



**10<sup>th</sup> International Wireless  
Communications & Mobile  
Computing Conference**



<http://www.iwcmc.org/2014>

**Technical Program**

**Hilton Nicosia**

**Cyprus**

**August 4<sup>th</sup> — 8<sup>th</sup>, 2014**



**IEEE IWCMC 2014**  
**Technical Program at a Glance**  
**Nicosia, Cyprus, August 4<sup>th</sup> — 8<sup>th</sup>, 2014**

DATE	TIME	ROOM					
<b>August 4, 2014</b> (Monday)	9:00-12:00	<b>KANTARA A</b>					
		<b>T1:</b> Empowering Future Internet Research and Experimentation Through Software Defined Networking <b>By:</b> M. Anan, Purdue University, USA & A. Al-Fuqaha, Western Michigan University, USA					
	12:00-13:30	<b>LUNCH BREAK</b>					
	14:00-17:00	<b>T2:</b> Mobile Cloud Computing <b>By:</b> Mario Gerla, UCLA, USA					
<b>TUTORIALS</b>	19:00-20:00	<b>WELCOME RECEPTION</b>					
<b>August 5, 2014</b> (Tuesday)	8:30-9:00	<b>Ballroom</b>	<b>Kantara A</b>	<b>Kantara B</b>	<b>AHERA</b>	<b>MR 1</b>	<b>MR 2</b>
		<b>WELCOME &amp; OPENING</b>					
	9:00-10:00	<b>KEYNOTE 1:</b> Mario Gerla, UCLA, USA <b>TITLE:</b> Vehicle Cloud Services					
	10:00-10:30	<b>COFFEE BREAK</b>					
	10:30-12:30	TM-1	TM-2	TM-3	TM-4	TM-5	TM-6
	12:30-13:30	<b>LUNCH BREAK</b>					
	13:30-15:30	TA-1	TA-2	TA-3	TA-4	TA-5	TM-6
	15:30-16:00	<b>Coffee Break</b>					
	16:00-18:00	TA-7	TA-8	TA-9	TA-10	TA-11	TA-12
19:00-22:00	<b>NIGHT OUT (Organized by "Smart Events")—Registration and payment onsite</b>						
<b>August 6, 2014</b> (Wednesday)	9:00-10:00	<b>KEYNOTE 2:</b> Fumiyuki Adachi, Tohoku University, Japan <b>TITLE:</b> Toward Spectrum-Energy Efficient Wireless Networks: <i>It is Time to Learn From the Human Being</i>					
	10:00-10:30	<b>Coffee Break</b>					
	10:30-12:30	WM-1	WM-2	WM-3	WM-4	WM-5	WA-6
	12:30-13:30	<b>LUNCH BREAK</b>					
	13:30-15:30	WA-1	WA-2	WA-3	WA-4	WM-5	WA-6
	15:30-16:00	<b>Coffee Break</b>					
	16:00-18:00	WA-7	WA-8	WA-9	WA-10	WA-11	WA-12
19:00-21:00	<b>DINNER BANQUET</b>						
<b>August 7, 2014</b> (Thursday)	9:00-10:00	<b>KEYNOTE 3:</b> Tarik Taleb, NEC Europe, Heidelberg, Germany <b>TITLE:</b> Turning Mobile Networking into Software Engineering					
	10:00-10:30	<b>Coffee Break</b>					
	10:30-12:30	ThM-1	ThM-2	ThM-3	ThM-4	ThM-5	ThM-6
	12:30-13:30	<b>LUNCH BREAK</b>					
	13:30-15:30	ThA-1	ThA-2	ThA-3	ThA-4	ThA-5	ThM-6
<b>August 8, 2014</b> (Friday)	<b>EXCURSIONS (Organized by "Smart Events")—Check website for more information</b>						
	<b>Registration and payment for these excursions will be made onsite</b>						

# IWCMC 2014 Sponsors & Supporters

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## **Technical Sponsor: IEEE Cyprus Section**



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**FREDERICK UNIVERSITY**

**TECHNICAL PROGRAM**  
**IEEE IWCMC 2014**  
**Nicosia, Cyprus, August 4<sup>th</sup> — 8<sup>th</sup>, 2014**

**Monday, August 4<sup>th</sup>, 2014**

**Registration — (8:00 - 15:00)**

**Room: Open Hall**

**Tutorial 1 — (9:00 - 12:00)**

**Room: KANTARA-A**

- **Speakers:** M. Anan, Purdue University, USA and A. Al-Fuqaha, Western Michigan University, USA
- **Title:** Empowering Future Internet Research and Experimentation through Software Defined Networking
- **Chair:** George Hadjichristofi, Frederick University, Cyprus

**Lunch Break — 12:00 – 13:30**

**Tutorial 2 — (14:00 - 17:00)**

**Room: KANTARA-A**

- **Speaker:** Mario Gerla, UCLA, USA
- **Title:** Mobile Cloud Computing
- **Chair:** George Hadjichristofi, Frederick University, Cyprus

**Welcome Reception — 19:00 – 20:00**

**TECHNICAL PROGRAM**  
**IEEE IWCMC 2014**  
**Nicosia, Cyprus, August 4<sup>th</sup> — 8<sup>th</sup>, 2014**

**Tuesday, August 5<sup>th</sup>, 2014**

**Registration — (8:00 - 15:00)**

**Room: Open Hall**

**Opening Session — (8:30 - 9:00)**

**Room: BALLROOM**

**Speaker:** Conference Chairs

**KEYNOTE 1 — (9:00 - 10:00)**

**Room: BALLROOM**

- **Speaker:** Mario Gerla, UCLA, USA
- **Title:** Vehicle Cloud Services
- **Chair:** Fumiyuki Adachi, Tohoku University, Japan

**Coffee Break — 10:00 - 10:30**

**Tuesday Morning Sessions (TM) — (10:30 12:30)**

- **Session Title:** INVITED PAPERS
- **Session Chair:** Mario Gerla, UCLA, USA

**TM-1 : Room: BALLROOM**

**1569909095:** Software-Defined Mobile Cloud: Architecture, Services and Use Cases  
Ian Ku; You Lu; Mario Gerla (University of California at Los Angeles, USA)

**1569904141:** Simultaneous Wireless Information and Power Transfer in Interference Alignment Networks  
Nan Zhao, Dalian University of Technology, F. Richard Yu, Carleton University, Victor CM Leung, University of British Columbia, Canada

**1569895353:** Downlink Spectrum Allocation in 5G HetNets  
Tamer Omar (Iowa State University, USA); Ahmed E. Kamal (Iowa State University, USA); J. Morris Chang (Iowa State University, USA)

**1569918291:** Dynamic Multi-User Access Scheme for IEEE 802.11 WLAN Channels  
Arafet Ben Makhoul, HKUST, Mounir Hamdi, Hong Kong University of Science and Technology

**Lunch Break — 12:00 – 13:30**

**Tuesday Afternoon Sessions (TA) — (13:30 - 15:30)**

- **Session Title:** Traffic Analysis for Network Security (TRAC Workshop)
- **Session Chair:** Pedro Casas (FTW Vienna)

**TA-1: Room: BALLROOM**

**1569906451:** Coping with 0-Day Attacks through Unsupervised Network Intrusion Detection  
Pedro Casas (FTW Vienna); Johan Mazel (National Institute of Informatics); Philippe Owezarski (LAAS-CNRS)

**1569902839:** A Taxonomy of Anomalies in Backbone Network Traffic  
Johan Mazel; Romain Fontugne; Kensuke Fukuda (National Institute of Informatics)

**1569903539:** Towards a Taxonomy of Darknet Traffic  
Jun Liu (The Graduate University for Advanced Studies); Kensuke Fukuda (National Institute of Informatics)

- **Session Title:** Resource Allocation and Management (Wireless Networking Symp) **TA-2: Room:** KANTARA-A  
➤ **Session Chair:** Halima Elbiaze, University of Quebec Montreal (UQAM), Canada

