

ACM IWCMC 2009: Technical Program at a Glance Leipzig, Germany, June 21-24, 2009

DATE	TIME	ROOM				
June 21 (Sunday)	10:00-12:00	Schiller 1		Schiller 2		Everth
		T1 [HPCS]: Market-Oriented Grid Computing and the Gridbus Middleware; Presenter: Rajkumar Buyya, Univ. of Melbourne, Australia		T2: Towards Ubiquitous Healthcare Services Presenter: Tarik Taleb, NEC-Labs Europe, Germany		T3 [HPCS]: Parallel Hybrid Computing Presenter: François Bodin, CAPS enterprise / Irisa, FR
	12:00-13:30	LUNCH				
	13:30-15:30 & 16:00-18:00	T4: Mobility Modeling for Future Mobile Network Design and Simulation Presenter: Ahmed Helmy, USA	T5 [HPCS]: Hardware-aware Computing on Multicore Processors and Accelerators Presenter: Rainer Buchty, Jan-Philipp Weiß, Karlsruhe Institute of Technology, Germany		T6 [HPCS]: Agents – Technology for the Mainstream? Presenter: Volkmar Schau Friedrich Schiller University Jena, Germany	
	19:00-20:00	WELCOME RECEPTION (Mediencampus Villa Ida)				
June 22 (Monday)	8:00-8:30	Schiller 1	Schiller 2	Everth	Peterhans	Wagner
		WELCOME & OPENING				
	8:30-10:00	KEYNOTE 1: Gordon Stuber, Georgia Tech, USA TITLE: TV Band Cognitive Radio Networks				
	10:00-10:30	COFFEE BREAK				
	10:30-12:30	MM-1	MM-2	MM-3	MM-4	MM-5
	12:30-13:30	LUNCH				
	13:30-15:30	MA-1	MA-2	MA-3	MA-4	MA-5
	15:30-16:00	COFFEE BREAK				
	16:00-18:00	MA-6	MA-7	MA-8	MA-9	MA-10
19:00-21:00	DINNER BANQUET (Moritzbastei)					
June 23 (Tuesday)	8:30-10:00	KEYNOTE 2 [HPCS]: Rajkumar Buyya, Univ. of Melbourne and Manjrasoft, Australia TITLE: Market-Oriented Cloud Computing: Vision, Hype, and Reality of Delivering Computing as the 5th Utility				
	10:00-10:30	COFFEE BREAK				
	10:30-12:30	TM-1	TM-2	TM-3	TM-4	TM-5
	12:30-13:30	LUNCH BREAK				
	13:30-15:30	TA-1	TA-2	TA-3	TA-4	TA-5
	15:30-16:00	Coffee Break				
	16:00-17:00	TA-6	TA-7	TA-8	TA-9	TA-10
	17:45-20:00	CITY TOUR				
June 24 (Wednesday)	8:30-10:00	KEYNOTE 3: Stefan Schmid, NEC Labs-Europe, Germany TITLE: Next-Generation Mobile Networks: 3GPP Evolved Packet System and Femtocell Technologies				
	10:00-10:30	COFFEE BREAK				
	10:30-12:30	WM-1	WM-2	WM-3	WM-4	WM-5
	12:30-13:30	LUNCH BREAK				
	13:30-15:30	WA-1	WA-2	WA-3	WA-4	WA-5
	15:30-16:00	COFFEE BREAK				
	16:00-18:00	WA-6	WA-7	WA-8	WA-9	WA-10
	18:00-18:30	CLOSING				

**Technical Program of IWCMC 2009
Leipzig, Germany, June 21-24, 2009
Sunday, June 21, 2009**

Registration: (9:00-12:00)

Room: Open Hall

Tutorial1 [HPCS]: (10:00-12:00)

Room: Schiller 1

Title: Market-Oriented Grid Computing and the Gridbus Middleware

Presenter: Rajkumar Buyya, University of Melbourne, Australia

Tutorial2: (10:00-12:00)

Room: Schiller 2

Title: Towards Ubiquitous Healthcare Services

Presenter: Tarik Taleb, NEC Labs-Europe, Germany

LUNCH (12:00 – 13:30)

Tutorial3 [HPCS]: (13:30-15:30)

Room: Schiller 1

Title: Parallel Hybrid Computing

Presenter: François Bodin, CAPS enterprise/Irisa, France

Tutorial4: (13:30-15:30)

Room: Schiller 2

Title: Mobility Modeling for Future Mobile Network Design and Simulation

Presenter: Ahmed Helmy, University of Florida, USA

COFFEE BREAK (15:30-16:00)

Tutorial5 [HPCS]: (16:00-18:00)

Room: Schiller 1

Title: Hardware-aware Computing on Multicore Processors and Accelerators

Presenter: Rainer Buchty, Jan-Philipp Weiß, Karlsruhe Institute of Technology, Germany

Tutorial6 [HPCS]: (16:00-18:00)

Room: Schiller 2

Title: Agents – Technology for the Mainstream?

Presenter: Volkmar Schau, Friedrich Schiller University Jena, Germany

WELCOME RECEPTION (19:00 – 20:00)

**Technical Program of IWCMC 2009
Leipzig, Germany, June 21-24, 2009
Monday, June 22, 2009**

Registration: (8:00-17:00)

Room: Open Hall

Opening Session: (8:00-8:30)

Room: Schiller

Speaker: Mohsen Guizani, IWCMC 2009 General Chair
Athanasios (Thanos) Vasilakos, IWCMC 2009 Program Chair

KEYNOTE 1 (8:30-10:00)

Room: Schiller

Speaker: Gordon Stuber, Georgia Tech, USA

Title: TV Band Cognitive Radio Networks

Chair: *Mohsen Guizani, IWCMC 2009 General Chair*

COFFE BREAK (10:00 – 10:30)

Monday Morning Sessions (MM)—(10:30-12:30)

MM-1: Room: Schiller 1

Session Title: Mobile Computing I (*Mobile Computing Symposium*)

Session Chair: *Athanasios Vasilakos, University of Western Macedonia, GR*

1569177371 A Pro-Active Mobility Management Scheme for Pub/Sub Systems using Neighborhood Graph; *Abdulbaset Gaddah; Thomas Kunz (Carleton University, CA)*

1569174775 Further Work on Network Interference in Wireless Ad Hoc Networks
Guinian Feng; Pingyi Fan (Tsinghua University, CN); Soung Chang Liew (The Chinese University of Hong Kong, HK)

1569174875 A Multiple-Base-Station Cooperative Proportional Fairness Scheduling Algorithm for Wireless Transmissions

Hui Zhou; Pingyi Fan (Tsinghua University, CN); Jie Li (University of Tsukuba, JP)

1569174889 A Proxy Cooperative Diversity Method based on IEEE 802.11 Standard
Wasimon Panichpattanakul; Beatrice Paillassa (ENSEEIH, FR); Benoit Escrig (Université de Toulouse, FR); Daniel Roviras (ENSEEIH, FR)

1569174921 True polarization diversity for handset MIMO

J. Valenzuela-Valdes (Emite Ing, ES); D. Sanchez-Hernandez (Universidad de Cartagena, ES)

1569175143 Dynamic trust establishment in emergency ad hoc networks
Christos Papageorgiou; Konstantinos Birkos (University of Patras, GR); Tasos Dagiuklas (Technological Educational Institute of Mesolonghi, GR); Stavros Kotsopoulos (Wireless Telecommunications Laboratory, GR)

1569177317 Mobility Support Using the Mobile Port Mapping

Zhiqiang Shi (Institute of Software, Chinese Academy of Sciences, CN); Yuansong Qiao; Adrian Matthews; Anthony Cunningham; Enda Fallon (Athlone Institute of Technology, IE)

MM-2: Room: Schiller 2

Session Title: Emergency Management I (*MCEM Workshop*)

Session Chair: *Romano Fantacci, University of Florence, IT*

1569174903 Dynamic Update of Data Analysis Models in Emergency Systems

Daniele Toscani; Marco Frigerio (Conorzio Milano Ricerche, IT); Diego Bernini (University of Milano-Bicocca, IT)

1569174925 Fast and safe emergency communication through network virtualization

Peter Dedecker (University College Ghent, BE); Jeroen Hoebeke; Dries Naudts; Ingrid Moerman (Ghent University, BE); Joris Moreau (Hogeschool Gent - Industriële wetenschappen, BE); Piet Demeester (Ghent University, BE)

1569174973 A Software Architecture for the Deployment of Executable Transformation Models

Diego Bernini (University of Milano-Bicocca, IT); Daniele Toscani; Marco Frigerio (Conorzio Milano Ricerche, IT)

1569177553 Topology Management for Public Safety Networks

Daniel Camara (EURECOM, FR); Christian Bonnet (Institut Eurecom, FR)

