technology, Iran); Hwee Pink Tan (Institute for Infocomm Research, Singapore); Masoud Sabaei (Amirkabir university of Technology, Iran)

16:22 *Effect of Data Aggregation in M2M Networks* ˙-)

Shin-Yeh Tsai (National Cheng Kung University, Taiwan); Sok-Ian Sou (National Cheng Kung University, Taiwan); Meng-Hsun Tsai (National Cheng Kung University, Taiwan)

16:40 Machine-to-Machine Communications as a New Revenue Source of Network Operators Á̈F€€

Hiroshi Saito (NTT & NTT Service Integration Laboratories, Japan)

SSR1: Systems, Standards, and Regulations 1
International Standards
Room: R202
Chair: Ai-Chun Pang (National Taiwan University, Taiwan)

15:10 *Rural, Poor and Catastrophic ICT Area Standardization and Modeling* ˙‰$'

Dipashree Bhalerao (Aalborg University, India); M. Tahir Riaz (Aalborg University, Denmark); Ole B Madsen (Aalborg University, Denmark); Ramjee Prasad (Aalborg University, Denmark)

15:28 *A New Standard Activity in IEEE 802.22 Wireless Regional Area Networks: Enhancement for Broadband Services and Monitoring Applications in TV Whitespace* ¨‰$,

Chang-Woo Pyo (NICT, Japan); Xin Zhang (National Institute of Information and Communication Technology, Singapore); Chunyi Song (National Institute of Information and Communications Technology, Japan); Ming-Tuo Zhou (National Institute of Information and Communications Technology, Singapore); Hiroshi Harada (National Institute of Information & Communications Technology (NICT), Japan)

15:46 *Chirp Pulse Compression in Non-Coherent Impulse-Radio Ultra-Wideband Detection Without Waveform Signature Estimation* ¨¨˙‰‰

Igor Dotlic (National Institute of Information and Communications Technology, Japan); Ryu Miura (NICT, Japan)

16:04 *TV White Space Database for Coexistence of Primary-Secondary and Secondary-Secondary Systems in Mesh Networking*
Kentaro Ishizu (National Institute of Information and Communications Technology, Japan); Homare Murakami (National Institute of Information and Communications Technology, Japan); Hiroshi Harada (National Institute of Information & Communications Technology (NICT), Japan)

16:22 *Prototype of UHF Converter for TV White-space Utilization*
Takeshi Matsumura (National Institute of Information and Communications Technology (NICT), Japan); Hiroshi Harada (National Institute of Information & Communications Technology (NICT), Japan)

WC2: Wireless Communications 2
Cognitive Radios (2)
Room: R201
Chair: Ping-Cheng Yeh (National Taiwan University, Taiwan)

15:10 *Stochastic Duty Cycle Model Based on Measurement for Cognitive Radio*
Kishor Patil (Aalborg University, Denmark); Knud Erik Skouby (Aalborg University, Denmark); Ramjee Prasad (Aalborg University, Denmark)

15:28 *Outage Probability of Cognitive Relay Network with Transmit Power and Interference Constraints*
Tao Yi (Beijing University of Posts and Telecommunications, P.R. China); Li Guo (Beijing University of Posts and Telecommunications, P.R. China); Jiaru Lin (Beijing University of Posts and Telecommunications, P.R. China)

15:46 *A Simple, Bio-inspired Time Synchronization Protocol for Cognitive Radio Ad Hoc Networks*
Aravind Kailas (University of North Carolina at Charlotte, USA); Nadine Pari (Federal University of Parana, Brazil); Michele Nogueira (Federal University of Parana, Brazil)

16:04 *M-GCF: Multicolor-Green Conflict Free Scheduling Algorithm for WSN*
Pranav Pawar (University of Aalborg, India); Rasmus Hjorth Nielsen (Aalborg University & Center for TeleInfrastruktur, Denmark); Neeli Rashmi Prasad (Center for TeleInFrastructure (CTIF), Denmark); Shingo Ohmori (CTIF-Japan, Aalborg University & YRP International Alliance Institute, Japan); Ramjee Prasad (Aalborg University, Denmark)

16:22 *An Opportunistic Network Coding Cooperative Scheme for Wireless Uplink Multi-Relay Cooperative Networks*¨˙‰⁄ ,
Weiyan Geng (Beijing University of Posts and Telecommunications, P.R. China); Tiejun Lv (Beijing University of Posts and Telecommunications, P.R. China)

18:30 - 21:00
    W1: Welcome Reception
    Room: 14F Conference Room

Wednesday, September 26

08:50 - 10:20

IV3: Invited 3
Advanced Communicaiton Technologies
Room: R203
Chair: Chun-Ting Chou (National Taiwan University, Taiwan)

08:50 *Development of a Self-Sustainable Autonomous Environmental Monitoring System¨˙‰)'*
Xiang-Yao Zheng (National Taiwan University, Taiwan); Min-Sheng Liao (National Taiwan University, Taiwan); Tzu-Shiang Lin (National Taiwan University, Taiwan); Chia-Pang Chen (National Taiwan University, Taiwan); Joe-Air Jiang (National Taiwan University, Taiwan); Cheng-Long Chuang (National Taiwan University, Taiwan)

09:08 *Performance Evaluation of Machine-to-Machine (M2M) Systems with Virtual Machines ¨˙‰)-*
Shih-Hao Hung (National Taiwan University, Taiwan)

09:26 *A Study of Network Infrastructure Optimization for Data Center Servers ¨˙‰(*
Hsin-Peng Lin (Telecommunication Laboratories Chunghwa Telecom Co., Taiwan); Ching-chih Chuang (National Taiwan University, Taiwan); Hsueh-Wen Tseng (National Chung-Hsing University, Taiwan); Ai-Chun Pang (National Taiwan University, Taiwan); Phone Lin (National Taiwan University, Taiwan); Jeu-Yih Jeng (Information of Technology Laboratory of Telecommunication Laboratories, Taiwan)