**1569905719:** An Energy Efficient Localized Topology Control Algorithm for Wireless Multihop Networks  
Dezhong Shang; Baoxian Zhang (University of the Chinese Academy of Sciences, P.R. China); Meng Zhou (China Mobile, P.R. China); Cheng Li (Memorial University of Newfoundland, Canada)  
**1569892669:** Radio Resource Allocation Based on Dynamic CoMP Mode Selection for MU-CoMP Systems  
Imen Ben Chaabane; Soumaya Hamouda; Sami Tabbane (Supcom, Tunisia)  
**1569904083:** A Tax-inspired Mechanism Design to Achieve QoS in VMIMO Systems: Give to Receive !  
Hassan Bennani (ENSIAS, Mohammed V-Souissi, Morocco); Essaid Sabir (ENSEM/GREENTIC UH2C, Morocco); Abdellatif Kobbane (ENSIAS, Mohammed V-Souissi, Morocco); Abdellaziz Walid (ENSIAS, University Mohammed V-Souissi, Morocco); Jalel Ben-Othman (University of Paris 13, France)  
**1569969837:** Cloud-based Autonomic Service Monitoring For Future Internet  
Muhammad Anan; Levente Ilyes (Purdue University Calumet, USA); M. Ayyash (Chicago State University, USA); Ala Al-Fuqaha (Western Michigan University, USA)  
**1569906259:** Capacity Improvement Via Indoor Small Cells  
Ahmed Darwish (Intel, Egypt); Ahmed S. Ibrahim (Cairo University and Intel Corporation, Egypt)

- **Session Title:** Energy Efficiency & Fault-Tolerance in WSNs (Wireless Sensor Networks) **TA-3: Room:** KANTARA-B  
➤ **Session Chair:** Paulvanna Marimuthu, Kuwait University, Kuwait

**1569892189:** Transmission Power Control for Interference Minimization in WSNs  
Georg von Zengen; Felix Büsching; Wolf-Bastian Pöttner; Lars C Wolf (Technische Universität Braunschweig, Germany)  
**1569894589:** Low-overhead and High-accuracy Failure Detection Method for Wireless Multi-hop ad hoc Networks  
Xin Di; Zhaoyu Zhang; Hongchun Li; Chen Ao; Jun Tian (Fujitsu R&D Center Co., Ltd., P.R. China); Kazuyuki Ozaki; Yun Wen; Hiroshi Fujita (Fujitsu laboratories Ltd, Japan)  
**1569876889:** Soft Computing Tool for Restoring Failures within Wireless Sensor Networks  
Sami Habib; Paulvanna Nayaki Marimuthu; Krishna Sudha (Kuwait University, Kuwait)  
**1569893315:** Energy-Aware Strategies for Wireless Sensor Networks  
Awatef Ben Fradj (ENIS, Tunisia); Nejah Nasri (University of Sfax, Tunisia); Abdennaceur Kachouri (Laboratoire d'Electronique et des Technologies de l'Information, Tunisia)  
**1569927933:** Efficiency of the RPL Repair Mechanisms for Low Power and Lossy Networks  
Nesrine Khelifi (ENSI, Tunisia); Wafa Kammoun (ISITCOM Hammam Sousse, Tunisia); Habib Youssef (Institut Supérieur d'Informatique et des Technologies de Communication, Tunisia)  
**1569892763:** On the Impacts of Lognormal-Rice Fading on Multi-Hop Extended Networks  
Muhammad Bilal Haroon; Syed Ali Hassan (National University of Sciences and Technology, Pakistan)

- **Session Title:** Localization and Mobile Systems (Mobile Computing Symposium) **TA-4: Room:** AHERA  
➤ **Session Chair:** Tamer Nadeem (Old Dominion University, USA)

**1569878137:** CET: Corner Extraction Technique for Efficient Characterization of GPS Tracks  
YaChieh Wu (National Tsing Hua University, Taiwan); Shih-Yung Juan (National Tsinghua University, Taiwan); Cheng-Hsin Hsu (National Tsing Hua University, Taiwan); Chung-Ta King (National Tsing-Hua University, Taiwan)  
**1569878709:** Performance Comparison of Point Feature Detectors and Descriptors for Visual Navigation on Android Platform, Michał Nowicki; Piotr Skrzypczyński (Poznan University of Technology, Poland)  
**1569894065:** A Roadmap to Continuous Biometric Authentication on Mobile Devices  
Marlies Rybnicek (St. Poelten University of Applied Sciences, Austria); Christoph Lang-Muhr (Researcher, Austria); Daniel Haslinger (Researcher, Austria)  
**1569904265:** DroidTrace: A Ptrace Based Android Dynamic Analysis System with Forward Execution Capability  
Min Zheng (The Chinese University of Hong Kong, Hong Kong); MingShen Sun (The Chinese University of Hong Kong, Hong Kong); John Chi Shing Lui (Chinese University of Hong Kong, Hong Kong)  
**1569904357:** Arabic Mobile Applications: Challenges of Interaction Design and Development  
Samar Zawati; Muhanna Muhanna (Princess Sumaya University for Technology, Jordan)  
**1569903845:** Precoding Stacked Space-Time Designs With Quantized Feedback  
Imen Turki (SupCom, Tunisia); Inès Kammoun (ENIS, Tunisia); Mohamed Siala (Sup'Com, Tunisia)

- **Session Title:** Cooperative Spectrum Sensing & Relay Selection (CCN Workshop)  
➤ **Session Chair:** Aymen Omri, Qatar University, Qatar

**TA-5: Room:** MR1

- 1569864567:** An Accumulated Credibility-based Weighted Cooperative Spectrum Sensing Algorithm  
Shibing Zhang; Lianlian Song; Xiaoge Zhang (Nantong University, P.R. China)  
**1569907277:** A Cooperative Spectrum Sensing Scheme based on Task Assignment Algorithm for Cognitive Radio Networks  
Mariam Nabil; Walaa Elsayed; Mustafa El-Nainay (Alexandria University, Egypt)  
**1569903699:** Contention-Sensing and Dynamic Spectrum Co-Use in Secondary User Cognitive Radio Societies  
Anna Wisniewska; Bilal Khan (City University of New York, USA)  
**1569894245:** Inter-Relay Interference Management Schemes for Multi-User Cooperative Wireless Networks  
Aymen Omri; Mazen Hasna (Qatar University, Qatar)  
**1569899221:** Cognitive Access in Multichannel Wireless Networks using Two-Dimension Markov Chain  
Han-Feng Lin (National Taiwan University of Science and Technology, Taiwan); Shin-Ming Cheng (National Taiwan University of Science and Technology, Taiwan); Po-Yao Huang (MediaTek Inc., Taiwan)  
**1569894279:** The Impact of Imperfect Channel State Information on the Performances of Relay Selection Schemes in Underlay Cognitive Networks  
Hela Chamkhia; Aymen Omri (Qatar University, Qatar); Ridha R. Bouallegue, B. (Ecole Supérieure des Communications de Tunis, Tunisia)

- **Session Title:** MIMO Systems (Communication & Information Theory Symp.)  
➤ **Session Chair:** Masashi Fushiki, KDDI R&D Laboratories, Inc., Japan

**TA-6: Room:** MR2

- 1569877361:** Optimal Power Allocation and Energy Efficiency of AF OSTBC-MIMO Systems  
Emna Ben Yahia; Nouredine Hamdi  
**1569891869:** Bit Division Multiplexing for MIMO Broadcasting System  
Jiachen Huang; Kewu Peng; Changyong Pan; Jian Song; Huangping Jin; Zhisheng Niu  
**1569891871:** Performance Analysis of DVB-NHG MIMO Coded Modulation System  
Tao Cheng; Kewu Peng; Fang Yang; Yang Zhixing  
**1569893957:** Experimental Evaluations of Multiuser MIMO with Two-Dimensional Antenna Configuration  
Masashi Fushiki; Yasuyuki Hatakawa; Satoshi Konishi  
**1569910507:** Regularized Phase Alignment Precoding for the MISO Downlink  
S. Morteza Razavi; Tharmalingam Ratnarajah; Christos Masouros; Mathini Sellathurai