1569182735 Genetic DOA Estimation in Sparse MIMO Systems for localization of rescuers

Laura Pierucci (University of Florence, IT)

1569183101 How to Localize Domain Entities: the Case of a Flooding Prediction and Risk

Management System; Daniela Micucci (University of Milano-Bicocca, IT)

1569174248 A Software-Defined Radio Receiver for APCO Project 25 Signals

Stephen Glass (Griffith University, AU); Vallipuram Muthukkumarasamy (Griffith University, AU); Marius Portmann (University of Queensland, AU)

MM-3: Room: Everth

Session Title: Security I (*Computer and Network Security Symposium*)

Session Chair: *Bilal Khan, CUNY, USA*

1569172248 Exploring the Security Requirements for Quality of Service in Combined Wired and

Wireless Networks; Zubair Fadlullah (Tohoku University, JP); Tarik Taleb (NEC Europe Ltds, DE); Nidal Nasser (University of Guelph, CA); Nei Kato (Tohoku University, JP)

1569183131 Using a Secure Permutational Covert Channel to Detect Local and Wide Area

Interposition Attacks; Jaroslaw Paduch; Jamie Levy; Bilal Khan (CUNY), USA)

1569160419 A Scalable Distributed Security Infrastructure for Industrial Control and Sensor

Networks; Flutra Osmani (Royal Institute of Technology (KTH), SE); Adriaan Slabbert (Swedish Institute of Computer Science - SICS, SE)

1569174899 WMNSec - Security for Wireless Mesh Networks

Georg Lukas; Christian Fackroth (University of Magdeburg, DE)

1569178407 On the Use of Co-Occurrence Matrices for Network Anomaly Detection

Christian Callegari; Stefano Giordano; Michele Pagano (University of Pisa, IT)

1569182615 Securing Hierarchical Multicast Communications Using Roles

Ezedin Barka; Emad Eldin Mohamed (UAEU, AE)

1569174311 A Prediction-based Detection Algorithm against Distributed Denial-of-Service

Attacks; Guoxin Zhang (South China University of Technology, CN); Shengming Jiang (South China University of Technology, CN); Gang Wei (South China University of Technology, CN)

MM-4: Room: Peterhans

Session Title: Autonomic Wireless Networking Workshop

Session Chair: *R. Venkatesan, Memorial University of Newfoundland, CA*

1569174029: A Distributed Embedded Web Based Automated Testbed for Wireless Sensor Networks

Axel Sikora (Duale Hochschule Baden-Württemberg Lörrach, DE); David Rahusen; Daniel Schauenberg; Lars Moellendorf (Steinbeis Transfer Centre Embedded Design and Networking, DE)

1569175262: Graph Coloring Based Physical Cell ID Assignment for LTE Networks

Tobias Bandh; Georg Carle (Technische Universität München, DE); Henning Sanneck (Nokia Siemens Networks, DE)

1569175659: Effect of Non-Cooperation on Dynamic Spectrum Cognitive Networks

Mustafa El-Nainay; Allen MacKenzie (Virginia Tech, US)

1569183285: Inertia-based Distributed Channel Allocation; *Juha-Matti Koljonen; Matti Peltomäki; Mikko Alava; Olav Tirkkonen (Helsinki University of Technology, FI)*
1569184321: 1 ADMA: Autonomous Decentralized Management Architecture for MANETs - A Simple Self-Configuring Case Study
Mouna Ayari (University of La Manouba, TN); Zeinab Movahedi (Laboratoire d'Informatique de Paris 6 (LIP6), FR); Guy Pujolle (University of Paris 6, FR); Farouk Kamoun (University of Manouba, TN)
1569184891: Modeling and Algorithm for Topology Construction with Delay and Traffic Constraints
Yong-Jin Lee (Korea National University of Education, KR)
1569174763: Hybrid Gateway Discovery Mechanism in Mobile Ad Hoc for Internet Connectivity
Lin Zhuang (Beijing University of Posts and Telecommunications, CN)

MM-5: Room: Wagner

Session Title: Cross-Layer Wireless Networks (*Cross-Layer Optimized Wireless Networks Symp.*)

Session Chair: *Lingyang Song, PKU, CN*

1569182921 A Cross layer Scheme for Maximizing the Combination of Wireless VoIP Capacity and Quality; *Terence Chen; Rokhsana Boreli; Thava Iyer (NICTA, AU)*
1569174825 Cross layering in wireless sensor networks; *P. Minet; Saoucene Mahfoudh (INRIA, FR)*
1569177559 Hierarchical Cross-Layer Control ESL Verification for Wireless Communications
Chao-Lieh Chen (National Kaohsiung First University of Science and Technology, TW)
1569183045 A Cross Layer Design to Improve Video Transmission over 802.11e WLANs Using Error and Rate Joint Contro; *Chen-Wei Lee, (National Cheng Kung University, TW)*
1569182847 XLEngine: a cross-layer autonomic architecture with network wide knowledge for QoS support in wireless networks; *Wafa Berrayana (Manouba University Tunisia and Pierre and Marie Curie University France, TN)*
1569184007 Application-driven Cross-layer Design of Multiuser H.264 Video Transmission over Wireless Networks; *Fan Li; Guizhong Liu (Xi'an Jiaotong University, CN)*
1569177637 Rate Control for Network Coding Based Multicast: A Hierarchical Decomposition Approach
Dalin Li (Beijing University of Posts and Telecommunications, CN)

LUNCH BREAK (12:00 – 13:30)

Monday Afternoon Sessions (MA)—(13:30-15:30)

MA-1: Room: Schiller 1

Session Title: Mobile Ad Hoc Networks (*Wireless LANs and Wireless PANs Symp.*)

Session Chair: *Abdelhamid Mellouk, University Paris XII, FR*

1569184177 An Efficient Real-Time Routing with Presence of Concave Voids in Wireless Sensor Networks, *Abdelhamid Mellouk (University Paris XII, FR)*
1569184359 An Adaptive Computational Trust Model for Mobile Ad hoc Networks
Azzedine Boukerche; Yonglin Ren (University of Ottawa, CA)
1569182245 Performance Analysis of BitTorrent Enabled Ad hoc Network Routing
Padmini Vellore, Paul Gillard, R. Venkatesan (Memorial University of Newfoundland, CA)
1569183053 On Fault Tolerant Ad Hoc Network Design
Wassim El-Hajj (UAE University, AE); Hazem Hajj (American University of Beirut, LB)
1569175261 Application of sector antennas in ad-hoc topologies
Jan Janecek (Czech Technical University, CZ)
1569185871 Lattice-Based Soft-Constraint Satisfaction Multi-Modulus Blind Equalization Algorithm of order p , *Kashif Paracha; Azzedine Zerguine; Yahya Al-Harathi (KFUPM, SA)*
1569184367 A Network Coding Scheme for SVC Streaming over Wireless Mesh Network
Liu Yong (Tsinghua University, CN)

MA-2: Room: Schiller 2

Session Title: Communications I (*Communication and Information Theory Symp.*)

Session Chair: *Seyed (Reza) Zekavat, Michigan Tech University, USA*

1569179103 Design of Adaptive Modulation and Coding System Using Ideal Performance Codes; *Chia-Hao Yu; Kalle Ruttik (TKK, EU); Olav Tirkkonen (Helsinki University of Technology, FI)*

1569179105 Rate Adaptation Design for Adaptive Modulation/Coding Systems with Hybrid ARQ *Chia-Hao Yu; Olav Tirkkonen (Helsinki University of Technology, FI)*

1569175259 A Simple Decorrelate-and-Forward Relaying Scheme for Multiuser Wireless CDMA Networks; *Tung Pham; Ha Nguyen (University of Saskatchewan, CA)*

1569177067 Orthogonal Structured Linear Dispersion Code for Fast Sphere Decoding *Xiaoguang Dai; William S. W. Cheung; Ti Yuk (The University of Hong Kong, HK)*

1569183249 Robust Joint Multiuser Scheduling and Precoding Design with Imperfect Channel State Information; *Xiaoting Wang (Beijing University of Posts and Telecommunications, CN)*

1569183193 Sum of Weibull Variates and Performance of Diversity Systems *Ferkan Yilmaz (Texas A&M University at Qatar, TR); Mohamed-Slim Alouini (Texas A&M University at Qatar, QA)*

1569178983 Reverse CDMA Link Based on Noise-like Spreading Sequences and Fading Mitigation; *Stevan Berber; Xinghua Zhan (University of Auckland, NZ)*

MA-3: Room: Everth

Session Title: Security & Fault Tolerance (*Wireless Sensor Networks Symp.*)