09:44 *Radio Network Selection Scheme Notified by the Each Network's Real-time Performance in the Multi-layered Communication Network ¨˙‰-*
Shingo Watanabe (KDDI R&D Laboratories Inc., Japan); Kosuke Yamazaki (KDDI R&D Laboratories Inc., Japan); Toshihiko Komine (KDDI R&D Labs., Inc., Japan); Tomoki Sada (KDDI R&D Laboratories Inc., Japan); Takashi Fujimoto (KDDI R&D Laboratories, Japan); Akira Yamaguchi (KDDI R&D Laboratories Inc., Japan); Kanshiro Kashiki (KDDI R&D Laboratories Inc., Japan); Kazunori Takeuchi (KDDI R&D Labs., Inc., Japan)

08:50 - 09:35

K3: Keynote Speech 3

Room: 2F Convention Hall

Chair: Hsuan-Jung Su (National Taiwan University, Taiwan)

Spectrum sensing under uncertain channel modeling

Ezio Biglieri (UCLA, USA)

09:35 - 10:20

K4: Keynote Speech 4

Room: 2F Convention Hall

Chair: Hsuan-Jung Su (National Taiwan University, Taiwan)

A Geometric Method for Networks and More

Lizhong Zheng (MIT, USA)

10:20 - 10:40

B5: Coffee Break

10:40 - 12:10

IV4: Invited 4

Ubiquitous Interaction System

Room: R203

Chair: Chun-Ting Chou (National Taiwan University, Taiwan)

10:40 *A Trust and Distrust Mechanism for a Social Network-based Recommendation System* ¨%+&

Chun-Cheng Lin (National Chiao Tung University, Taiwan); Tzong-Shyan Lin (National Chiao Tung University, Taiwan); Wan-Yu Liu (Aletheia University, Taiwan)

10:58 *Authentication Using Graphical Password in Cloud* ¨%++

Minghuang Guo (Shih Hsin University, Taiwan); Horng-Twu Liaw (Shih Hsin University, Taiwan); Li-Lin Hsiao (Shih Hsin University, Taiwan); Chih-Yuan Huang (Shih Hsin University, Taiwan); Chih-Ta Yen (National Taiwan University of Science and Technology, Taiwan)

11:16 *Data Processing with Time Constraint Using Prediction Algorithm in Mobile Environment* ¨˙‰ &
Ding-Jung Chiang (Taipei Chengshih University of Science and Technology, Taiwan); Ching-Sheng Wang (Aletheia University, Taiwan); Chien-Liang Chen (Aletheia University, Taiwan); Der-Jiunn Deng (National Changhua University of Education, Taiwan)

11:34 *Identity Establishment and Capability Based Access Control (IECAC) Scheme for Internet of Things* ¨˙‰ +
Parikshit Narendra Mahalle (Aalborg University, Denmark); Bayu Anggorojati (Aalborg Universitet, Denmark); Neeli Rashmi Prasad (Center for TeleInFrastructure (CTIF), Denmark); Ramjee Prasad (Aalborg University, Denmark)

10:40 - 11:25

K5: Keynote Speech 5
Room: 2F Convention Hall
Chair: Hsiao-Hwa Chen (National Cheng Kung University, Taiwan)
Depolarization in Wireless Channels
Gordon L. Stüber (Georgia Institute of Technology, USA)

10:40 - 12:10

WN2: Wireless Networks 2
Sensor Networks
Room: R202
Chair: Kuo-Chang Ting (Minghsin University of Science and Technology, Hsinchu, Taiwan)

10:40 *Barrier Coverage with Optimized Quality for Wireless Sensor Networks* ¨˙‰ &
Yung-Liang Lai (Taoyuan Innovation Institute of Technology, Taiwan); Jehn-Ruey Jiang (National Central University, Taiwan)

10:58 *Distributed Scheduling for Cooperative Tracking in Hierarchical Wireless Sensor Networks* ¨˙‰ +
Ying-Chih Chen (National Chung Hsing University, Taiwan); Su-Mong Yu (National Chung Hsing University, Taiwan); Chih-Yu Wen (National Chung Hsing University, Taiwan)

11:16 *Performance Comparison Between Single-User MIMO and Multi-User MIMO in Wireless Mesh Networks ¨&$&*

Hironori Kusumoto (Nagoya University, Japan); Hiraku Okada (Nagoya University, Japan); Kentaro Kobayashi (Nagoya University, Japan); Masaaki Katayama (Nagoya University, Japan)

11:34 *An Efficient Scheduling and Random Access Hybrid Medium Access Control Protocol for Underwater Sensor Networks ¨&$+*

Chih-Shun Hsu (Shih Hsin University, Taiwan); Xiang-Ze Hong (Department of Information Management, Shih Hsin University, Taiwan)

11:52 *A Dynamic Channel Switching Mechanism Based on Vehicle Density ¨&%&*

Huo Yiding (Beijing University of Posts and Telecommunications, P.R. China); Guo Jinjie (Beijing University of Posts and Telecommunications, P.R. China); Rui Zou (Beijing University of Posts and Telecommunications, P.R. China); Hongtao Zhang (Beijing University of Posts and Telecommunications, P.R. China); Yu Liu (Beijing University of Posts and Telecommunications, P.R. China); Lin Zhang (Beijing University of Posts and Telecommunications, P.R. China)

11:25 - 12:10

K6: Keynote Speech 6
Room: 2F Convention Hall
Chair: Hsiao-Hwa Chen (National Cheng Kung University, Taiwan)
Advanced High Quality Media: Trend and Applications
Naohisa Ohta (Keio University, Japan)

12:10 - 13:20

L3: Lunch
Room: 1F Garden Cafeteria

13:20 - 14:50

IV5: Invited 5
Disaster-Resilient Networks (2)
Room: 2F Convention Hall
Chair: Yeong-Sheng Chen (National Taipei University of Education, Taiwan)

13:20 *Multi-hop Communication and Multi-protocol Gateway by Using Plural ITS* ¨&‰
Takashi Ohyama (OKI Electric Industry Co., Ltd., Japan); Yutaka Kaneko (OKI Electric Industry Co., Ltd., Japan); Kinya Asano (OKI Electric Industry Co., Ltd., Japan); Masaharu Hamaguchi (Oki Electric Industry Co., Ltd., Japan)