**Coffee Break — 15:30 - 16:00**

**Tuesday Afternoon Sessions (TA) — (16:00 - 18:00)**

- **Session Title:** Protocols, QoS, and performance analysis (Vehicular Symp.)  
➤ **Session Chair:** Abderrahmane Lakas, UAEU, UAE

**TA-7: Room:** BALLROOM

- 1569893983:** Speed Adaptive Probabilistic Broadcast for Scalable Data Dissemination in Vehicular Ad hoc Networks,  
Moumena Chaqfeh; Abderrahmane Lakas (UAEU, UAE)  
**1569904235:** Providing Fast Broadcasting by Reserving Time Slots for Multi-hop Distance in VANETs  
Celimuge Wu; Satoshi Ohzahata (The University of Electro-Communications, Japan); Yusheng Ji (National Institute of Informatics, Japan); Toshihiko Kato (University of Electro-Communications, Japan)  
**1569905663:** Performance Analysis of Adaptive Clustering in Hybrid Technology Networking  
Pradhuma Shrestha; Michael Hempel; Sushanta Mohan Rakshit; Hamid Sharif (University of Nebraska-Lincoln, USA); John Punwani; Monique Stewart (Department of Transportation, USA)  
**1569891279:** Stimulating Traffic Information Transfer in Non-Cooperative Vehicular Ad Hoc Networks  
Tianrong Zhang (University of North Carolina at Chapel Hill, USA); Fan Wu (Shanghai Jiao Tong University, P.R. China)  
**1569905561:** A Formal Model of Human Driving Behavior in Vehicular Networks  
Afaf Bouhoute (USMBA, Morocco); Ismail Berrada; M. El Kamili (LIM, Sidi Mohammed Ben Abdellah U., Fez, Morocco)  
**1569820631:** VANET Adaptive and Reliable Broadcast Protocol  
Meriam Essaies; Nabil Tabbane (Sup'com, Tunisia)

- **Session Title:** Performances analysis and optimization I (Wireless Net. Symp.) **TA-8: Room:** KANTARA-A  
➤ **Session Chair:** Halima Elbiaze, University of Quebec Montreal (UQAM), Canada

**1569891949:** Wireless Channel Loss Analysis - A Case Study Using WiFi-Direct  
Jingyun Feng; Zhi Liu; Yusheng Ji (National Institute of Informatics, Japan)  
**1569892541:** Fine-Tuning the Femtocell Performance in Unlicensed Bands: Case of WiFi Co-existence  
Sima Hajmohammad; Halima Elbiaze; Wessam Ajib (UQAM, Canada)  
**1569900179:** Differentiated Services in Wireless Multiaccess Systems: Rate Allocation and Power Adjustment  
C. Zhang, Pingyi Fan (Tsinghua University), Ke Xiong (Beijing Jiaotong University), Yunquan Dong (Tsinghua University)  
**1569870555:** Power management for wireless adapters using multiple feedback metrics  
Christos Bouras; Vaggelis Kapoulas; Kostas Stamos; Nikos Tavoularis (University of Patras, Greece)  
**1569878375:** Performance Comparison of IBETX Routing Metric over AODV and DSDV Routing Protocols  
Maxime Kabiwa (Tshwane University of Technology, South Africa); Karim Djouani (University Paris Est Créteil (UPEC), South Africa); Anish Mathew Kurien (Tshwane University of Technology, South Africa)

- **Session Title:** Positioning & security in WSNs (Wireless Sensor Networks Symp.) **TA-9: Room:** KANTARA-B  
➤ **Session Chair:** Mohamed Manoufali, KUSTAR, UAE

**1569884725:** A Heterogeneous RSSI-based Localization System for Indoor and Outdoor Sports Activities  
Marco Pricone (Politecnico di Milano, Italy); Alexandru Caracas (IBM Research - Zurich, Switzerland)  
**1569892633:** Strategic Priorities for Electronics, Communications and Photonics (ECP) Technologies in Saudi Arabia: Investigation of 3D Positioning using Ultra-Wide Band (UWB) Technology  
Mohamed Khalaf-Allah (Umm Al-Qura University, Saudi Arabia)  
**1569893317:** An Integrated Framework for Localization and Coverage Maintenance in Wireless Sensor Networks  
Imen Mahjri; Amine Dhraief (University of Manouba, Tunisia); Issam Mabrouki (University of Carthage, Tunisia); Abdelfettah Belghith (University of Manouba, Tunisia); Khalil Drira (LAAS-CNRS, France)  
**1569905867:** Full-View Coverage Quasi-Mobile Camera Sensor Network for Maritime Surveillance  
Mohamed Manoufali; Peng-Yong Kong; Shihab Jimaa (Khalifa University, UAE)  
**1569877571:** Recovering from the selective forwarding attack in WSNs - Enhancing the recovery benefits of blacklisting and rerouting using directional antennas, Eliana Stavrou; Andreas Pitsillides (University of Cyprus, Cyprus)  
**1569878037:** Secure Data Transmission in Wireless Medical Sensor Networks  
Soufiene Ben othman (Tunisia)

- **Session Title:** Traffic Analysis and Characterization I (TRAC Workshop) **TA-10: Room:** AHERA  
➤ **Session Chair:** Pedro Casas (FTW Vienna)

**1569903367:** Characterizing Web Services Provisioning via CDNs: The Case of Facebook  
Pierdomenico Fiadino; Alessandro D'Alconzo; Pedro Casas (FTW Vienna)  
**1569902421:** The Pursuit of 'Appiness: Exploring Android Market Download Behaviour in a Nationwide Cellular Network  
Fehmi Ben Abdesslem; Anders Lindgren (Swedish Institute of Computer Science)  
**1569890509:** A Pin is Worth a Thousand Words: Characterization of Publications in Pinterest  
César Bernardini; Thomas Silverston (University of Lorraine); Olivier Festor (INRIA Nancy)  
**1569903623:** A Statistical Blind Technique for Recognition of Internet Traffic with Dependence Enforcement  
Riccardo Pecori; Luca Veltri (University of Parma)  
**1569899691:** Analytical Model for Jitter in Networks with IPP Traffic  
Adnan Huremovic; Mesud Hadzialic (University of Sarajevo); Fatima Skaka (BH Telecom Sarajevo)  
**1569890561:** Reactive Logic in Software-Defined Networking: Measuring Flow-Table Requirements  
Maurizio Dusi; Roberto Bifulco (NEC Laboratories Europe); Francesco Gringoli (University of Brescia); Fabian Schneider (NEC Laboratories Europe)



- **Session Title:** Resource Management (CC Networks Workshop)  
➤ **Session Chair:** Chafika Benzaid, USTHB, Algeria

**TA-11: Room: MR1**

- 1569892635:** Channel Division Multiple Access Analysis in MB-OFDM UWB High Data Rate System  
Houda Chihi (ENIT, Tunisia)
- 1569893647:** Optimal Power Allocation for Delay-Constrained Multiple-Channel Cognitive Radio Systems  
Pei Zhang; Gangming Lv; Chao Zhang (Xi'an Jiaotong University, P.R. China)
- 1569909871:** Improving Cognitive Radio Link Adaptation for Avoiding Interference with Passive Primary Users  
Ali Haider Mahdi (Ilmenau University of Technology, Germany); Oleksandr Artemenko (Ilmenau University of Technology, Germany); Andreas Mitschle-Thiel (Ilmenau University of Technology, Germany)
- 1569954743:** Maximum Achievable Arrival Rate of Secondary Users under GoS Constraints in Cognitive Radio Networks  
Yun Shen; Ting Feng; WanBin Tang; Yuxiang Lan (University of Electronic Science and Technology of China, P.R. China)
- 1569905255:** Enhancing content dissemination for ad hoc cognitive radio  
Abbas Bradai; Toufik Ahmed (University of Bordeaux 1, FR); Abderrezak Rachedi (University Paris-Est Marne-la-Vallée, FR)

- **Session Title:** Wireless Networks (Communication & Information Theory Symposium)  
➤ **Session Chair:** Syed Ali Hassan, National University of Science & Technology, Pakistan