Session Chair: *Laura Pierucci, University of Florence, IT*

1569172267 Energy Efficiency for rectangular ad-hoc wireless networks *Wei Feng; Hamada Alshaer; Jaafar Elmighani (University of Leeds, UK)*

1569174977 A Key Pre-distribution Scheme for Heterogeneous Sensor Networks *Amar Rasheed; Rabi Mahapatra (Texas A&M University, USA)*

1569183121 On Providing Sink Anonymity for Sensor Networks *Edith Ngai (Uppsala University, SE)*

1569182999 On-Supporting Energy Balanced K-Barrier Coverage in Wireless Sensor Networks *Chih-Yung Chang; Yu-Chieh Chen (Tamkang University, TW)*

1569182695 Energy penalties for non-shortest paths in wireless sensor networks with link failures *Geir Egeland (University of Stavanger, NO); Paal Engelstad (University of Oslo/Telenor R&I, NO)*

1569181901 Randomized Multi-stage Clustering-Based Geocast Algorithms in Anonymous Wireless Sensor Networks

Jean Frédéric Myoupo; Aboubecrine Ould Cheikhna (Universite de picardie-jules verne, FR); Alain bertrand Bomgni (University of yaounde, CM)

1569175238 A Protocol for Secure and Energy-Aware Reprogramming in WSN

Carlos Caloca; J. Antonio García (Ensenada's Center for Scientific Research and Advanced Education, MX)

MA-4: Room: Peterhans

Session Title: UWB and Cognitive Networks (*Wireless LANs and Wireless PANs Symp.*)

Session Chair: *Cheng Li, Memorial University of Newfoundland, CA*

1569183273: Multi-Band CSMA/CA-Based Cognitive Radio Networks *Jo Woon Chong; Youngchul Sung; Dan Keun Sung (KAIST, KR)*

1569185873: Scalable FPGA Implementation for Mixed-Norm LMS-LMF Adaptive Filters *Abdul-Rahman Elshafei; Azzedine Zerguine; Abdelhafid Bouhraoua (KFUPM, SA)*

1569183197: Security in Cognitive Radio Networks: A Survey *Cheng Li; Xueying Zhang; Howard Heys (Memorial University of Newfoundland, CA)*

1569175011: Cross-layer Resource Allocation Scheme for Multi-band High Rate UWB Systems *Ayman Khalil; Matthieu Crussière; Jean-François Hélar (Institute of Electronics and Telecommunications of Rennes - IETR, FR)*

1569174915: Performance Evaluation of Multiple Access M-Ary DS-UWB Communication System, *Zhiquan Bai (Shandong University, CN)*

1569188199: Multi-Scale Direct Sequence Ultra Wide Band Communications; *Ertan Öztürk (Zonguldak Karaelmas University, TR); H-H Chen (National Cheng Kung University, TW)*
1569184384 Near-optimal Delay-constrained MLR Scheduler for Embedded Multimedia Wireless Channels; *Tae-Eung Sung (Cornell University, US)*

MA-5: Room: Wagner

Session Title: Cross-Layer Applications (*Cross-Layer Optimized Wireless Networks Symp.*)

Session Chair: *Falko Dressler, University of Erlangen, DE*

1569182863 Integrated Ad-Hoc and Cellular Networking in Indoor or Faded Environments
Jean-Michel Dricot (Université Libre de Bruxelles, BE); Philippe De Doncker (ULB, BE)

1569183161 Distributed Routing Algorithm for Low-latency Broadcasting in Multi-rate Wireless Mesh Network; *Tiantian Guo, Jianfei Cai, Chuan Heng Foh, Nanyang Technological University, SG*

1569183221 The Impact of Path-Delay Routing on TCP in Ad Hoc Networks
Despina Triantafyllidou; University of Paris XI, FR

1569182399 LT Codes for OFDM Multicast Systems with PAPR Reduction Capability
Shih-Kai Lee, Hsin-Liang Chiu, Yung-Chih Tsai, Hsin-Yi Chen, Taiwan Univ., TW

1569183467 Using Novel Distributed Heuristics on Hexagonal Connected Dominating Sets to model Routing Dissemination in Future Force Networks; *Maria Striki (Telcordia Technologies, US)*

1569182533 TCP-sleek Channel Access Scheduling for Multi-hop Mesh Networks
Li-Ping Tung (Academia Sinica, TW); Yeali S. Sun (National Taiwan University, TW); Meng Chang Chen (Academia Sinica, TW)

1569182571 A Utility-based Power Allocation Non-cooperative Game for the Uplink in Multi-Service CDMA Wireless Networks

Eirini Eleni Tsiropoulou, Timotheos Kastrinogiannis and Symeon Papavassiliou, (National Technical University of Athens, GR)

COFFEE BREAK (15:30-16:00)

Monday Afternoon Sessions (MA)—(16:00-18:00)

MA-6: Room: Schiller 1

Session Title: Performance Evaluation & Analysis (*Wireless Sensor Networks Symp.*)

Session Chair: *Stevan Berber, University of Auckland, NZ*

1569183208 Sensor-Aided Routing for Mobile Ad Hoc Networks
Ricardo Lent; Javier Barria (Imperial College London, UK)

1569174853 GAFO: Genetic Adaptive Fuzzy Hop Selection Scheme for Wireless Sensor Networks; *Darminder Ghataoura (UCL, UK)*

1569182263 Characterization of Hello Message Exchange for Estimating Distribution of Network Residual Energy
Shudong Fang; Stevan Berber; Akshya Swain (University of Auckland, NZ)

1569182991 Sink mobility in wireless sensor networks: A (mis)match between theory and practice
Natalija Vlajic (York University, CA)

1569183013 Performance Analysis of Collaborative Communication in the Presence of Phase Errors and AWGN in Wireless Sensor Networks

Syed Husnain Abbas Naqvi; Stevan Berber; Zoran Salcic (The University of Auckland, NZ)

1569182950 Performance Analysis of SDS-TWR-MA
Hakyong Kim (Samsung Networks Inc., KR)

1569182047 Graph Neuron and Hierarchical Graph Neuron, Novel Approaches Toward Real Time Pattern Recognition in Wireless Sensor Networks; *Amir Basirat (Monash University, AU)*

MA-7: Room: Schiller 2

Session Title: Vehicular Communication I (*Vehicular Communication Technology Workshop*)

Session Chair: *Cheng-Xiang Wang, Heriot-Watt University, UK*

1569175215 Vehicular Communication: Protocol Design, Testbed Implementation and Performance Analysis

Sumaiya Iqbal; Shihabur Chowdhury; Chowdhury Hyder (BUET, BD); Athanasios Vasilakos (University of Western Macedonia, GR); Cheng-Xiang Wang (Heriot-Watt University, UK)

1569175213 Estimation of a successful beacon reception probability in vehicular ad-hoc networks

Alexey Vinel (Saint-Petersburg Institute for Informatics and Automation, RU); Yevgeni Koucheryavy (Tampere University of Technology, FI); Sergey Andreev (Saint-Petersburg State University of Aerospace Instrumentation, RU); Dirk Staehle (University of Wuerzburg, DE)

1569183177 The Promotion of WAVE Contention Performance by Variable Cyclic Prefix Mechanism; *Ya-Chun Li; Tin-Yu Wu; Wei-Tsong Lee (Tamkang University, TW); Yueh-Min Huang (National Cheng Kung University, Taiwan, TW)*

1569183921 Multi-channel Transmission with Efficient Delivery of Routing Information in Maritime WiMAX Mesh Networks

Ming-Tuo Zhou (National Institute of Information and Communications Technology, SG)

1569175221 Cars Communicating Over Publish/Subscribe in a Peer-to-Peer Vehicular Network

Vivian Prinz; Robert Eigner; Wolfgang Woerndl (Technical University of Munich, DE)

1569169353 Hardware Architecture for Trustable Vehicular Electronic Control Units

Wael Adi (Braunschweig University of Technology, DE); Nizar Kassab (Ajman University of Science & Technology, AE)

1569176031 A TOA Estimation Method for UWB Signals Based on Weighted Energy Detection *Tingting; Zhang (Harbin Institute of Technology, CN)*

MA-8: Room: Everth

Session Title: Routing and Protocols (*General Symposium*)

Session Chair: *Mehrdad Dianati; University of Surrey, UK*

1569183009 PTFW: A Protocol Testing Framework for Wireless Sensor Networks

JIALU FAN; Jiming Chen; Ruilong Deng; Youxian Sun (Zhejiang University, CN); Sherman Shen (University of Waterloo, CA)

1569183157 E-PROPHET: A Novel Routing Protocol for Intermittently Connected Wireless Networks; *Yun Li (ChongQing University of Posts and Telecommunications of China, CN)*