13:38 *Rapid Recovery of Base Station Backhaul by the Neighbor Regional Wireless Access Network and Its Extension with the Multi-hop Wireless LAN Relay* ¨&&%
Yoji Kishi (KDDI Corporation, Japan)

13:56 *Resource Utilization on CWC-Supported Long-Lived IEEE 802.15.4g/4e SUN for Disaster Radio* ¨&&)
Fumihide Kojima (National Institute of Information and Communications Technology, Japan); Hiroshi Harada (National Institute of Information & Communications Technology (NICT), Japan)

14:14 *RRBS: Reliable Broadcasting Over Unreliable Wireless Links in Resilient Ad-Hoc Networks* ¨&!$
Jung-Chun Kao (National Tsing Hua University, Taiwan); Fu-Wen Chen (National Tsing Hua University, Taiwan)

SSR2: Systems, Standards, and Regulations 2
Mobile Cellular Systems
Room: R201
Chair: Hwang-Cheng Wang (National Ilan University, Taiwan)

13:20 *Performance Evaluation of Capacity Based CoMP Handover Algorithm for LTE-Advanced* ¨&!*
Cheng-Chung Lin (University of Technology Sydney, Australia); Kumbesan Sandrasegaran (University of Technology, Sydney, Australia); Xinning Zhu (Beijing University of Posts and Telecommunications, P.R. China); Zhuliang Xu (University of Technology, Sydney, Australia)

13:38 *Performance Evaluation of Intra-Site Coordinated Multi-Point Transmission with Inter-cell Phase Information in 3GPP LTE-A* ¨&(%
Chen-Yin Liao (Chunghwa Telecom Co., Ltd., Taiwan); Hsin-Kai Huang (Chunghwa Telecom Co., Ltd., Taiwan)

13:56 *Deployment Analysis and Optimization of Macro-Pico Heterogeneous Networks in LTE-A System ¨&(**

Peng Tian (Beijing University of Posts and Telecommunications & Key Laboratory of Universal Wireless Communications, Ministry of Education, P.R. China); Hui Tian (Beijing University of Posts & Telecommunications, P.R. China); Liqi Gao (Beijing University of Posts & Telecommunications, P.R. China); Jing Wang (DOCOMO Beijing Communications Laboratories, P.R. China); Xiaoming She (DOCOMO Beijing Communications Laboratories, P.R. China); Lan Chen (DOCOMO Beijing Communications Laboratories, P.R. China)

14:14 *Optimization of Time-to-Trigger Parameter on Handover Performance in LTE High-speed Railway Networks ¨&) %*

Yifan Zhang (Beijing University of Posts and Telecommunications, P.R. China); Muqing Wu (BUPT, P.R. China); Shunming Ge (Beijing University of Posts and Telecommunications, P.R. China); Linlin Luan (Beijing University of Posts and Telecommunications, P.R. China); Ankang Zhang (Beijing University of Posts and Telecommunications, P.R. China)

WC3: Wireless Communications 3
Communication and Coding
Room: R205
Chair: Shih-Chun Lin (National Taipei University of Technology, Taiwan)

13:20 *LMMSE Detection of OFDM Signals in Time-Varying Channels with Partial Whitening of Intercarrier Interference and Soft Decision Feedback ¨&) **

Hai-wei Wang (National Chiao Tung University, Taiwan); David Lin (National Chiao Tung University, Taiwan); Tzu-Hsien Sang (National Chiao Tung University, Taiwan)

13:38 *Performance Comparisons of Localized and Distributed Transmissions Using Iterative Decision-Directed Channel Estimation in DFT-Precoded OFDMA ¨&* %*

Keita Miwa (Tokyo City University, Japan); Teruo Kawamura (NTT DOCOMO, INC., Japan); Nobuhiko Miki (NTT DOCOMO, INC., Japan); Mamoru Sawahashi (Tokyo City University, Japan)

13:56 *Link-Level Performance of Star 32/64QAM Schemes Using Frequency Domain Equalizer for DFT-Precoded OFDMA ¨&* **

Chihiro Mori (Tokyo City University, Japan); Teruo Kawamura (NTT DOCOMO, INC., Japan); Nobuhiko Miki (NTT DOCOMO, INC., Japan); Mamoru Sawahashi (Tokyo City University, Japan)

14:14 *Band Edge Filters Perform Non Data-Aided Carrier and Timing Synchronization of Software Defined Radio QAM Receivers* ¨&+%

Frederic j harris (San Diego State Univ, USA); Elettra Venosa (San Diego State University, USA); Xiaofei Chen (San Diego State University, USA); Chris Dick (Xilinx, USA)

14:32 *SNR Estimation Techniques for Low SNR Signals* ¨&+*

Frederic j harris (San Diego State Univ, USA); Chris Dick (Xilinx, USA)

WC4: Wireless Communications 4
MIMO Communications (1)
Room: R202
Chair: Wei-Ho Chung (Academia Sinica, Taiwan)

13:20 *Simple Zero Interference Transmissions to Users with Rank Deficient Channels* ¨&,%¨

Helka-Liina Määttänen (Renesas Mobile Europe, Finland); Olav Tirkkonen (Aalto University, Finland)

13:38 *Adaptive One-Way and Two-Way Relaying for MIMO Relay Networks* ¨&,*

Sho Mukai (Yokohama National University, Japan); Fumie Ono (National Institute of Information and Communications Technology, Japan); Hideki Ochiai (Yokohama National University, Japan); Ryu Miura (NICT, Japan)

13:56 *I/Q Imbalance Compensation in Precoded MIMO-OFDMA Systems* ¨&,%

Udesh Oruthota (Aalto University, Finland); Olav Tirkkonen (Aalto University, Finland)

14:14 *Joint Precoding for Two Way AF MIMO Relays in Frequency Selective OFDM Channels* ¨&,*

Nithin James (Indian Institute Of Technology, Madras, India); Rajeshwari S. S (Indian Institute Technology, India); Devendra Jalihal (Indian Institute of Technology Madras, India); K Giridhar (Indian Institute of Technology, Madras, India)

14:32 *Effects of Open-loop Transmit Diversity Schemes with Four Antennas on Control Signals Using Cyclic-Shift CDMA* ¨'$%