**TA-12: Room: MR2**

- 1569881409:** A Game-Theoretic Approach to Relay Selection in Cooperative Wireless Networks  
Mohammed W. Baidas; Mohammed Bahbahani
- 1569891267:** DSMA: Optimal Multirate Anypath Routing in Wireless Networks with Directional Antennas  
Feng Ping; Fan Wu; Bo Liu; Chao Dong
- 1569892345:** On the Performance of Multiple Region Reverse Frequency Allocation Scheme in a Single Cell Downlink Heterogeneous Networks; Rehan Zahid; Atta Rahman; Syed Ali Hassan
- 1569904857:** Coverage Aspects of Cooperative Multi-hop Line Networks in Composite Fading Environment  
Mudasar Bacha; Syed Ali Hassan
- 1569893419:** Cooperative Coding Based Retransmission Protocol for Cognitive Radio Networks by Exploiting Hybrid ARQ  
Xiaoyan Wang; Yusheng Ji; Jie Li

**NIGHT OUT (On Your Own - Organized by: "Smart Events") — Register & Pay Onsite**

**TECHNICAL PROGRAM**  
**IEEE IWCMC 2014**  
**Nicosia, Cyprus, August 4<sup>th</sup> — 8<sup>th</sup>, 2014**

**Wednesday, August 6<sup>th</sup>, 2014**

**Registration — (8:00 - 15:00)**

**Room: Open Hall**

**KEYNOTE 2 — (9:00 - 10:00)**

**Room: BALLROOM**

- **Speaker:** Fumiyuki Adachi, Tohoku University, Japan
- **Title:** Toward Spectrum-Energy Efficient Wireless Networks: *It is Time to Learn from the Human Being*
- **Chair:** Mario Gerla, UCLA, USA

**Coffee Break — 10:00 - 10:30**

**Wednesday Morning Sessions (WM) — (10:30 - 12:30)**

- **Session Title:** INVITED PAPERS
- **Session Chair:** Fumiyuki Adachi, Tohoku University, Japan

**WM-1: Room: BALLROOM**

**1569893721:** Robust Frequency-Domain Equalization Against Doubly Selective Fading for Single-Carrier STBC Time-Division Duplex Transmission, Hiroyuki Miyazaki; Fumiyuki Adachi (Tohoku University, Japan)

**1569892965:** Network QoE Metrics for Assessing System-Level Performance of Radio Resource Management Algorithms in LTE Networks, Elias Yaacoub (Qatar Mobility Innovations Center (QMIC), Qatar); Zaher Dawy (American University of Beirut, Lebanon)

**1569893335:** Robust Provisioning of Multicast Sessions in Cognitive Radio Networks, Abdullah Almasoud; Ahmed E. Kamal (Iowa State University, USA)

**1569921103:** Context-aware Task Allocation for Fast Parallel Big Data Processing in Optical-Wireless Networks, Katsuya Suto; Hiroki Nishiyama; and Nei Kato (Tohoku University, Japan)

**1569893823:** Reduced Outage Probability Relay Selection For Underlay Cognitive Networks  
Ahmed ElShaarany (Cairo Univ, Egypt); Mohamed M. Abdallah (TAMU- Qatar, Qatar); Mohamed Khairy (Cairo Univ, Egypt); Khalid A. Qaraqe (Texas A&M University at Qatar, USA)

**Lunch Break — 12:00 – 13:30**

**Wednesday Afternoon Sessions (WA) — (13:30 - 15:30)**

- **Session Title:** Traffic Analysis for Performance Diagnosis (TRAC Workshop)
- **Session Chair:** Pedro Casas (FTW Vienna)

**WA-1: Room: BALLROOM**

**1569903599:** Who to Blame when YouTube is not Working? Detecting Anomalies in CDN-Provisioned Services  
Alessandro D'Alconzo; Pedro Casas; Pierdomenico Fiadino; Arian Bär (FTW Vienna); Alessandro Finamore (Polytechnic University of Turin)

**1569889311:** A per-Application Account of Bufferbloat: Causes and Impact on Users  
Andrea Araldo (Paris Sud University); Dario Rossi (Telecom ParisTech)

**1569903513:** ErrorSense: Characterizing WiFi Error Patterns for Detecting ZigBee Interference  
Daniele Croce; Pierluigi Gallo; Domenico Garlisi; Fabrizio Giuliano; Stefano Mangione; Ilenia Tinnirello (University of Palermo)

- **Session Title:** Performances analysis and optimization II (WN Symp.)
- **Session Chair:** Muhammad Anan, Purdue University, USA

**WA-2: Room:** KANTARA-A

**1569905713:** Performance Analysis of Real-Time Traffic over 802.11n Wireless Local Area Networks: An Experimental Study; John P Podolanko; Sajib Datta (University of Texas at Arlington, USA); Sajal K. Das (MUST, USA)  
**1569909439:** A Cross-layer Approach for Improving WiFi Performance  
Kien Nguyen; Yusheng Ji; Shigeki Yamada (National Institute of Informatics, Japan)  
**1569894555:** Performance Analysis of Application-Based QoS Control in Software-Defined Wireless Networks  
Lei Zhong; Kiyohide Nakauchi; Yozo Shoji (National Institute of Information and Communications Technology, Japan)  
**1569902223:** Inferring Trust Relationships in the Social Networks: Evidence Theory Approach:  
Khalil Ibrahim (University of Ibn Tofail, Morocco); Soufiana Mekouar (Université Mohammed V Agdal, Morocco);  
Houssine Bouyakhf (Université Mohammed V Agdal, Morocco)

- **Session Title:** Query Processing & Data Aggregation in WSNs (WSN Symp.)
- **Session Chair:** Mohamed Manoufali, KUSTAR, UAE

**WA-3: Room:** KANTARA-B

**1569905195:** Effective Handling of Spreading Events Using Wireless Sensor and Actuator Networks  
Wassila Lalouani (High National School of Computing Science, Algeria); Mohamed Younis (University of Maryland Baltimore County, USA); Miloud Bagaa (CERIST, Algeria); Nadjib Badache (USTHB, Algeria)  
**1569886341:** Path Planning for Data Collectors in Precision Agriculture WSNs  
Mohammad Biglarbegian; Fadi M. Al-Turjman (University of Guelph, Canada)  
**1569892901:** Clustering in Wireless Sensor networks Based on Node Ranking  
Maryam Al Nuaimi; Khaled Shuaib; Klaithem Al Nuaimi; Mohammed Adel Abdel-Hafez (UAEU, UAE)  
**1569893913:** A Suffix-Based Enhanced Technique for Data Aggregation in Periodic Sensor Networks  
Hassan Harb (Lebanese University, Lebanon); Abdallah Makhoul (University of Franche-Comté, France);  
Ali Jaber (Lebanese University, Lebanon); Rami Tawil (LIU University, Lebanon)  
**1569881003:** Rate-Constrained Data Aggregation in Power-Limited Multi-Sink Wireless Sensor Networks  
Arwa Hamid; Samina Ehsan; Bechir Hamdaoui (Oregon State University, USA)

- **Session Title:** Mobile Security (Security Symposium)

**WA-4: Room:** AHERA

- **Session Chairs:** Xin Liu, China University of Petroleum, P.R. China & Abdelouahid Derhab, KSU, Saudi Arabia

**1569895559:** Distributed Anonymous Authentication in Heterogeneous Networks  
Shin-Ming Cheng; Cheng-Han Ho (National Taiwan University of Science and Technology, Taiwan);  
Shannon Chen (University of Illinois at Urbana-Champaign, USA); Shih-Hao Chang (Tamkang University, Taiwan)  
**1569874863:** StoreDroid: Sensor-based Data protection  
Miriam Allalouf; Radel Ben-Av; Alex Gerdov (Azrieli College of Engineering (JCE), Israel)  
**1569904099:** Secure Macro Mobility Protocol For New Generation Access Network, Faouzi Zarai (Sfax Univ., Tunisia)  
**1569904103:** Security Analysis of NFC Relay Attacks using Probabilistic Model Checking  
Nikolaos Alexiou (KTH Royal Institute of Technology, Sweden); Stylianos Basagiannis (United Technologies Research Centre, Ireland); Sophia Petridou (University of Macedonia, Greece)  
**1569904867:** Improved Relay Selection for Decode-and-Forward Cooperative Wireless Networks under Secrecy Rate Maximization, Seifeddine Bouallegue; Mazen Hasna; Ridha Hamila (QU); Kaouthar Sethom (SUPCOM, France)  
**1569905357:** An alternative version of HTTPS to provide non-repudiation security property  
Stassia Resondry; Karima Boudaoud; Michel Kamel; Yoann Bertrand; Michel Riveill (University of Nice, France)  
**1569877773:** Third Line of Defense Strategy to Fight against SMS-based Malware in Android Smartphones  
Abdelouahid Derhab; Kashif Saleem; Ahmed Youssef (King Saud University, Saudi Arabia)