1569183203 N-Drop: Congestion Control Strategy under Epidemic Routing in DTN

Yun Li (ChongQing University of Posts and Telecommunications of China, CN)

1569183459 PC-MAC: Pico Cellular MAC Protocol for Motorway Vehicular Multimedia Communication; *Bilal Qazi; Jaafar Elmirghani (University of Leeds, UK)*

1569181387 Using Link-Layer Broadcast to Improve Scalable Source Routing

Pengfei Di; Thomas Fuhrmann (University of Karlsruhe, DE)

1569182649 Exploiting Traffic Sampling Techniques for Mobile Peer Networking

Julian Buhagiar; Carl Debono (University of Malta, MT)

1569175068 Distributed Routing Schemes for Multi-hop Fixed Relay Networks

Weiwei Wang; Jun Cai; Attahiru Alfa (University of Manitoba, CA)

MA-9: Room: Peterhans

Session Title: Cooperative Cognitive Networks Workshop

Session Chair: *Zhiqiang Wu, Wright State University, USA*

1569183309 A Software-Defined Radio Based Cognitive Radio Demonstration Over FM Band

Omer Mian; Ruolin Zhou (Wright State University, USA); Seng Hong (AFRL, US); Zhiqiang Wu (Wright State University, US)

1569210041 Multi-User MIMO Broadcast Systems with Imperfect Feedbacks

Li-Chun Wang; Chu-Jung Yeh (National Chiao Tung University, TW)

1569200991 Carbon-Copying onto the Dirty Relay Channel

Abdellatif Zaidi (Ecole Polytechnique de Louvain, UCL, BE); Luc Vandendorpe (University of Louvain, BE)

1569176471 Myopic Sensing for Opportunistic Spectrum Access Using Channel Correlation
Hao Zhao (Beijing University of Posts and Telecommunications, CN)
1569174887 Outage Analysis for Novel Selection Cooperation in Multi-Source Cognitive
Networks; *Bao Xu; Song Tiecheng; Lianfeng Shen (National Mobile Communications Research
Laboratory, Southeast University, CN)*
1569179005 Randomized Space-Time Block Coding with Limited Feedback
Xin He (Beijing University of Posts and Telecommunications, CN)

MA-10: Room: Wagner

Session Title: WiMAX/WiBro Services and QoS Management Symp.

Session Chair: *Bechir Hamdaoui, Oregon State University, US*

1569183037 Effect of Feedback Prediction on OFDMA System Throughput
*Mohammad Abdul Awal (LRI, University of Paris Sud, FR); Lila Boukhatem (Paris-
Sud&LRI/CNRS, FR)*
1569175155 An Energy-Efficient Scheduling Algorithm for IEEE 802.16e Broadband Wireless
Access Systems; *Shun-Ren Yang; Chien-Chi Kao (National Tsing Hua University, TW)*
1569182599 Handling Mobility Across WiFi and WiMAX
Anand Padmanabha Iyer (The University of Texas at Austin, US)
1569183001 An Efficient Scheduling Algorithm for Maximizing Throughput in WiMAX Mesh
Networks; *Chih-Yung Chang; Ming-Hsien Li (Tamkang University, TW)*
1569174809 Enhancement of Managed Roaming procedure in GSM
Jaroslav Vrana; Petr Vlácil; Robert Bestak (Czech Technical University in Prague, CZ)
1569174861 A Joint Centralized Scheduling and Channel Assignment Scheme in WiMax Mesh
Networks; *Yuliang Tang (Xiamen University, CN)*
1569177297 A Minimum Energy Path Topology Control Algorithm for Wireless Multihop
Networks; *Quansheng Guan; Quanlong Ding; Shengming Jiang (South China University of
Technology, CN)*

BANQUET DINNER (19:00-21:00)

**Technical Program of IWCMC 2009
Leipzig, Germany, June 21-24, 2009
Tuesday, June 23, 2009**

Registration: (8:00-15:00)

Room: Open Hall

KEYNOTE 2 [HPCS] (8:30-10:00)

Room: Schiller

Speaker: Rajkumar Buyya, University of Melbourne and Manjrasoft, Australia

Title: Market-Oriented Cloud Computing: Vision, Hype, and Reality of Delivering Computing as the 5th Utility

Chair: Waleed Smari, University of Dayton, USA

COFFE BREAK (10:00 – 10:30)

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

TM-1: Room: Schiller 1

Session Title: INVITED PAPERS

Session Chair: *Izhak Rubin, UCLA, USA*

1569175015 Cross-Layer Routing and Rate Control Strategies for Datagram-based Wireless Multi-Hop CSMA/CA Networks; *Ju-lan Hsu; Izhak Rubin (UCLA, US)*

1569171293 Switching Cost Minimization in the IEEE 802.16e Mobile WiMAX Sleep Mode Operation; *Gary K. W. Wong; Qian Zhang; Danny H. K. Tsang HKUST, HK)*

1569175016 On the capacity of BICM with QAM constellations; *Alex Alvarado, Erik Agrell, and Arne Svensson, (Chalmers University of Technology, SE)*

1569175017 TinyNET: A Tiny Network framework for TinyOS
Angelo P. Castellani, Paolo Casari, Michele Zorzi, (University of Padova, IT)

1569175018 Adaptive Antenna Selection at Mobile Stations for SDMA in WiMAX Networks
Tairan Wang (University of Minnesota, US), Zhifeng Tao (MERL, US), Andreas F. Molisch (USC, US), Philip V. Orlik, Jinyun Zhang (MERL, US)

TM-2: Room: Schiller 2

Session Title: Emergency Management II (*MCEM Workshop*)

Session Chair: *Daniele Tarchi, University of Florence, IT*

1569183135 Scheduling Cooperative Emergency Response (or how the Meek shall overcome the Greedy); *Carol Dottin; Bilal Khan (City University of New York, US)*

1569183207 Combining Mobility and Heterogeneous Networking for Emergency Management: a PMIPv6 and HIP-based approach; *Giuliana Iapichino (Eurecom, FR); Christian Bonnet (Institut Eurecom, FR); Oscar Del Rio (ESTEC TOS-ETC, European Space Agency, NL); Cedric Baudoin; Isabelle Buret (Thales Alenia Space, FR)*

1569183333 Carawa—A clinical documentation system for use in mobile ad-hoc networks
Martin Lablans; Frank Ueckert (University of Muenster, DE)

1569183345 Design of a Backup Network for Catastrophe Scenarios
Sergio Alves (Collab, PT); Boris Koldehofe (Universitat Stuttgart, DE); Hugo Miranda (Universidade de Lisboa, PT); Francois Taiani (Lancaster University, UK)

1569184307 The Communication Infrastructure for Emergency Management: the In.Sy.Eme. Vision; *Daniele Tarchi (University of Florence, IT); Romano Fantacci (University of Florence, IT); Dania Marabissi (Università di Firenze, IT)*

1569183107 Rescue Information System for Earthquake Disasters Based on MANET Emergency Communication Platform, *Hung-Chin Jang (National Chengchi University, TW)*

1569176169 Structured and Real Time Heterogeneous Sensor Deployment in Preferential Areas
Rabie Ramadan (German University in Cairo, EG)

TM-3: Room: Everth

Session Title: Physical & Synchronization (*Wireless Sensor Networks Symp.*)

Session Chair: *Thomas Kunz, Carleton University, CA*

1569177367 Behavior of Clock-Sampling Mutual Network Synchronization in Wireless Sensor Networks; *Ereth McKnight-MacNeil; Thomas Kunz (Carleton University, CA)*

1569174291 Approximating Node-Weighted Multicast Trees in Wireless Ad-Hoc Networks
Thomas Erlebach; Ambreen Shahnaz (University of Leicester, UK)

1569174933 Radio Frequency Energy Harvesting In Wireless Sensor Networks
Lizzie Tang; Chris Guy (The University of Reading, UK)

1569183147 Memory-Efficient Segment-Based Packet-Combining Schemes in Face of Deadlines
Andreas Willig (Technical University of Berlin, DE)

1569182439 C2AM: An Algorithm for Application-Aware Movement-Assisted Recovery in Wireless Sensor and Actor Networks

Ameer Abbasi; Uthman Baroudi (KFUPM, SA); Mohamed Younis (University of Maryland Baltimore County, US); Kemal Akkaya (Southern Illinois University Carbondale, US)

1569183287 Cooperative Beamforming For Multi-hop Relaying in Wireless Sensor Networks
Mohamed Abdallah (Cairo University, EG)

1569175138 On the Capacity of k-MPR Wireless Networks Using Multi-Channel Multi-Interface
Ming-Fei Guo; Xinbing Wang; Wu Minyou (Shanghai JiaoTong University, CN)

TM-4: Room: Peterhans

Session Title: Wireless Networks (*General Symposium*)