Yuichiro Hikosaka (Tokyo City University, Japan); Teruo Kawamura (NTT DOCOMO, INC., Japan); Hidekazu Taoka (DOCOMO Euro-Labs, Germany); Mamoru Sawahashi (Tokyo City University, Japan)

WN3: Wireless Networks 3

Cooperative Networks

Room: R203

Chair: Kuo-Chang Ting (Minghsin University of Science and Technology, Hsinchu, Taiwan)

13:20 *Optimizing for High Channel Capacity of Multiple-Hop MIMO Relay System with MAC-PHY Cross Layer* ¨' $*

Pham Thanh Hiep (Yokohama national university, Japan); Ryuji Kohno (Yokohama National University, Japan)

13:38 *Performance Analysis of Packet Cooperative Cellular Relaying Networks* ¨' %‰

Hyungseok Yu (Georgia Institute of Technology, USA); Gordon Stüber (Georgia Institute of Technology, USA)

13:56 *Finding Optimized Positioning for Fixed Relay Stations in a Cooperative LTE Network* ¨' %‰

André Martins (Instituto de Telecomunicações and Instituto Superior Técnico, Portugal); António J. Rodrigues (IT / Instituto Superior Técnico, Portugal); Pedro Vieira (Instituto de Telecomunicações and ISEL, Portugal)

14:14 *On Optimal Power Allocation of Layered Coding in Noisy Wireless Relay Networks* ¨' &‰

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

14:50 - 15:10

B6: Coffee Break

15:10 - 16:40

P2: Panel Session 2

CONASENSE

Room: 2F Convention Hall

Chair: Ramjee Prasad (Aalborg University, Denmark)

AS2: Applications and Service 2

Positioning

Room: R202

Chair: Fang-Chang Kuo (National Ilan University, Taiwan)

15:10 *Localizing an Unknown Number of Targets with Radio Tomography Networks* ¨' &*
Chi Zhang (Beijing University of Posts and Telecommunications, P.R. China); Yi Zheng (Beijing University of Posts and Telecommunications, P.R. China); Yang Li (Beijing University of Posts and Telecommunications, P.R. China); Aidong Men (Beijing University of Posts and Telecommunications, P.R. China)

15:28 *Study on the Use of a Weighted Screening Method for Indoor Positioning Systems* ¨' ' %
Hung-Huan Liu (Chung Yuan Christian University, Taiwan); Yu-Non Yang (Chung Yuan Christian University, Taiwan)

15:46 *A Multi-Path Data Exclusion Model for RSSI-based Indoor Localization* ¨' ' *
Ndeye Amy Dieng (Telecom Bretagne, France); Maurice Charbit (Telecom ParisTech CNRS/LTCI/TSI, France); Claude Chaudet (Telecom Paristech, France); Laurent Toutain (Telecom Bretagne, France); Tayeb Ben Meriem (Orange, France)

16:04 *Collaborative Localization in Wireless Sensor Networks Based on Dependable RSSI* ¨' (%
Yeong-Sheng Chen (National Taipei University of Education, Taiwan); Tai-Lin Chin (National Taiwan University of Science and Technology, Taiwan); Yi-Chen Huang (National Taipei University of Education, Taiwan)

IV6: Invited 6
Disaster-Resilient Networks (3)
Room: R203
Chair: Chia-Han Lee (Academia Sinica, Taiwan)

15:10 *Secured Information Service Platforms Effective in Case of Disasters -Using Multilayered Communications Network-* ¨' (,
Fumiyuki Adachi (Tohoku University, Japan); Kiyohito Tokuda (YRP International Alliance Institute, Japan); Shingo Ohmori (CTIF-Japan, Aalborg University & YRP International Alliance Institute, Japan)

15:28 *R&D Project of Multilayered Communications Network -For Disaster-resilient Communications-* ¨') $
Fumiyuki Adachi (Tohoku University, Japan); Kazunori Takeuchi (KDDI R&D Labs., Inc., Japan); Yoji Kishi (KDDI Corporation, Japan); Masaharu Hamaguchi (Oki Electric Industry Co., Ltd., Japan); Shingo Ohmori (CTIF-Japan, Aalborg University & YRP International Alliance Institute, Japan); Ryo Kajiwara (YRP R&D Promotion Committee, Japan)

15:46 *Recovery Techniques for Images and Videos with Missing Data in Disaster Situation ¨) &*
Masayuki Kawamata (Tohoku University, Japan); Shuhei Sakamoto (Tohoku University, Japan); Masahide Abe (Tohoku University, Japan)

16:04 *SensorFly: Enabling Groups of Minimalistic Semi-Controllable Flying Sensing Devices ¨) '*
Frank Mokaya (Carnegie Mellon University, USA); Aveek Purohit (Carnegie Mellon University, USA); Pei Zhang (Carnegie Mellon University, USA)

16:22 *Disaster and Emergency Management System ¨ * '*
Fang-Chu Chen (Computer and Communications Labs, ITRI, Taiwan); Rui-Yen Chang (Industrial Technology Research Institute & Industrial Technology Research Institute, Taiwan); Wan-Yi Lin (Industrial Technology Research Institute, Taiwan); Sheng Hui Chen (Engineer, Taiwan); YuCheng Chen (Engineer, Taiwan); Chin Nung Li (Project Manager, Taiwan)

WC5: Wireless Communications 5
Green Communications
Room: R201
Chair: I-Wei Lai (Academia Sinica, Taiwan)

15:10 *A Polarization-Amplitude-Phase Modulation Scheme for the Power Amplifier Energy Efficiency Enhancement ¨ * -*
Dong Wei (Beijing University of Posts and Telecommunications, P.R. China); Feng Chunyan (Beijing University of Posts and Telecommunications, P.R. China); Caili Guo (Beijing University of Posts and Telecommunications, P.R. China)

15:28 *Impact of Site Power Modeling on Heterogeneous Deployment in Radio Access Networks ¨ +(*
Chih-Hsuan Tang (Chunghwa Telecom, Taiwan); Chin-Wei Lin (Chunghwa Telecom, Taiwan); Chi-En Wu (Chunghwa Telecom, Taiwan); Chen-Yin Liao (Chunghwa Telecom Co., Ltd., Taiwan)