- **Session Title:** Multimedia Signal Processing and Computing (Multimedia Symp.)
- **Session Chair:** Katsuya Suto, Tohoku University, Japan

**WA-5: Room:** MR1

**1569924221:** Energy-Efficient Routing for Time-Sensitive Data Traffic in Linear Wireless Sensor Networks  
Hani Alesaimi and Bechir Hamdaoui (Oregon State University, USA)  
**1569894227:** Steganography Attack Based on Discrete Spring Transform and Image Geometrization  
Qilin Qi; Aaron Sharp; Yaoqing Yang; Dongming Peng; Hamid Sharif (University of Nebraska-Lincoln, USA)  
**1569893363:** Automated Covert Channel Modeling over a Real Network Platform  
Fahimeh Rezaei; Michael Hempel; Sushanta Mohan Rakshit; Hamid Sharif (University of Nebraska-Lincoln, USA)

**1569893815:** A Smart Hybrid Routing Protocol Supporting Multimedia Delivery Over Mobile Ad Hoc Networks  
Mingchuan Zhang; Changqiao Xu; Jianfeng Guan (Beijing University of Posts and Telecommunications, P.R. China);  
Qingtao Wu; Ruijuan Zheng (Henan Univ of Science and Technology, P.R. China); Hongke Zhang (Beijing University)  
**1569890579:** Performance Study of Resource Allocation for Multimedia Traffics in LTE system  
Samia Dardouri (ENIT, Tunisia); Ridha R. Bouallegue, B. (Ecole Supérieure des Communications de Tunis, Tunisia)  
**1569892163:** QoE Evaluation of Multimedia Transmission over Wireless Networks  
Xiaojing Li; Kai Dong; Wei Song; Bradford G. Nickerson (University of New Brunswick, Canada)

- **Session Title:** Wireless Communications (Communication and Information Theory Symp.) **WA-6: Room:** MR2
- **Session Chair:** Syed Ali Hassan, , National University of Science & Technology, Pakistan

**1569877325:** Extended Spatial Modulation Scheme with Low Complexity Detection Algorithms  
Longzhuang He; Jintao Wang; Jian Song  
**1569891995:** SNR Estimation in a Non-Coherent MFSK Receiver with Diversity Combining  
Aamra Arshad; Syed Ali Hassan  
**1569893121:** Power Optimization for Layered Transmission Over Decode-and-Forward Relay Channels  
Mohamed Adel Attia; Mohammad Shaqfeh; Karim Seddik; Hussein Alnuweiri  
**1569905061:** A New Closed-Form Approximations for MRC Receiver Over Non-Identical Weibull Fading Channels  
Faissal El bouanani  
**1569902899:** Subcarrier and Bit Allocation Scheme for D2D Communication Based on OFDMA Cellular Networks  
Laila Melki (Higher School of Communication of Tunis, Tunisia); Hichem Besbes; Sameh Najeh (Sup'com, Tunisia)

### Coffee Break — 15:30 - 16:00

### Wednesday Afternoon Sessions (WA) — (16:00 - 18:00)

- **Session Title:** Traffic Analysis and Characterization II (TRAC Workshop) **WA-7: Room:** BALLROOM
- **Session Chair:** Pedro Casas (FTW Vienna)

**1569903579:** DBStream: an Online Aggregation, Filtering and Processing System for Network Traffic Monitoring  
Arian Bär; Pedro Casas (FTW Vienna); Lukasz Golab (University of Waterloo); Alessandro Finamore  
(Polytechnic University of Turin)  
**1569905911:** nDPI: Open-Source High-Speed Deep Packet Inspection  
Luca Deri (NTOP); Maurizio Martinelli (ITT - CNR); Tomasz Bujlow (Aalborg University); Alfredo Cardigliano (NTOP)  
**1569903443:** WekaTIE, Traffic Classification Plugin Integrating TIE and Weka  
Federico Rodríguez-Teja; Eduardo Grampín (University of the Republic)  
**1569889157:** Analysis and Simulation of WAN Traffic by Self-Similar Traffic Model with OMNET  
Alexander Yu. Privalov; Alexander Tsarev (Samara State Aerospace University)  
**1569903159:** Study of YouTube Demand Patterns in Mixed Public and Campus WiFi Network  
Jukka-Pekka Laulajainen (VTT Finland); Åke Arvidsson (Ericsson); Timo Ojala (University of Oulu); Janne Seppänen  
(VTT Finland); Manxing Du (ICT Sweden Acreo AB and Lund University)  
**1569890829:** A Measurement Study of the Potential Benefits for Peer-Assisted Mobile VoD  
Jiqiang Wu; Liang Chen; Dah Ming Chiu (The Chinese University of Hong Kong); Youwei Hua; Zirong Zhu (Tencent)

- **Session Title:** Mobile Ad-hoc networks (Wireless Networking Symposium) **WA-8: Room:** KANTARA-A
- **Session Chair:** Chafika Benzaid, USTHB, Algeria

**1569892265:** Hybrid Cellular-MANETs in Practice: A Microblogging System for Smart Devices in Disaster Areas  
Chenyu Zheng; Lijun Chen; Douglas Sicker; Xinying Zeng (University of Colorado at Boulder, USA)  
**1569894223:** CO-TORA On-demand Routing Protocol for Cognitive Radio Ad-hoc Networks  
Lamia El Garoui; Wessam Ajib; Halima Elbiaze (UQAM, Canada)  
**1569892579:** Efficient centralized Link scheduling algorithms in wireless mesh networks  
Mohamed Nabli (UQAM, Canada); Fatma Abdelkefi (SUPCOM, Tunisia); Wessam Ajib (UQAM, Canada);  
Mohamed Siala (Sup'Com, Tunisia)  
**1569889615:** Interference in Wireless Ad Hoc Networks with Smart Antennas  
Ibrahim Alabdulmohsin (KAUST, Saudi Arabia)  
**1569904329:** A Congestion Game-based Routing Algorithm for Communicating VANETs  
Abdelfettah Mabrouk; Mohamed Senhadji; Abdellatif Kobbane; Abdellaziz Walid; Essaid Sabir; Mohammed El Koutbi

(University Mohamed V - Souissi, Morocco)

- **Session Title:** Relay and cooperative communications (Vehicular Symposium) **WA-9: Room:** KANTARA-B  
➤ **Session Chair:** Elias Yaacoub, Qatar Mobility Innovations Center (QMIC), Qatar

**1569904723:** Cluster Based V2V Communications for Enhanced QoS of SVC Video Streaming over Vehicular Networks  
Elias Yaacoub; Fethi Filali (Qatar Mobility Innovations Center (QMIC), Qatar)  
**1569893849:** Cross-Layer Transmission for Video Streaming in Wireless Relay Networks  
Hongxing Guo; Rui Cui; Tao Xia; Aihua Zhang (Huazhong University of Science and Technology, P.R. China)  
**1569890077:** Opportunistic Vehicle-to-Vehicle Relay with Adaptive Modulation for Drive-Thru Internet Access  
Wei Song; Qing Shen; Weichang Du (University of New Brunswick, Canada)  
**1569899785:** Mitigating Error Propagation in Cooperative Intervehicular Communications  
Özgür Özdemir (Selcuk University, Turkey); Haci Ilhan (Yildiz Technical University, Turkey)  
**1569906189:** Trust Model with Delayed Verification for Message Relay in VANETs  
Chaker abdelaziz Kerrache; Nasreddine Lagraa (Laghout University, Algeria); Abderrahmane Lakas (UAEU, UAE)  
**1569918903:** Analysis of Connectivity Probability in Platoon-based Vehicular Ad Hoc Networks  
Caixing Shao; Supeng Leng (University of Electronic Science and Technology of China, P.R. China); Yan Zhang (Simula Research Laboratory and University of Oslo, Norway); Alexey Vinel; Magnus Jonsson (Halmstad University, Sweden)