Session Chair: *Bechir Hamdaoui, Oregon State University, USA*

1569174931 Global Planning of 3G Networks using Simulated Annealing
Shangyun Liu; Marc St-Hilaire (Carleton University, CA)

1569174361 Distance-Incorporated Opportunistic Scheduling
Mehrdad Shariat; Atta Quddus; Rahim Tafazolli (University of Surrey, UK)

1569183229 A Markov Model for Per-User Service of Opportunistic Scheduling
Mehrdad Dianati; Rahim Tafazolli (University of Surrey, UK); Sherman Shen; Kshirasagar Naik (University of Waterloo, CA)

1569174345 A Robust Reservation Protocol for Wireless Ad-hoc Networks

Boudour GHALEM (UPS, FR); Cedric Teyssie; Zoubir Mammeri (Paul Sabatier University, FR)

1569182879 Interference and Throughput Analyses in Dual-Polarized Wireless Networks Subject to Rayleigh Fading

Jean-Michel Dricot; François Horlin; Philippe De Doncker (Université Libre de Bruxelles, BE)

1569183139 Fuzzy-Based Cross-Layer Transmission Scheme with QoS Considerations for Wireless Mesh Networks; *Chin-Fu Kuo (National University of Kaohsiung, TW)*

1569179243 An Equilibrium Multi-hop Cluster Hierarchy for Wireless Sensor Networks
Kai Lin (Dalian University of Technology, CN)

TM-5: Room: Wagner

Session Title: Networking over Emerging Wireless Networks (*Wireless LANs and Wireless PANs Symp.*)

Session Chair: *Hamid Sharif, University of Nebraska-Lincoln, USA*

1569174666: Type I HARQ Performance Modeling and Evaluation of Mobile WiMAX for Network Simulators; *Puttipong Mahasukhon; Hamid Sharif; Michael Hempel; Ting Zhou; Wei Wang; Tao Ma (University of Nebraska-Lincoln, US)*

1569182603: Downlink Call Admission Control Algorithm with Look-Ahead Calls for 3GPP LTE Mobile Networks, *Farag Sallabi; Khaled Shuaib (UAEU, AE)*

1569182733: A Distributed Call Admission Control scheme for Satellite Networks under Rain Fading, *Markos Anastasopoulos and Dionysia Petraki (National Technical University of Athens, GR); Athanasios Vasilakos (University of Western Macedonia, GR)*

1569186023: Centralized Scheduling and Channel Assignment Scheme in Third Generation Router Based WiMAX Mesh Network

Jun Xiao (East China Normal University, CN); Xiong Naixue (Georgia State University, US, US); Athanasios Vasilakos (University of Western Macedonia, GR)

1569182591: Carrier Sensing and Receiver Performance in Indoor IEEE 802.11b Mesh Networks, *Mathias Kurth; Jens-Peter Redlich (Humboldt University Berlin, DE)*

1569182665: Carrier Sense Multiple Access with Enhanced Collision Avoidance: a Performance Analysis; *Jaume Barcelo; Boris Bellalta; Cristina Cano; Anna Sfairpoulou; Miquel Oliver (Pompeu Fabra Univ., ES)*

1569183307: Inter-Carrier Interference Self-Cancelation in Synchronous Downlink MC-CDMA System; *Ruolin Zhou, Xue Li (Wright State University), Vasu Chakravarthy (Air Force Research Laboratory), Bin Wang, Zhiqiang Wu, (Wright State University, US)*

LUNCH BREAK (12:00 – 13:30)

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

TA-1: Room: Schiller 1

Session Title: Communications II (*Communication and Information Theory Symp.*)

Session Chair: *Seyed (Reza) Zekavat, Michigan Tech University, USA*

1569175159: Orientation Adaptive Transmit Polarization Diversity for Branch Power Equalization; *Yu Chieh Huang; Bouchra Senadji (Queensland University of Technology, AU)*

1569179521: Channel Estimation and Performance of BICM-ID with Signal Space Diversity over Correlated Rayleigh Fading Channels

Zohreh Andalibi; Ha Nguyen; Eric Salt (University of Saskatchewan, CA)

1569182635: Efficient Hybrid Relaying Schemes with Limited Feedback

Yinan Q; Reza Hoshyar; Rahim Tafazolli (University of Surrey, UK)

1569183269: New Deterministic and Statistical Simulation Models for Non-Isotropic Scattering MIMO Channels; *Omar Salih; Cheng-Xiang Wang (Heriot-Watt University, UK); David*

Laurenson (The University of Edinburgh, UK)

1569183025: Regular Non-binary Quasi-Cyclic LDPC Codes for High-Rate Applications

Murat Arabaci; Ivan Djordjevic (University of Arizona, US); Ross Saunders; Roberto Marcoccia (StrataLight Communications, Inc., US)

1569182677: Superimposed or Time-Division Multiplexed Pilots in Time-varying Channels: An Informative Consideration; *Xin Wang (Tsinghua University, CN)*

1569182913: Combining BICM with trellis based constellation shaping

Kalle Ruttik, (Helsinki University of Technology, FI)

TA-2: Room: Schiller 2

Session Title: Wireless Local Area Networks (*Wireless LANs and Wireless PANs Symp.*)

Session Chair: Yang Yang, University College London, UK

1569182941: Novel Adaptive DCF Protocol with Efficient Optimization for Wireless Local-Area Networks; Shih Yu Chang (*National Tsing Hua University of Taiwan, TW*); Hsiao-Chun Wu (*Louisiana State University, US*); Ai-Chun Pang (*National Taiwan University, TW*)

1569182461: Dynamic Protocol Timing Adaptation for Improved Efficiency in IEEE 802.11 Wireless LANs, Joshua Wall (*CSIRO, AU*); Jamil Khan (*University of Newcastle, AU*)

1569174669: Unsaturated Performance Analysis of Cooperative Access Protocol for Multi-rate WLANs; Samir Gaber Sayed Abdel Gawad; Yang Yang (*University College London (UCL), UK*)

1569181955: Placement of Access Points in Wireless Local Area Networks
Faisal Al-Nasser; Mansour Al-Dajani; Uthman Baroudi; Shokri Selim (*KFUPM, SA*)

1569183580: Unified Fixed Point Analysis of IEEE 802.11(e) WLAN Under Saturated and Unsaturated Conditions; Xinbing Wang (*Shanghai Jiaotong University, CN*); Qian Zhang (*Hong Kong University of Science and Technology, HK*)

1569184293: TINA: The INtelligent Airport—A Proposed Architecture
Bilal Qazi; Angela Vivero; Jaafar Elmirghani (*University of Leeds, UK*)

TA-3: Room: Everth

Session Title: MAC, Routing and Localization (*Wireless Sensor Networks Symp.*)

Session Chair: Yasser Gadallah, UAE University, UAE

1569168739 Energy Efficient Reuse Set Formulation with End-to-End Packet Loss Constraint in TDMA Based Wireless Sensor Networks; Liqi Shi; Abraham Fapojuwo (*University of Calgary, CA*)

1569174741 Design and Implementation of a Look-Ahead Scheduling MAC Protocol for Wireless Sensor Networks; Jaesub Kim; Kyu-Ho Park (*KAIST, KR*)

1569177483 An OFDMA-Based MAC Protocol for Under Water Acoustic Wireless Sensor Networks; Mohammad Hayajneh; Issa Khalil; Yasser Gadallah (*UAE University, AE*)

1569183255 Constructing Virtual Coordinate for Routing in Wireless Sensor Networks under Unreliable Links; Fei Yang; Isabelle Augé-Blum (*CITI, INSA Lyon, FR*)

1569183235 Wireless Array Based Sensor Relocation in Mobile Sensor Networks
Wei Li; Yousif Kamil; Athanassios Manikas (*Imperial College London, UK*)

1569183242 Characterizing the Energy Efficiency of Localization Algorithms in Wireless Sensor Networks; Dominik Lieckfeldt; Jiayi You; Jakob Salzmann; Ralf Behnke; Dirk Timmermann (*University of Rostock, DE*)

1569174599 Multi-hop Sleep Scheduling and Local Data Link Aggregation Dependant Qos in Modeling and Simulation of Power-aware Wireless Sensor Networks
Vasanth Iyer (*International Institute of Information Technology, Hyderabad, IN*)

TA-4: Room: Peterhans

Session Title: MIMO Systems I (*MIMO Systems Symposium*)

Session Chair: Cheng-Xiang Wang, Heriot-Watt University, Edinburgh, UK

1569174457 Reduced-Complexity Multicell Decoding Systems with Multiple Antennas at the base Station, Symeon Chatzinotas; Muhammad Ali Imran; Reza Hoshyar (*University of Surrey, UK*)