15:46 *Clustering Based Power Saving Algorithm for Self-Organized Sleep Mode in Femtocell Networks* ¨ +-

Wei Li (Beijing University of Posts and Telecommunications, P.R. China); Wei Zheng (BUPT, P.R. China); YuanBao Xie (Beijing University of Posts and Telecommunications, P.R. China); Xiangming Wen (Beijing University of Posts and Telecommunications, P.R. China)

16:04 *Accurate Analysis of Delay and Power Consumption of LTE DRX Mechanism with a Combination of Short and Long Cycles* ¨ , (

Hwang-Cheng Wang (National Ilan University, Taiwan); Chih-Cheng Tseng (National Ilan University, Taiwan); Guan-Yun Chen (National Ilan University, Taiwan); Fang-Chang Kuo (National Ilan University, Taiwan); Kuo-Chang Ting (Minghsin University of Science and Technology, Hsinchu, Taiwan)

WC6: Wireless Communications 6
MIMO Communications (2)
Room: R205
Chair: Wei-Ho Chung (Academia Sinica, Taiwan)

15:10 *Degree of Freedom of MIMO ICR Under Power Allocation with Optimized Interference Alignment* ¨ , -

Wei Wang (Beijing University of Posts and Telecommunications, P.R. China); Tiankui Zhang (Beijing University of Posts and Telecommunications, P.R. China); Song Zhao (Beijing University of Posts and Telecommunications, P.R. China); Zhimin Zeng (Beijing University of Posts and Telecommunications, P.R. China)

15:28 *Impact of Multi-beam Antenna Amplitude Tapering on Co-Channel Interference and Backhaul Throughput Density* ¨ - (

Nizabat Khan (Universite Catholique de Louvain, Belgium); Tao Jiang (University of York, United Kingdom); David Grace (University of York, United Kingdom); Alister G. Burr (University of York, United Kingdom); Claude Oestges (Université Catholique de Louvain, Belgium)

15:46 *A Multi-Mode Space-Time Coded MIMO System Using Lattice-Reduction Aided Detection* ¨ - -

Shin-Hua Huang (National Chung Cheng University, Taiwan); Chiao-En Chen (National Chung-Cheng university, Taiwan)

16:04 *Low-Complexity Successive Interference Cancelation and One/Two-Bit Feedback Transmit Antenna Shuffling for 4✕4 Quasi-Orthogonal Space-Time Block Codes ¨´($(*

Yinman Lee (National Chi Nan University, Taiwan)

16:22 *Iterative Overlap QRM-MLBD for Single-Carrier MIMO Transmission Without CP Insertion ¨´($-*

Hideyuki Moroga (Tohoku University, Japan); Tetsuya Yamamoto (Tohoku University, Japan); Fumiyuki Adachi (Tohoku University, Japan)

18:30 - 21:00

W2: Award Banquet

Venue: W-Hotel 8F Mega-Room 1 (10 Zhongxiao East Road, Sec 5, Xinyi District, Taipei.)

Shuttle Bus to Award Banquet site will be leaving at 17:30 in front of Howard International House.

Thursday, September 27

08:50 - 09:35

K7: Keynote Speech 7
Room: 2F Convention Hall
Chair: Phone Lin (National Taiwan University, Taiwan)
Monetizing MBB with LTE - network deployment and strategies
Nigel Chan (Nokia Siemens Networks, Greater China)

08:50 - 10:20

WC7: Wireless Communications 7
Radio Propagation
Room: R203
Chair: Ying-Ren Chien (National I-Lan University, Taiwan)

08:50 *A VLF to UHF Propagation Model for Evaluation of High-Speed Railway Electromagnetic Emissions in Outside World* ¨(%
Pedro Vieira (Instituto de Telecomunicações and ISEL, Portugal); Nuno Cota (Instituto Superior de Engenharia de Lisboa, Portugal); António J. Rodrigues (IT / Instituto Superior Técnico, Portugal)

09:08 *Small-Scale Statistics of Fixed Relay Polarimetric Links Using Narrow-Beamwidth Antennas At 3.5 GHz* ¨(%
Nizabat Khan (Universite Catholique de Louvain, Belgium); Claude Oestges (Université Catholique de Louvain, Belgium)

09:26 *Power Allocation for Indoor Distributed Antenna System Based on Path Loss Prediction At 6 GHz* ¨(&
Liang Xin (BeiJing University of Posts and Telecommunications, P.R. China); Jianhua Zhang (Beijing University of Posts and Telecommunications, P.R. China); Xiaofan Li (Beijing University of Posts and telecommunications, P.R. China)

09:44 *Power Coverage and Multipath Diversity for Indoor Distributed Antenna System Based on Wideband Channel Measurement At 6 GHz* ¨(&
Liang Xin (BeiJing University of Posts and Telecommunications, P.R. China); Jianhua Zhang (Beijing University of Posts and Telecommunications, P.R. China); Fei Xiong (Beijing University of Post and Telecommuniation, P.R. China); Yanliang Sun (Beijing University of Posts and Telecommunications, P.R. China); Nan Sheng (Beijing University of Posts and Telecommunications, P.R. China)

10:02 *UHF RFID PIFA Array Tag Antenna for Human Body Applications* ¨('(
Min-Chuan Tsai (Department of Electronic Engineering, National Ilan University, Taiwan); Ian Guang Li (SA, Taiwan); Chien-Wen Chiu (National Ilan University, Taiwan); Hwang-Cheng Wang (National Ilan University, Taiwan)

09:35 - 10:20

K8: Keynote Speech 8
Room: 2F Convention Hall
Chair: Phone Lin (National Taiwan University, Taiwan)
MAC in Motion: Delivering Differential Services in Drive-Thru Internet
Sherman Shen (University of Waterloo, Canada)

10:20 - 10:40

B7: Coffee Break

10:40 - 12:10

AS3: Applications and Service 3
Mobile Multimedia
Room: R202
Chair: Ray-Guang Cheng (National Taiwan University of Science and Technology, Taiwan)