- **Session Title:** Synchronization & scheduling in WSNs (WSN Symp.) **WA-10: Room:** AHERA  
➤ **Session Chair:** Paulvanna Marimuthu, Kuwait University, Kuwait

**1569877023:** Asynchronous blind MAC protocol for wireless sensor networks  
Affoua Thérèse Aby (LIMOS-CNRS, France); Alexandre Guitton (Clermont University, France); Michel Misson (Equipe REPLIC, IUT Clermont-Fd, France)  
**1569902169:** An Efficient Clock Synchronization Protocol for Wireless Sensor Networks  
Chafika Benzaid (University of Sciences and Technology Houari Boumediene, Algeria); Miloud Bagaa (CERIST, Algeria); Mohamed Younis (University of Maryland Baltimore County, USA)  
**1569880441:** Coded addresses in Multi-hop Wireless Sensor Networks  
Leila Ben Saad (ENIT, France); Bernard Tourancheau (LIG UMR 5217, France)  
**1569922065:** Mobile Radio Frequency Charger for Wireless Sensor Networks in the Smart Grid  
Uthman Baroudi; Anas Al-Roubaiey (King Fahd University of Petroleum & Minerals, Saudi Arabia)  
**1569926315:** Energy-Efficient Clustering Algorithms for Fixed and Mobile Wireless Sensor Networks  
Ben Fradj Awatef (ENIS, Tunisia); Nejah Nasri (University of Sfax, Tunisia); Abdennaceur Kachouri (Laboratoire d'Electronique et des Technologies de l'Information, Tunisia)

- **Session Title:** M2M Communications (M2M & IoT Workshop) **WA-11: Room:** MR1  
➤ **Session Chairs:** Chih-Wei Huang, National Central University

**1569891391:** A Survey on Cognitive Machine-to-Machine Communications, Rubbens Boisguene; Shuo-Hsuan Chou; Chih-Wei Huang (National Central University, Taiwan)  
**1569893533:** Energy-Efficient Uplink Radio Resource Management in LTE-Advanced Relay Networks for Internet of Things  
Jen-Jee Chen (National University of Tainan, Taiwan); Jia-Ming Liang (National Chiao Tung University, Taiwan); Zeng-Yu Chen (National University of Tainan, Taiwan)  
**1569905071:** Power Efficient Mechanism for MTC UEs in LTE-A Networks  
Tao Qiu, Haibo Xu, Hua Zhou (Fujitsu Research & Development Center, P.R. China)  
**1569910025:** Grouping ID based Device Trigger Mechanism for 3GPP MTC Communication  
Chi-Wei Tseng; Hau Chen; Phone Lin (National Taiwan University, Taiwan)  
**1569920677:** Self-Adaptive Battery and Context Aware Mobile Application Development  
Soumya Kanti Datta; Christian Bonnet; Navid Nikaein (EURECOM, France)

- **Session Title:** Multimedia Communications Technology (Multimedia Symp.)
- **Session Chair:** Phone Lin, National Taiwan University, Taiwan

**WA-12: Room: MR2**

**1569878133:** An Efficient Fuzzy Fusion-Based Framework for Surveillance Applications in Wireless Multimedia Sensor Networks

Seyyit Alper Sert; Adnan Yazici; Ahmet Cosar (MET University, Turkey); Cengiz Yilmazer (Gate A.Ş., Turkey)

**1569894507:** Contact-Based Adaptive Granularity for Scalable Video Transmission in Opportunistic Networks

Merza Klaghstan (University of Passau, Germany); Nadia Bennani (LIRIS INSA de Lyon, France); David Coquil; Harald Kosch (University of Passau, Germany); Lionel Brunie (LIRIS INSA de Lyon, France)

**1569921385:** Performance Evaluation of Background Subtraction Algorithms for Android Devices Deployed in Wireless Multimedia Sensor Networks; Pinar Sarisaray Boluk (Bahcesehir University, Turkey); Kemal Akkaya (Southern Illinois University Carbondale, USA)

**1569954397:** QoE-Driven Scheme for Multimedia Content Dissemination in Device-to-Device Communication

Aiqing Zhang; Liang Zhou; Lei Wang (Nanjing University of Posts and Telecommunications, P.R. China)

**Dinner Banquet — 19:00 – 21:00**

**TECHNICAL PROGRAM**  
**IEEE IWCMC 2014**  
**Nicosia, Cyprus, August 4<sup>th</sup> — 8<sup>th</sup>, 2014**

**Thursday, August 7<sup>th</sup>, 2014**

**Registration — (8:00 - 15:00)**

**Room: Open Hall**

**KEYNOTE 3 — (9:00 - 10:00)**

**Room: BALLROOM**

- **Speaker:** Tarik Taleb, NEC Europe, Heidelberg, Germany
- **Title:** Turning Mobile Networking into Software Engineering
- **Chair:** Ala Al-Fuqaha, Western Michigan University, USA

**Coffee Break — 10:00 - 10:30**

**Thursday Morning Sessions (ThM) — (10:30 - 12:30)**

- **Session Title:** 5G
- **Session Chair:** Ioannis Krikidis, University of Cyprus, Cyprus

**ThM-1: Room: BALLROOM**

**1569894475:** Precoding Decision for Full-Duplex X-Relay Channel with Decode-and-Forward  
Themistoklis Charalambous (Royal Institute of Technology (KTH), Sweden); Ioannis Krikidis (U. of Cyprus, Cyprus);  
Mikael Johansson (Royal Institute of Technology, Sweden)

**1569880465:** Joint Channel Estimation and Pilot Allocation in Underlay Cognitive MISO Networks  
Maha Alodeh (SnT, Luxemburg); Symeon Chatzinotas; Bjorn Ottersten (University of Luxembourg, Luxemburg)

**1569887279:** Generalized Resource Sharing for Multiple Operators in Cellular Wireless Networks  
I. Malanchini (Alcatel-Lucent, Germany); Stefan Valentin (Bell Labs, Germany); O. Aydin (Alcatel-Lucent, Germany)

**156989295:** Optimizing Interference as a Source of Signal Energy with Non-Linear Precoding  
Adrian Garcia-Rodriguez; Christos Masouros (University College London, UK)

**1569904871:** Mitigating Nonlinearities Under Average Power Constraint In Visible Light Communication  
Wasiu O. Popoola; Funmilayo Ogunkoya; Sinan Sinanovic (Glasgow Caledonian University, UK)

**1569900031:** Relay Selection in 5G Networks  
N. Nomikos; P. Makris; D. Skoutas; D. Vouyioukas; H. Skianis (U. of Aegean, Greece)

- **Session Title:** Network Protocols (Wireless Networking Symp.)
- **Session Chair:** Markus Rupp, Vienna University of Technology, Austria

**ThM-2: Room: KANTARA-A**

**1569900075:** A Circular Interference Model for Wireless Cellular Networks  
Martin Taranetz; Markus Rupp (Vienna University of Technology, Austria)

**1569905831:** Experimental evaluation of SCTP tunneling for energy-efficient TCP data transfer over a WLAN  
Masafumi Hashimoto; Go Hasegawa; Masayuki Murata (Osaka University, Japan)

**1569905383:** Novel rekeying approach for secure multiple multicast groups over wireless mobile networks  
Trust Mapoka; Simon Shepherd; Raed Abd-Alhameed; Kelvin Anoh (University of Bradford, United Kingdom)