1569174637 Performance Analysis and Adaptive Power Control for Block Coded Collaborative Networks; Weisi Guo; Ioannis Chatzigeorgiou; Ian Wassell (*University of Cambridge, UK*); Rolando Carrasco (*University of Newcastle, UK*)

1569175107 Link Performance Prediction for HSUPA in a Multipath Channel
Et tolba Mohamed; Messaoud Eljamai; Samir Saoudi (*Telecom-Bretagne, FR*); Raphael Visoz (*Orange Labs, FR*)

1569175173 Blind channel shortening in MIMO-OFDM systems using single-block differential modulation; Taoufik Ben Jabeur (*Université Paris Descartes, FR*); Karim Abed-Meraim (*Dept TSI, Télécom Paris, FR*); Hatem Boujemaa (*Ecole Supérieure des Communications, TN*)

1569174771 Adaptive Power Allocation in Spatially Correlated Dual-Hop MIMO Relay Channels
Ah-Young Kim; Yong-Hwan Lee (*Seoul National University, KR*)

1569174827 Narrowband Interference Suppression for MIMO OFDM System Using Adaptive Filter Banks; *Georgi Iliev; Vladimir Poulkov; Zlatka Nikolova; Miglen Ovtcharov (Technical University of Sofia, BG)*

1569174909 Joint Timing Error, Frequency Offset and Channel Estimation for MIMO Systems
Wei Dong (University of Xidian, CN)

TA-5: Room: Wagner

Session Title: Next Generation Mobile Networks I (*Next Generation Mobile Networks Symposium*)

Session Chair: *Bilal Khan, City University of New York, USA*

1569174723 Balancing Power: Tradeoffs between Connection Lifetime and Control Traffic in MANETS; *Zeki Bilgin; Bilal Khan (City University of New York, US)*

1569175219 Flight Size Auto Tuning for Broadband Wireless Networks

Ken Igarashi (DoCoMo Communications Laboratories USA, Inc., US)

1569178888 Best Permutation: A Novel Network Selection Scheme in Heterogeneous Wireless Networks; *Lusheng Wang (ENST, FR); David Binet (France Telecom R&D, FR)*

1569182525 RDCCS: Routing Driven Channel Selection in Multi-Radio Ad-hoc Networks

David Murray; Terry Koziniec; Michael Dixon (Murdoch University, AU)

1569175165 Hard Decision Combining-based Cooperative Spectrum Sensing in Cognitive Radio Systems; *Seung-Hwan Lee (Seoul national university, KR)*

1569182651 Discovery Based Network selection to Improve Fast Vertical Handoffs in Heterogeneous Networks

Vahid Solouk (University Putra Malaysia, MY); Borhanuddin Ali (MIMOS Berhad, MY); Sabira Khatun (University of Putra Malaysia, MY); Daniel Wong (Malaysia University of Science & Technology, MY)

1569176203 Performance Analysis in C3G-A System; *Xujie Li (Southeast University, CN)*

COFFEE BREAK (15:30-16:00)

Tuesday Afternoon Sessions (TA)—(16:00-17:00)

TA-6: Room: Schiller 1

Session Title: Security II (*Computer and Network Security Symposium*)

Session Chair: *Ezedin Barka, UAEU, UAE*

1569183141 Multimodal Security Enforcement Framework for Wireless Ad hoc Networks
Lu Yan (University of Hertfordshire, UK)

1569183187 Adaptive Intrusion Detection & Prevention of Denial of Service attacks in MANETS
Adnan Nadeem (University of Surrey, UK); Michael Howarth (University of Surrey, UK)

1569183145 Security Concept for Peer-to-Peer Systems; *Stefan Kraxberger (Graz University of Technology, AT); Udo Payer (Graz University of Technology, AT)*

1569183171 A Simple Lightweight Authentic Bootstrapping Protocol for IPv6-based Low Power Wireless Personal Area Networks (6LoWPANs); *Muhammad Ikram (Ajou University, KR); Md. Aminul Haque Chowdhury (Ajou University, KR)*

1569186691 An Enhanced Secure ARP Protocol and LAN Switch for Preventing ARP based Attacks; *Senda Hammouda (SupCom, TN); Zouheir Trabelsi (UAE University, AE)*

TA-7: Room: Schiller 2

Session Title: Mobile Computing III (*Mobile Computing Symposium*)

Session Chair: *Nei Kato, Tohoku University, JP*

1569183191 Orientation-based Radio Map Extensions for Improving Positioning System Accuracy; *Apostolia Papapostolou (Telecom Sudparis, FR); Hakima Chaouchi (INT, FR)*

1569183097 Proposal and Evaluation of an Application Level Caching Scheme for Ad Hoc Networks; *Francisco Javier González-Cañete; Eduardo Casilari-Perez; Alicia Trivino-Cabrera (University of Malaga, ES)*

1569183143 Energy-efficient Multicasting in Wireless Networks with Fixed Node Transmission Power; *Christos Papageorgiou; Panagiotis Kokkinos; Emmanouel Varvarigos (University of Patras, GR)*

1569183387 Towards a Network-Device Unified Framework for Power-Aware Wireless Applications; *Marius Marcu; Dacian Tudor; Sebastian Fuicu (Politehnica University of Timisoara, RO)*

TA-8: Room: Everth

Session Title: Wireless Network Applications (*General Symposium*)

Session Chair: *Zubair Fadlullah, Tohoku University, JP*

1569182755 Ubiquitous IMS Emergency Services over Cooperative Heterogeneous Networks
Chi-Yuan Chen (National Taiwan University, TW); Kai-Di Chang; Han-Chieh Chao (National Ilan University, TW); Sy-Yen Kuo (National Taiwan University, TW)

1569183051 Enabling Fair Offline Trading

Michael Stini; Martin Mauve (Heinrich Heine University Düsseldorf, DE)

1569183267 Towards Identity-Based Services in IMS

Yacine Belala (SAP Research Canada, CA)

1569168206 A Traffic Performance Evaluation for Low-Earth Orbit Satellite Communication Systems; *Derya Yiltas; A. Halim Zaim (University of Istanbul, TR)*

TA-9: Room: Peterhans

Session Title: Next Generation Mobile Networks III (*Next Generation Mobile Networks Symp.*)

Session Chair: *Daniele Tarchi, University of Florence, IT*

1569183017 Distributed Channel Assignment in Cognitive Radio Networks

Xiukui Li; Seyed (Reza) Zekavat (Michigan Technological University, US)

1569183241 I-PMIP: An Inter-Domain Mobility Extension for Proxy-Mobile IP

Niklas Neumann; Jun Lei; Xiaoming Fu (University of Goettingen, DE); Gong Zhang (Huawei Technologies Co., Ltd., CN)

1569183297 Distributed Dynamic Spectrum Access using a Virtual Network Coded Control Channel; *Nicola Baldo (Centre Tecnològic de Telecomunicacions de Catalunya, IT); Alfred Asterjadhi; Michele Zorzi (University of Padova, IT)*

1569183337 Modeling and Performance Analysis for Handover Schemes in C3G-A System
Xujie Li (Southeast University, CN)

TA-10: Room: Wagner

Session Title: Mobility and its Applications Workshop

Session Chair: *Han-Chieh Chao, National Ilan University, TW*

1569181815 Context Management in Dynamic Environments

Jens Tiemann; Humberto Astudillo; Evgenij Belikov (Fraunhofer FOKUS, DE)

1569183113 On Semi-Dynamic Contention Resolution Scheme for IEEE 802.16 BWA Systems

Chih-Heng Ke (National Kinmen Institute of Technology, TW); Der-Jiunn Deng; Li-Wei Chang (National Changhua University of Education, TW); Yueh-Min Huang (National Cheng Kung University, Taiwan, TW)

1569183181 A Robust End-to-End Delivery Scheme for Home-Media Wireless Network

I-Ju Liao (Tamkang University, TW); Kuo-Chi Chu (Lunghwa University of Science and Technology, TW); Tin-Yu Wu; Wei-Tsong Lee (Tamkang university, TW)

1569184373 Enhancing Location Services with Prediction

Ebtisam Amar (University of Pierre and Marie Curie - Paris 6 (UPMC), FR)

CITY TOUR (17:45-21:00)

**Technical Program of IWCMC 2009
Leipzig, Germany, June 21-24, 2009
Wednesday, June 24, 2009**

Registration: (8:00-13:00)

Room: Open Hall

KEYNOTE 3 (8:30-10:00)

Room: Schiller

Speaker: Stefan Schmid, NEC Labs-Europe, Germany

Title: Next-Generation Mobile Networks: 3GPP Evolved Packet System and Femtocell Technologies

Chair: Mohsen Guizani, IWCMC 2009 General Chair

COFFE BREAK (10:00 – 10:30)