10:40 *A Model for Evaluating QoE of Mobile Internet Services* ¨(',
Yi Luo (Beijing University of Posts and Telecommunications, P.R. China); Guochu Shou (Beijing University of Posts and Telecommunications, P.R. China); Yihong Hu (Beijing University of Posts and Telecommunications, P.R. China); Zhigang Guo (Beijing University of Posts and Telecommunications, P.R. China)

10:58 *A Joint Source-Channel Decoder for H.264 SPS and PPS Headers* ¨(('
Kai Yen (Institute for Infocomm Research, Singapore); Sumei Sun (Institute for Infocomm Research, Singapore); Ubolthip Sethakaset (Institute for Infocomm Research, Singapore); Peng Hui Tan (Institute for Infocomm Research, Singapore); Zhengguo Li (Institute for Inforcomm Research, Singapore); Jinghong Zheng (Institute for Infocomm Research, Singapore)

11:16 *An Empirical Investigation Into CDMA Network Traffic Classification Based on Feature Selection* ¨*((,*

Yang Jie (Beijing University of Posts and Telecommunications, P.R. China); Zheng Ma (Beijing University of Posts and Telecommunications, P.R. China); Chao Dong (Beijing University of Posts and Telecommunications, P.R. China); Gang Cheng (Microsoft Corporation, P.R. China)

11:34 *A Novel Secure Wireless Communication Using Side Information From Spatially Distributed Nodes in Private Wireless Network* ¨*( ) '*

Hiroki Matoba (Osaka University & Osaka University, Japan); Shinichi Miyamoto (Osaka University, Japan); Seiichi Sampei (Osaka University, Japan)

11:52 *Cooperative Jamming for Physical Layer Security in Wireless Sensor Networks* ¨*( ) ,*

Vandana Rohokale (CTIF, Aalborg University & Sinhgad Institute of Technology, Lonavala, Maharashtra, India, India); Neeli Rashmi Prasad (Center for TeleInFrastructure (CTIF), Denmark); Ramjee Prasad (Center for TeleInFrastruktur (CTiF), Aalborg University, Denmark)

10:40 - 11:25

K9: Keynote Speech 9
Room: 2F Convention Hall
Chair: Der-Jiunn Deng (National Changhua University of Education, Taiwan)
Security and Network Performance for Wireless Ad Hoc Networks
Yuguang "Michael" Fang (University of Florida, USA)

10:40 - 12:10

WC8: Wireless Communications 8
Channel Modeling and Signal Processing Techniques (1)
Room: R203
Chair: Ying-Ren Chien (National I-Lan University, Taiwan)

10:40 *The Impulsive Noise Reduction Using It's Replica Signal Under Class-A Impulsive Channel* ¨*(* '*

Takuya Kitamura (Tokyo University of Science, Japan); Hiroshi Ando (Tokyo University of Science, Japan); Kohei Ohno (Tokyo University of Science, Japan); Makoto Itami (Tokyo University of Science, Japan)

10:58 *Theoretical Polarized Channel Model and Analysis of XPD and Polarization Correlation Under Narrowband Macrocell Environment* ¨(*,

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

11:16 *Low-speed ADC Sampling Based High-resolution Compressive Channel Estimation* ¨(+'

Guan Gui (Tohoku University, Japan); Aihua Kuang (School of Electronics and Information Engineering of Zhengzhou, P.R. China); Ling Wang (University of Electronic Science and Technology of China, P.R. China)

11:34 *Network Video Quality Assessment Based on Measuring Salient Video Features* ¨(+,

Zhiming Shi (Beijing University of Posts and Telecommunications, P.R. China)

11:52 *Robust Transceiver Optimization for Non-Regenerative MIMO Relay Systems* ¨(, '

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

11:25 - 12:10

K10: Keynote Speech 10
Room: 2F Convention Hall
Chair: Der-Jiunn Deng (National Changhua University of Education, Taiwan)
BAN of Things and Dependable Wireless M2M
Ryuji Kohno (Yokohama National University, Japan)

12:10 - 13:20

L4: Lunch
Room: 1F Garden Cafeteria

13:20 - 14:50

IV7: Invited 7
Disaster-Resilient Networks (4)
Room: 2F Convention Hall
Chair: Chia-Han Lee (Academia Sinica, Taiwan)

13:20 *Towards Throughput Optimization of Wireless Mesh Networks in Disaster Areas* ¨´(, ,
Wei Liu (Tohoku University, Japan); Hiroki Nishiyama (Tohoku University, Japan); Nei Kato (Tohoku University, Japan)

13:38 *Packet Loss Concealment of VoIP Under Severe Loss Conditions* ¨´(, -
Akinori Ito (Tohoku University, Japan); Takeshi Nagano (Tohoku University, Japan)

13:56 *Multiband Antenna for Disaster-resilient Wireless Networks* ¨´(- %
Kunio Sawaya (Tohoku University & School nof Engineering, Japan); Qiang Chen (Tohoku University, Japan); Hiroto Abe (Tohoku University, Japan)

14:14 *Compression of Scene Images by Region Segmentation and Text Detection* ¨´(- '
Shinichiro Omachi (Tohoku University, Japan); Shota Kaneko (Tohoku University, Japan); Hiroko Tsuchida (Tohoku University, Japan); Yoshihiro Sugaya (Tohoku University, Japan)

14:32 *Distributed Service Recovery for Real-Time Pub/Sub Services on Disaster Management* ¨´(- (
Chi-Sheng Shih (National Taiwan University, Taiwan); Hsin-Yi Chen (National Taiwan University, Taiwan)

WC9: Wireless Communications 9
Channel Modeling and Signal Processing Techniques (2)
Room: R201
Chair: Yao-Win Peter Hong (National Tsing Hua University, Taiwan)

13:20 *Latency Impacts of Different Parallelism Levels in Data-Flow Architectures* ¨´) $$
Markus Petri (IHP, Germany)

13:38 *Channel Estimation and Performance Analysis for MIMO-OFDM in Doubly-Selective Channels* ¨´) $)
Lian Chang (Beijing University of Posts and Telecommunications, P.R. China); Jianhua Zhang (Beijing University of Posts and Telecommunications, P.R. China); Xiaofan Li (Beijing University of Posts and telecommunications, P.R. China); Baoling Liu (Beijing University of Posts and Telecommunications, P.R. China)