**1569909925:** Ferry-based Architecture for Participatory sensing  
Sara Koulali (University Mohammed Ist, Morocco); Essaid Sabir (ENSEM/GREENTIC UH2C, Morocco);  
Abdellatif Kobbane (ENSIAS, University Mohammed V-Souissi, Morocco); Mostafa Azizi (University, Morocco)

**1569896897:** Link Level Performance Evaluation of Higher Order Modulation in Small Cells  
Shady Elbassiouny (Intel, Egypt); Ahmed S. Ibrahim (Cairo University and Intel Corporation, Egypt)

**1569904433:** The Use of Antenna Radiation Pattern in Node Localization Algorithms for Wireless Sensor Networks  
Martin K Mwila (Tshwane University of Technology, South Africa); Karim Djouani (University Paris Est Creteil (UPEC),  
South Africa); Anish Mathew Kurien (Tshwane University of Technology, South Africa)

➤ **Session Title:** System Security (Security Symposium)

**ThM-3: Room:** KANTARA-B

➤ **Session Chairs:** Miriam Allalouf, Jerusalem College of Engineering, Israel

**1569890501:** Cooperative Cross Layer Detection for Blackhole Attack in VANET-OLSR

Raghad Baiad; Hadi Otrok; Sami Muhaidat (Khalifa University, UAE); Jamal Bentahar (Concordia University, Canada)

**1569891845:** Accelerating Snort NIDS using NetFPGA-based Bloom Filter

Rami Al-Dalky; Khaled Salah; Hadi Otrok; Mahmoud Al-Qutayri (Khalifa University, UAE)

**1569893537:** Cryptanalyzing the Efficient Identity-Based RSA and GQ Multisignature Schemes

Weihan Goh; Chai Kiat Yeo (Nanyang Technological University, Singapore)

**1569894149:** Low-overhead authentication method for reprogramming protocol based on rateless codes in wireless sensor networks, Lina Yang; Shi-Ning Li; Yu Zhang (Northwestern Polytechnical University, P.R. China); Gang Liu (Henan University of Technology, P.R. China)

**1569894359:** A Decentralized and Personalized Spam Filter Based on Social Computing

Xin Liu (China University of Petroleum, P.R. China)

**1569904101:** Secure Micro Mobility Protocol For New Generation Wireless Access Network

Faouzi Zarai (Sfax University, Tunisia)

➤ **Session Title:** OFDM Systems (Communication & Information Theory Symp.)

**ThM-4: Room:** AHERA

➤ **Session Chair:** Stylianos Basagiannis, United Technologies Research Centre, Ireland

**1569892295:** Exploiting Characteristics of Slow Fading Channels in OFDMA Scheduling

Mustafa Tekinay; Cory Beard; Deep Medhi

**1569892951:** A Coordination Based Resource Management Scheme with QoS Provisioning for Multicell OFDMA

Downlink Systems; Yao-Hsing Chung; Chung-Ju Chang

**1569892127:** Reliable OFDM Transmission Parameter Detection for a Novel Preamble Design, Jingjing Liu; Chao Zhang

**1569891221:** Algebraic Space-Time Code Implementation in MB-OFDM UWB Communications

Ines Ben Hassine; Bouallegue Ridha

**1569893831:** Tree-Based Optimized Forward Scheme for Pilot Placement in OFDM Sparse Channel Estimation

Zakia Jellali; Leila Najjar

**1569926225:** Three-state Markov Model for Multi-hop ARQ with DF Relaying

Maymouna Ben Said; Hatem Boujemaa

➤ **Session Title:** Cloud and Wireless Systems (Mobile Computing Symposium)

**ThM-5: Room:** MR1

➤ **Session Chair:** Alexandros Kaloxylos, University of Peloponnisos, Greece

**1569893847:** Technical considerations towards mobile user QoE enhancement via Cloud interaction

Elias Allayiotis; Josephina Antoniou (University of Central Lancashire, Cyprus)

**1569905379:** An efficient RAT selection mechanism for 5G cellular networks

Alexandros Kaloxylos (University of Peloponnisos, Greece); Sokratis Barmounakis (University of Athens, Greece);

Panagiotis Spapis (National and Kapodistrian Univ. of Athens, Greece); Nancy Alonistioti (Univ. of Athens, Greece)

**1569905737:** Performance Evaluation of Genetic Algorithms for Resource Scheduling in LTE Uplink

Mohamad Kalil; Jagath Samarabandu; Abdallah Shami (The University of Western Ontario, Canada); Arafat Al-Dweik (University of Guelph, Canada)

**1569889769:** Cloud-Assisted Spectrum Management System with Trading Engine

Hazem El Sayed; Mohamed Elrefaey (Intel, Egypt); Norhan Buckla (Intel, Egypt)

**1569878289:** Content Diffusion in Wireless MANETs: the Impact of Mobility and Demand

Bryce Thomas (James Cook University, Australia); Raja Jurdak (Commonwealth Scientific and Industrial Research Organisation (CSIRO) ICT Centre, Australia); Ian Atkinson (James Cook University, Australia)

**1569905689:** Power-aware Selective Encryption of Video Transmissions in Smart Devices

Christopher Mansour (Villanova University, USA); Danai Chasaki (Villanova University, USA)

➤ **Session Title:** Self-Organizing Heterogeneous Networks

**ThM-6: Room:** MR2

➤ **Session Chair:** Francesco Chiti & Romano Fantacci, University of Florence, Italy

**1569893199:** Multi-hop D2D Networking and Resource Management Scheme for M2M Communications over LTE-A Systems, Giovanni Rigazzi; Francesco Chiti; Romano Fantacci; Camillo Carlini

**1569893277:** Angular Interference Suppression in Cognitive LTE-A femtocells

Giulio Bartoli; Romano Fantacci; Dania Marabissi; Marco Pucci



**1569905231:** Application Driven SON; Tommaso Pecorella; Roberto Viti; Giovanni Rigazzi; Camillo Carlini  
**1569906651:** Adaptive muting ratio in enhanced Inter-Cell Interference Coordination for LTE-A systems  
 Giulio Bartoli; Romano Fantacci; Dania Marabissi; Marco Pucci  
**1569889999:** Modeling and Evaluation of Disease Spread Behaviors, Nadra Guizani and Arif Ghafoor  
**1569893095:** A Novel FIR Channel Estimation Method for Land Mobile Satellite Channel  
 Zilong Zhang; Xiaodong Xu; Zhiyong Chen; Baisheng Du (University of Science & Technology of China, P.R. China)

**Lunch Break — 12:00 – 13:30**

**Thursday Afternoon Sessions (ThA) — (13:30 - 15:30)**

➤ **Session Title:** Experiments and deployments (Vehicular Symp.) **ThA-1: Room:** BALLROOM  
 ➤ **Session Chair:** Yejun He, Shenzhen University, P.R. China

**1569877799:** Experimental Validation of Cooperative Approach Near Road Side Units  
 K. Kamakura (Chiba Institute of Technology, Japan), B. Ducourthial (Université de Technologie de Compiègne, France)  
**1569891863:** First principles wireless network simulation for aircraft  
 Andrew Thain; Gaëtan Racic; Bruno Pasquier (Airbus Group Innovation, France)  
**1569894623:** Effect of Feeder Cable's Phase Tolerance on the First Sidelobe Level of Base Station Antenna  
 Yejun He; Zhengzheng Pan; Jie Yang; Guiyuan Sun (Shenzhen University, P.R. China); Manos M. Tentzeris (Georgia Institute of Technology, USA)  
**1569892729:** Joint Wireless-Optical Infrastructure Deployment and Layout Planning for Cloud-Radio Access Networks  
 Bin Lin; Xiaoying Pan; Rongxi He; Sen Li (Dalian Maritime University, P.R. China)  
**1569891911:** A Real-Time Implementation of CoMP Transmission based on Cloud-RAN Infrastructure  
 Bobo Cheng; Xiang Mi; Xibin Xu (Tsinghua University, P.R. China); Zhan Xu (Beijing Information Science and Technology University, P.R. China); Xiangxiang Xu; Ming Zhao (Tsinghua University, P.R. China)  
**1569933867:** Contention Window Adaptation for Broadcast Beaconing in Vehicular Ad Hoc Networks  
 Chrysostomos Chrysostomou (Frederick University, Cyprus); Constantinos Djouvas; Lambros Lambrinos (Cyprus University of Technology, Cyprus)