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

WM-1: Room: Schiller 1

Session Title: Multimedia over Wireless Symposium

Session Chair: *Toufik Ahmed, University of Bordeaux-1/CNRS-LaBRI, FR*

1569183188 On Tightly Managing End-to-End QoS and Security for IPTV Service Delivery
*Mohamed Aymen Chalouf (LaBRI (Laboratoire Bordelais de Recherche en Informatique), FR);
Ismail Djama; Toufik Ahmed (University of Bordeaux-1 / CNRS-LaBRI, FR); Francine Krief (Labri
laboratory, FR)*

1569174444 Downlink streaming performance over evolved HSPA

Lorant Farkas; Csaba Vulkan; Gergely Homanyi; Csaba Deak (Nokia Siemens Networks, HU)

1569175101 A cognitive radio system for home theatre 5+1 audio surround applications

*Valeria Orani (University of Cagliari, IT); Vlad Popescu (Transilvania University of Brasov, RO);
Maurizio Murrioni (University of Cagliari, IT)*

1569179980 Peer-to-Peer Live Video Streaming over Mobile Ad Hoc Network

*Nobal Niraula (Telecom SudParis, France, FR); Kanchana Kanchanasut (Asian Institute of
Technology, TH); Anis Laouiti (GET/INT, FR)*

1569181338 Unbalanced Multiple Description with Variable Frame Rate

Antonio Vilei; Giuseppe Barba (STMicroelectronics, IT)

1569182815 Overlay Solution for Multimedia Data over Sparse MANETs

*Sergio Cabrero; Xabiel Garcia Pañeda (University of Oviedo, ES); Thomas Plagemann
(University of Oslo, NO); Vera Goebel (University of Oslo, NO); Matti Siekkinen (Helsinki
University of Technology, FI)*

1569183049 Low-Complexity Adaptive Packet Size Assignment Schemes for Real-Time Scalable Video
Transmission over WLANs; *Chen-Wei Lee (National Cheng Kung University, TW)*

WM-2: Room: Schiller 2

Session Title: Mobile Computing II (*Mobile Computing Symposium*)

Session Chair: Thomas Kunz, Carleton University, CA

1569182607 Call Admission Control with Soft-QoS Based Spectrum Handoff in Cognitive Radio Networks; Ming Huang; Rong Yu (South China University of Technology, CN); Yan Zhang (Simula Research Laboratory, NO)

1569180300 Optimal Cooperative Spectrum Sensing in Cognitive Sensor Networks
Hai Ngoc Pham (University of Oslo, NO); Yan Zhang (Simula Research Laboratory, NO); Paal Engelstad (University of Oslo/Telenor R&I, NO); Tor Skeie; Frank Eliassen (Simula Research Lab, NO)

1569179401 Collaborative Beamforming and Dirty Paper Coding Assisted Transmission Strategy for E-Health Wireless Sensor Networks

Feng Han (Tsinghua University, CN); Ying Chang (Stanford University, US); Pingyi Fan (Tsinghua University, CN); Athanasios Vasilakos (University of Western Macedonia, GR)

1569179241 Locating Mobiles in General Urban Areas Using Combined Convex Optimization and Weight-Product Tracking Method; Wei-Yu Chiu (National Tsing Hua University, TW)

1569183096 Study on the Need for Adaptive Gateway Discovery in MANETS

Alicia Trivino-Cabrera (University of Malaga, ES)

1569181809 Supporting Distributed Applications for Swarm of Robots within Smart Environments: The Way of EU Project DustBot

Francesco Chiti; Romano Fantacci; Giovanni Collodi; Luca Bencini (University of Florence, IT); David Lund (HW Communications Ltd, UK); Bassem Ammar (HW Communications Ltd, UK); Ioannis Katsaros (University of Lancaster, UK); Alistair Doswald (University of Applied Sciences of Western Switzerland, CH); Stephan Robert (University of Applied Sciences of Western Switzerland, CH); Peter Sollberger (Lucerne University of Applied Science and Arts, CH)

1569182597 Proportional Fairness with Minimum Rate Guarantee Scheduling in a Multiuser OFDMA Wireless Network

Nararat Ruangchaijaturon (Graduate University for Advanced Studies, JP); Yusheng Ji (National Institute of Informatics, JP)

WM-3: Room: Everth

Session Title: Communications III (*Communication and Information Theory Symp.*)

Session Chair: Seyed (Reza) Zekavat, Michigan Tech University, USA

1569183179 Optimizing Radio Resource Allocation in HSDPA Using 2 Group Allocation
Zhenfeng He; Mustafa Gurcan (Imperial College London, UK)

1569183277 A comparison of linear and non-linear transmitter and receiver antenna array processing for interference nulling and diversity with non-zero CSI feedback delay

Hamid Reza Karimi (Ofcom, UK); Arash Molavi Kakhki (Imperial College, UK)

1569182937 Theoretical Exploration of Pattern Attributes for Maximum-Length Shift-Register Sequences; Shih Yu Chang (National Tsing Hua University of Taiwan, TW); Hsiao-Chun Wu (Louisiana State University, US); Ai-Chun Pang (National Taiwan University, TW)

Ruolin Zhou (Wright State University, US); Vasu Chakravarthy (Air Force Research Laboratory, US); Zhiqiang Wu (Wright State University, US)

1569183313 Performance of Downlink MC-CDMA and CI/MC-CDMA Systems with Narrowband Interference

Zhiqiang Wu (Wright State University, US); Carl Nassar (Colorado State University, US)

1569183317 High Performance Frequency Division MC-CDMA System via Carrier Interferometry Codes; Zhiqiang Wu (Wright State University, US)

1569161273 Generic Construction of Orthogonal Complementary Sets of Sequences
Liru Lu (Nanyang Technological University, SG)

1569175121 ATCP+: An Adaptive TCP-Trunking Flow Control Scheme for Video Streaming
Yuan-Tse Yu (Kaohsiung Medical University, TW); Sheau-Ru Tong (National Pingtung University of Science and Technology, TW)

WM-4: Room: Peterhans

Session Title: Applications and Data Gathering (*Wireless Sensor Networks Symp.*)

Session Chair: Erik Golen, Rochester Institute of Technology, USA

1569174674 Underwater Sensor Deployment Using an Evolutionary Algorithm

Erik Golen; Bo Yuan; Nirmla Shenoy (Rochester Institute of Technology, US)

1569171311 Energy-Efficient Data Acquisition by Adaptive Sampling for Wireless Sensor Networks; Yee Wei Law (The University of Melbourne, AU); Supriyo Chatterjea (University of Twente, NL); Jiong Jin; Thomas Hanselmann; M. Palaniswami (University of Melbourne, AU)

1569174793 SOTRIP: A Self Organizing Protocol for Traffic Information; G. Tasseron; M. C. Schut; (VU University Amsterdam, NL)

1569174757 Query-Based Data Collection in Wireless Sensor Networks with Mobile Sinks

Long Cheng (Beijing University of Posts and Telecommunications, CN); Yimin Chen (Stanford University, US); Canfeng Chen; Jian Ma (Nokia Research Center, CN)

1569175113 Counting birds with wireless sensor networks

Harry Gros-Desormeaux; Philippe Hunel (University of Antilles Guyane, FR); Nicolas Vidot (Université des Antilles et de la Guyane, FR)

1569183311 Asynchronous Distributed Particle Filtering For Wireless Sensor Network Target Tracking; Chunhe Song (Northeastern University, CN)

1569183305 FireSenseTB: A Wireless Sensor Networks TestBed for Forest Fire Detection

Bilgin Kosucu; Kerem Irgan; Gurhan Kucuk; Sebnem Baydere (Yeditepe University, TR)

WM-5: Room: Wagner

Session Title: Wireless Personal Area Networks (*Wireless LANs and Wireless PANs Symp.*)

Session Chair: Jelena Mistic, University of Manitoba, CA

1569174633: An Analytical Model for Estimating the Delay in Bluetooth Communications with Serial Port Profile; María Moron; Eduardo Casilari-Perez (Universidad de Malaga, ES)

1569182653: A Mathematical Model for Performance of IEEE 802.15.4 Beacon-Enabled Mode
Chiara Buratti (University of Bologna, IT)

1569183233: Remote Physiotherapy Treatments using Wireless Body Sensor Networks

Paul Fergus (Liverpool John Moores University, UK)

1569174981: Variable Probability Modulation Policies for Sensing in Cognitive PANs

Vojislav Mistic; Jelena Mistic (University of Manitoba, CA)

1569182831: Throughput Analysis and Improvement of Hybrid Multiple Access in IEEE mmWave-WPAN; ChangWoo Pyo (NICT, JP)