13:56 *Digital-Analog in Band Separation Using Extended Combined Measurement Kalman Filter ¨) %$*
Beibei Wang (Beijing University of Posts and Telecommunications, P.R. China); Jue Hou (Beijing University of Posts and Telecommunications, P.R. China); Peizhi Liu (Beijing University of Posts and Telecommunications, P.R. China); Chen Xi (Tsinghua University, P.R. China)

14:14 *A Non-invasive Detection of Respiration by Using Ultra Wideband Signals ¨) %*
Tomoya Akiyama (Meiji University, Japan); Tetsushi Ikegami (Meiji University, Japan); Kenichi Takizawa (National Institute of Information and Communications Technology, Japan)

14:32 *A Space-Time Block Code with Temporal and Spatial Modulation ¨) %*
Tatsuya Muramatsu (Yokohama National University, Japan); Fumie Ono (National Institute of Information and Communications Technology, Japan); Hideki Ochiai (Yokohama National University, Japan); Ryu Miura (NICT, Japan)

WN4: Wireless Networks 4
Network Protocols
Room: R203
Chair: Shao-Yu Lien (National Taiwan University, Taiwan)

13:20 *PIB with Rate Selection for Multicast Broadcast Service in Relay System ¨) &*
Yu-Chen Lee (National Taiwan University, Taiwan); Ching-Chun Chou (National Taiwan University, Taiwan); Hung-Yu Wei (National Taiwan University, Taiwan)

13:38 *A Listening Power-Saving Mechanism in MAC Layer for the DCF of 802.11n ¨) &*
Kuo-Chang Ting (Minghsin University of Science and Technology, Hsinchu, Taiwan); Hwang-Cheng Wang (National Ilan University, Taiwan); Fang-Chang Kuo (National Ilan University, Taiwan); Chih-Cheng Tseng (National Ilan University, Taiwan)

13:56 *A Cross-Layer Design for Video Applications Based on QoE Prediction ¨) ' (*
Ying Ju (China & BUPT, P.R. China); Zhaoming Lu (BUPT, P.R. China); Wei Zheng (Beijing University of Posts and Telecommunications, P.R. China); Xiangming Wen (Beijing University of Posts and Telecommunications, P.R. China); Dabing Ling (BUPT, P.R. China)

14:14 *Introducing Quiet Period to Wireless LAN Over TV White Space ¨) ' -*
Masumi Yuki (Niigata University, Japan); Shigenobu Sasaki (Niigata University, Japan)

14:32 *Quota-Based Multicast Routing in Delay-Tolerant Networks ˙) ((*
Shou-Chih Lo (National Dong Hwa University, Taiwan); Nai-Wun Luo (National Dong Hwa University, Taiwan)

WN5: Wireless Networks 5
Scheduling and RRM
Room: R202
Chair: Chih-Cheng Tseng (National Ilan University, Taiwan)

13:20 *An Offline Tool for Accurately Estimating the Lifetime of a Mote ¨) (-*
Sankarkumar Thandapani (University of North Carolina at Charlotte, USA); Aravind Kailas (University of North Carolina at Charlotte, USA)

13:38 *Call Admission Control Based Resource Allocation Scheme for LTE Uplink ¨)) (*
Fang-Chang Kuo (National Ilan University, Taiwan); Hwang-Cheng Wang (National Ilan University, Taiwan); Chih-Cheng Tseng (National Ilan University, Taiwan); Kuo-Chang Ting (Minghsin University of Science and Technology, Hsinchu, Taiwan); Po En Liu (National I-Lan University, Taiwan)

13:56 *Uplink Scheduling for Multi-Channel Multi-User Cognitive Radio Cellular Networks in Fading Channels ¨)) -*
Po-Chiang Lin (Yuan Ze University, Taiwan)

14:14 *Resilience in IMS: End-to-End Reliability Analysis Via Markov Reward Models ¨) * (*
Chayapol Kamyod (Aalborg University & Center for TeleInFrastruktur, Denmark); Rasmus Hjorth Nielsen (Aalborg University & Center for TeleInfrastruktur, Denmark); Neeli Rashmi Prasad (Center for TeleInFrastructure (CTIF), Denmark); Ramjee Prasad (Aalborg University, Denmark)

14:32 *Analytical Derivation of Reuse Pattern for Soft Frequency Reuse Based Femtocell Deployment ¨) * -*
Suman Kumar (Indian Institute of Technology Madras, India); K Giridhar (Indian Institute of Technology, Madras, India)

14:50 - 15:10

B8: Coffee Break

15:10 - 16:40

IV8: Invited 8
Disaster-Resilient Networks (5)
Room: 2F Convention Hall
Chair: Hung-Yu Wei (National Taiwan University, Taiwan)

15:10 *Effective Data Processing and Protection Techniques for Community Network Nodes ¨) +(*
Naofumi Homma (Tohoku University, Japan); Takafumi Aoki (Tohoku University, Japan)

15:28 *Protocol Optimization for Integrated Heterogeneous Networks in Disaster Areas ¨) +**
Yuichi Kawamoto (Tohoku University, Japan); Hiroki Nishiyama (Tohoku University, Japan); Nei Kato (Tohoku University, Japan)

15:46 *A Primary Study on Location Estimation System for Ad-hoc Networks with Considering Incorrect Nodes ¨) ++*
Yoshihiro Sugaya (Tohoku University, Japan); Masahito Okamoto (Tohoku University, Japan); Yuta Nakano (Tohoku University, Japan); Shinichiro Omachi (Tohoku University, Japan)

16:04 *Joint Design on Load Balancing and Survivability for Resilient IP Networks ¨) +-*
Po-Kai Tseng (Academia Sinica, Taiwan); Wei-Ho Chung (Academia Sinica, Taiwan)

SSR3: Systems, Standards, and Regulations 3
Spectrum Sharing and Allocation
Room: R201
Chair: Hung-Yun Hsieh (National Taiwan University, Taiwan)