➤ **Session Title:** Next generation networks (Wireless Networking Symp.) **ThA-2: Room:** KANTARA-A  
 ➤ **Session Chair:** Lei Zhong, NICT, Japan

**1569908629:** Outage Probability Analysis of Mobile Small cells over LTE-A Networks  
 Mohamed Feteiha; Mahmoud Qutqut; Hossam Hassanein (Queen's University, Canada)  
**1569888671:** Expanding the use of CTS-to-Self mechanism for reliable broadcasting on IEEE 802.11 networks  
 Christos Chousidis; Rajagopal Nilavalan (Brunel University, UK); Laurentiu Lipan (U. Politehnica of Bucharest)  
**1569894345:** COMB: An NS-2 Tool for Studying the Coexistence of Dissimilar and Competing Wireless Networks  
 Alessia Autolitano; Massimo Reineri; Riccardo M. Scopigno (Istituto Superiore Mario Boella, Italy)  
**1569900707:** Channel Access Competition in Linear Multihop Device-to-Device Networks  
 Vaggelis Douros; Stavros Toumpis; George Polyzos (Athens University of Economics and Business, Greece)  
**1569905575:** Robust Doubly-Differential Primary Synchronization Approach for 3GPP LTE Systems  
 Leila Nasraoui; Leila Najjar; Mohamed Siala (Sup'Com, Tunisia)

➤ **Session Title:** Communication Systems (CI. Theory Symp.) **ThA-3: Room:** KANTARA-B  
 ➤ **Session Chair:** Syed Ali Hassan, NUST, Pakistan

**1569892797:** On the Use of Space-Time Block Codes for Opportunistic Large Array Network, S. Syed; Syed A. Hassan  
**1569893303:** Adaptive Spectrum Hole Detection Using Sequential Compressive Sensing  
 Ahmed Elzanati; Mohamed Abdelkader; Karim Seddik; Atef Ghuniem  
**1569894397:** A CORDIC-Friendly FFT Architecture, Mohammed El-Moataz; Omar Nasr; Karim Mohammed  
**1569894557:** Adaptive Channel Estimation Based on Sparsity Detection; Xudong Zhu; Jintao Wang  
**1569899999:** Smart Grid Opportunities and Challenges of Integrating Renewable Sources: A Survey  
 Maher Guizani, Muhammad Anan

➤ **Session Title:** Cognitive & Cooperative Communications in WSNs (WSN Symp.)

**ThA-4: Room:** AHERA

➤ **Session Chair:** Nan Zhao, Dalian University of Technology, China

**1569906479:** A Cooperative Routing Method with Shared Nodes for Overlapping Wireless Sensor Networks

N. Inoue; K. Kinoshita; Y. Tanigawa; Hideki Tode; Takashi Watanabe; Koso Murakami (Osaka University, Japan)

**1569891715:** Stochastic Network Collection Point (NCP) Selection in Mobile Sensor Networks with Cooperative Communications, Maoyu Wang (Communications Research Centre Canada, Canada); F. Richard Yu (Carleton University, Canada); Louise Lamont (Communications Research Centre Canada, Canada); Nan Zhao (Carleton University, Canada)

**1569910063:** Energy Conservation in WSNs: A Collaborative Information Processing Approach

Mohamed Hefeida; Ashfaq Khokhar (University of Illinois at Chicago, USA)

**1569877645:** Cognitive Routing for Information-Centric Sensor Networks in Smart Cities

Gayathri Tilak Singh (Queen's University, Canada); Fadi Al-Turjman (University of Guelph, Canada)

**1569905607:** Packet Delivery Significance and Metrics Improvements in Protocols for 3-D Routing in Wireless Sensor Networks, Tarek El Salti (Sheridan College and University of Guelph, Canada); Deborah Stacey (University of Guelph, Canada); Nidal Nasser (Alfaisal University, Saudi Arabia); Fadi Al-Turjman (University of Guelph, Canada)

➤ **Session Title:** Multimedia Services and Applications (Multimedia Symp.)

**ThA-5: Room:** MR1

➤ **Session Chair:** Ross Andreucetti, Dublin City University, Ireland

**1569892777:** A dynamic social content caching under user mobility pattern

Neng Zhang (Beijing University of Posts & Telecommunications, P.R. China)

**1569921655:** Quality of Experience Study for Multiple Sensorial Media Delivery

Zhenhui Yuan (Dublin City University, Ireland); Gheorghita Ghinea (Brunel University, United Kingdom);

Gabriel-Miro Muntean (Dublin City University, Ireland)

**1569921647:** Smartphone Energy Consumption of Multimedia Services in Heterogeneous Wireless Networks

Ross Andreucetti; Zhenhui Yuan; Shengyang Chen; Gabriel-Miro Muntean (Dublin City University, Ireland)

**1569925725:** Smart Greenhouse: A Real-time Mobile Intelligent Monitoring System Based on WSN

Ruan Li; Xuefeng Sha; Kai Lin (Dalian University of Technology, P.R. China)

**1569889347:** Efficient Video Streaming over Wireless Networks through Modified IEEE 802.11 Frame

Saima Shaheen; Asia Khannum; Shoab Ahmed Khan; Muhammad Javed (NUST Islamabad, Pakistan)

➤ **Session Title:** Quality of Service in Wireless Networks (General Symp.)

**ThA-6: Room:** MR2

➤ **Session Chair:** Francesco Chiti, University of Florence, Italy

**1569893507:** Downlink Outage Capacity Analysis of Distributed Antenna Systems over Composite Channels

Ying Wang; Xiangbin Yu; BinBin Wu (Nanjing University of Aeronautics and Astronautics, P.R. China); Yun Rui

(Chinese Academy of Sciences, P.R. China); Xiaoyu Dang (Nanjing U. of Aeronautics and Astronautics, P.R. China)

**1569865115:** Authentic and Confidential Policy Distribution in Software Defined Wireless Network

Wang Huaqun (Dalian Ocean University, P.R. China)

**1569893235:** Positioning Framework for WLAN 802.11n Utilizing Kalman Filter on Received Signal Strength

Laith Khalil; Andreas Waadt; Guido Bruck; Peter Jung (Duisburg Essen University, Germany)

**1569903969:** A Practical RF-based Indoor Localization System Combined with the Embedded Sensors in Smart Phones

Wei Li; Hewu Li; Yong Jiang (Tsinghua University, P.R. China)

**1569905471:** Resource management with multilevel interference mitigation in Heterogeneous Network

Yanzan Sun; Zhijuan Wang; Yong Fang; Yating Wu (Shanghai University, P.R. China)

**1569909667:** Routing and Channel Assignment in Wireless Cooperative Networks

Kun Xie; Hui Li (Hunan University, P.R. China); Xin Wang (Stony Brook University, USA); Shiming He

(Hunan University, P.R. China); Jigang Wen (Chinese Academy of Science, P.R. China); M. Guizani (Qatar)

**END OF SESSIONS**

**TECHNICAL PROGRAM**  
**IEEE IWCMC 2014**  
**Nicosia, Cyprus, August 4<sup>th</sup> — 8<sup>th</sup>, 2014**

**Friday, August 8<sup>th</sup>, 2014**

***No Sessions Scheduled on Friday***

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August 24<sup>th</sup> - 27<sup>th</sup>, 2015

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- 1) Wiley Journal of *Wireless Communications and Mobile Computing (WCMC)*
- 2) The *International Journal of Sensor Networks (IJSNet)*
- 3) The *International Journal of Autonomous and Adaptive Communications Systems (IJAACS)*
- 4) *KSII Transactions on Internet and Information Systems*
- 5) *Peer-to-Peer Networking & Applications*

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#### **Important Dates:**

Paper Submission Deadline: **15 December 2014**  
Paper Acceptance Notification: 15 March 2015  
Camera-ready Paper Submissions: 1 April 2015  
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