15:10 *Two-Stage DCF-based Access Scheme for Throughput Enhancement of OFDMA WLAN Systems ¨) , (*
Kodai Shimamoto (Osaka University, Japan); Shinichi Miyamoto (Osaka University, Japan); Seiichi Sampei (Osaka University, Japan); Wenjie Jiang (NTT Network Innovation Laboratories, NTT Corporation & Research Engineer, Japan)

15:28 *Indoor Broadband Use of 2.7-2.9 GHz Radar Spectrum: Case of Macedonia ¨) , -*
Pero Latkoski (Ss Cyril and Methodius University - Skopje, Macedonia, the former Yugoslav Republic of); Jovan Karamacoski (Faculty of Electrical Engineering and Information Technologies, Macedonia, the former Yugoslav Republic of); Liljana Gavrilovska (Ss Cyril and Methodius University - Skopje, Macedonia, the former Yugoslav Republic of)

15:46 *Karnaugh-map Like Online Embedding Algorithm of Wireless Virtualization ¨) - (*
Yang Mao (Tsinghua University, P.R. China); Yong Li (Tsinghua University, P.R. China); Lieguang Zeng (Tsinghua University, P.R. China); Depeng Jin (Tsinghua University, P.R. China); Li Su (Tsinghua University, P.R. China)

16:04 *Differentiated-Pricing Based Power Allocation in Dense Femtocell Networks ¨) - -*
Wenmin Ma (Beijing University of Posts and Telecommunications, P.R. China); Haijun Zhang (Beijing University of Posts and Telecommunications, P.R. China); Wei Zheng (Beijing University of Posts and Telecommunications, P.R. China); Xiangming Wen (Beijing University of Posts and Telecommunications, P.R. China)

16:22 *Capability-based Access Control Delegation Model on the Federated IoT Network ¨*$(*
Bayu Anggorojati (Aalborg Universitet, Denmark); Parikshit Narendra Mahalle (Aalborg University, Denmark); Neeli Rashmi Prasad (Center for TeleInFrastructure (CTIF), Denmark); Ramjee Prasad (Aalborg University, Denmark)

WN6: Wireless Networks 6
4G Communications
Room: R202
Chair: Shao-Yu Lien (National Taiwan University, Taiwan)

15:10 *Hybrid Division Duplex for Cognitive Small Cell Networks ¨*$-*
Tony Q. S. Quek (Singapore University of Technology and Design (SUTD) & Institute for Infocomm Research, Singapore); Yong Sheng Soh (Institute for Infocomm Research, Singapore); Marios Kountouris (Supélec, France)

15:28 *A Novel Distributed Cluster Combination Method for CoMP in LTE-A System* ¨˙*⁒

Hongbin Li (Beijing University of Posts and Telecommunications, P.R. China); Hui Tian (Beijng university of posts and telecommunications, P.R. China); Cheng Qin (Beijing University of Posts and Telecommunications, P.R. China); Yushan Pei (Beijing University of Posts and Telecommunications, P.R. China)

15:46 *Joint Pricing and Power Control for OFDMA Femtocell Networks Using Stackelberg Game* ¨˙*⁒

Jingjing Zhang (Beijing University of Posts and Telecommunications, P.R. China); Zhenmin Zhao (Beijing University of Posts and Telecommunications, P.R. China); Wei Li (Beijing University of Posts and Telecommunications, P.R. China); Zhen Liu (Beijing University of Posts and Telecommunications, P.R. China); Liang Xin (BeiJing University of Posts and Telecommunications, P.R. China)

16:04 *Energy Efficient Cross-layer Resource Allocation Scheme Based on Potential Games in LTE-A* ¨˙*&'

Dabing Ling (BUPT, P.R. China); Zhaoming Lu (BUPT, P.R. China); Wei Zheng (Beijing University of Posts and Telecommunications, P.R. China); Xiangming Wen (Beijing University of Posts and Telecommunications, P.R. China); Ying Ju (BUPT, P.R. China)

16:22 *Shadowing Time-Scale Admission and Power Control for Small Cell Networks* ¨˙*&‚

Siew Eng Nai (Institute for Infocomm Research, Singapore); Tony Q. S. Quek (Singapore University of Technology and Design (SUTD) & Institute for Infocomm Research, Singapore); Mérouane Debbah (Supelec, France)

WN7: Wireless Networks 7
Channel Asssignment and Mobility Management
Room: R203
Chair: Jeng-Ji Huang (National Taiwan Normal University, Taiwan)

15:10 *Centralized Channel Assignment for IEEE 802.11 WLANs: Utilization MinMax-Sum* ¨˙˙*''

Micheal Drieberg (Universiti Teknologi PETRONAS, Malaysia); Fu-Chun Zheng (The University of Reading, United Kingdom)

15:28 *Performance Evaluation of Referral Selection Algorithms in Human Centric Communication Networks* ¨˙* ' ,
Yu-Feng Chou (National Taiwan University of Science and Technology, Taiwan);
Ray-Guang Cheng (National Taiwan University of Science and Technology, Taiwan);
Hsin-Heng Huang (National Taiwan University of Science and Technology, Taiwan)

15:46 *An Analytical Model for Evaluating Outage and Handover Probability of Cellular Wireless Networks* ¨˙* ('
Thanh Tung Vu (ENST Paris, France); Laurent Decreusefond (Telecom ParisTech & CNRS LTCI, France); Philippe Martins (Telecom Paristech, France)

16:04 *Multi-Relay Selection Scheme Based on Quantum Particle Swarm Optimization in Relay Networks* ¨˙* (,
Jinlong Cao (Beijing University of Posts and Telecommunications, P.R. China); Tiankui Zhang (Beijing University of Posts and Telecommunications, P.R. China); Zhimin Zeng (Beijing University of Posts and Telecommunications, P.R. China)

16:22 *Comparative Performance Analysis on Dynamic Mobility Anchoring and Proxy Mobile IPv6* ¨˙*) '
Hassan Ali-Ahmad (Orange Labs & Telecom Bretagne, France); Meryem Ouzzif (Orange Labs, France); Philippe Bertin (Orange Labs, France); Xavier Lagrange (Institut Telecom - Telecom Bretagne, France)