1569171945: Route-over vs. Mesh-under Routing in 6LoWPAN; Md. Aminul Haque Chowdhury; Muhammad Ikram; S. M. Saif Shams; Ki-Hyung Kim (Ajou University, KR)

1569173543 Utilizing Semantic Caching in Ubiquitous Environment

S. Kami Makki and Stefan Andrei (Lamar University, US)

LUNCH BREAK (12:00 – 13:30)

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

WA-1: Room: Schiller 1

Session Title: MIMO Systems II (*MIMO Systems Symposium*)

Session Chair: Athanasios (Thanos) Vasilakos, University of Western Macedonia, GR

1569175367 Multiple-Antenna Multiple-Relay System with Precoding for Multiuser Transmission
Arash Talebi; Witold Krzymien (University of Alberta / TRILabs, CA)

1569175199 Performance Analysis of OSTBC over Generalized Gaussian MIMO Channels
Serguei Primak (UWO, CA); Valeri Ya Kontorovitch (Cinvestav ipn mx, MX)

1569175203 Autocovariance Receiver for DTSM: performance characteristics for a Generalized Gaussian MIMO Channel; Serguei Primak (The University of Western Ontario, CA); Valeri Ya Kontorovitch (Cinvestav ipn mx, MX)

1569175241 Power Allocation and Distributed Beamforming Optimization in Relay-Assisted Multiuser Communications; Duy Nguyen; Ha Nguyen (University of Saskatchewan, CA)

1569175181 Quantized Transmit Beamforming With Antenna Selection in a MIMO Channel
Wiroonsak Santipach (Kasetsart University, TH)

1569175971 Characterization of Adaptive Modulation MIMO Systems in the Presence of Phase Noise; Mohammad Reza Keshavarzi; Abbas Mohammadi; Abdolali Abdipour; Hossein Hemesi (Amirkabir University, IR)

1569176114 Performance Analysis for Keyhole Channel of A Quaternion Quasi-Orthogonal Space Time Block Code; Zhengquan Li; Lianfeng Shen (Southeast University, CN)

WA-2: Room: Schiller 2

Session Title: Next Generation Mobile Networks II (*Next Generation Mobile Networks Symp.*)

Session Chair: Vojislav Misić, University of Manitoba, CA

1569182192 Dynamic Spectrum Access in Heterogeneous Networks: HSDPA and WiMAX
Soumaya Hamouda (ESC-Tunis, TN); Bechir Hamdaoui (Oregon State University, US)

1569181823 p-Persistent Frame Replication for Resilient Services in Multi-Radio Wireless Networks; Sangheon Park; Seongyeol Yang (Korea University, KR); Joo-Sang Youn (Donggeui University, KR); Yong-Geun Hong; Jungsoo Park (ETRI, KR)

1569182577 A Unified Approach for Efficient Network Selection in Multi-Service Integrated CDMA/WLAN Systems; Giorgos Aristomenopoulos; Timotheos Kastrinogiannis; Symeon Papavassiliou (National Technical University of Athens, GR)

1569174831 Distributed and Centralized Scheduling for Relaying Systems under Interference Limited Conditions; Fan Huang (Beijing University of Posts and Telecommunications, CN)

1569182689 Simulation Analysis of Bi-Directional traffic characterization over Wireless Ad Hoc Networks; Saquib Razak (SUNY-Binghamton, US); Uthman Baroudi (KFUPM, SA)

1569183105 Cognitive Interference-Minimizing Code Assignment for Underlay CDMA Networks in Asynchronous Multipath Fading Channels; Mohamed Kassef (Cairo University, EG); Ayman Elezabi (AUC, EG); Mohamed Abdallah; Mohamed Khairy (Cairo University, EG)

1569175281 Comparison of Frequency Reuse Algorithms for Fixed Two-hop OFDMA Cellular Relaying Networks; Min Liang (Beijing University of Posts and Telecommunications, CN)

WA-3: Room: Everth

Session Title: Vehicular Communication II (*Vehicular Communication Technology Workshop*)

Session Chair/Co-Chair: Cheng-Xiang Wang, Heriot-Watt University, Edinburgh, UK

1569183247 New Simulation Models for Non-Isotropic Scattering Mobile-to-Mobile Rayleigh Fading Channels; Xiang Cheng; Cheng-Xiang Wang (Heriot-Watt University, UK); David Laurenson (The University of Edinburgh, UK); Sana Salous (University of Durham, UK); Athanasios Vasilakos (University of Western Macedonia, GR)

1569182877 Wideband Bluetooth Speech Transmission for Hands-free Car Kits
Juergen Freudenberger (University of Applied Sciences Constance, DE)

1569184355 Characterisation of Data Dissemination in Vehicular Ad Hoc Networks in a City Environment; Mun Joon Lok; Bilal Qazi; Jaafar Elmoghani (University of Leeds, UK)

- 1569183205** Flexible Embedded System for Sensor Integration and Custom Data Processing in an Automotive Application; *Lotfi Guedria; Damien Hubaux; Mathieu Ocaña (CETIC, BE); Jean-Didier Legat (Université Catholique de Louvain, BE)*
- 1569183265** Adaptive Movement Aware Routing for Vehicular Ad Hoc Networks
Nadia Brahmi; Mounir Boussedjra; Joseph Mouzna (Irseem - Esigelec, FR); Mireille Bayart (LAIL ESA CNRS 8021, FR)
- 1569177038** Issues on the design of vehicular node positioning based on doppler-shifted frequency measurement on highway; *Bo Xu; Lianfeng Shen (Southeast University, CN)*
- 1569181487** Research on Stopping Criterion for Irregular LDPC Codes Decoding
Changhao Zhai (Beijing University of Posts and Telecommunication, CN)
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WA-4: Room: Peterhans

Session Title: Wireless Network Applications I

Session Chair: *Yan Zhang, Simula Research Laboratory, NO*

- 1569174979** Adaptive Video Streaming over a Mobile Network with TCP-Friendly Rate Control
Ktawut Tappayuthpijarn (Nomor Research, DE)
- 1569175273** An Enhanced Uplink Scheduling Algorithm for Video Traffic Transmission in IEEE 802.16 BWA Systems; *Sheng-De Wang (National Taiwan University, TW)*
- 1569184159** Probability Counter-Based Route Discovery for Mobile Ad Hoc Networks
Aminu Mohammed (University of Glasgow, UK)
- 1569182975** Multi-target Cell tracking based on classic kinetics; *Lin Fan; Zhongmin Wang (Xi'an Institute of Posts and Telecommunications, CN); Hai Wang (Xi'an Jiaotong University, CN)*
- 1569175247** Design and Implementation of a Wireless Automatic Meter Reading System
Di Miao; Kefei Xin; Yizhong Wu (Zhejiang Universtiy, CN); Weqiang Xu (College of Informatics and Electronics, ZhejiangSci-Tech University, CN); Jiming Chen (Zhejiang University, CN)
- 1569183971** A Context Aware Approach to Emergency Management Systems
Rajalkshmi Bhavanishankar (Dr.M.G.R University, IN); Chandrasekaran Subramaniam; Magesh Kumar; Dipesh Dugar (Anna University, IN)
- 1569168387** FPGA Prototyping of a multi-million gate System-on-Chip (SoC) design for Wireless USB applications; *Subramanian, J. Patil; M. K. Saxena, (Samsung India Software Operations, IN)*
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WA-5: Room: Wagner

Session Title: MIMO Systems III (MIMO Systems Symposium)

Session Chair: *Tarik Ait-Idir, INPT, MO*

- 1569183253** Joint Turbo Equalization for Relaying Schemes over Frequency-Selective Fading Channels; *Houda Chafnaji; Tarik Ait-idir (INPT, MA); Halim Yanikomeroglu (Carleton University, CA); Samir Saoudi (Telecom-Bretagne, FR)*
- 1569183243** New Deterministic and Statistical Simulation Models for Non-Isotropic Scattering MIMO Channels; *Xiang Cheng; Cheng-Xiang Wang (Heriot-Watt University, UK); David Laurenson (The University of Edinburgh, UK)*
- 1569182593** Two-Way Amplify and Forward Relaying with Adaptive Modulation
Kyu-Sung Hwang; Young-Chai Ko (Korea University, KR); Mohamed-Slim Alouini (Texas A&M University at Qatar, QA)
- 1569180565** Simplified User Scheduling and Mode Selection Algorithm for Multiuser MIMO Systems with Limited-Feedback CSIT Linear Precoding
Shreeram Sigdel; Witold Krzymien (University of Alberta / TRILabs, CA)
- 1569183111** Performance Analysis of Spatial Multiplexing MIMO-OFDM Systems under Frequency-Selective I/Q Imbalances
Yaning Zou; Mikko Valkama; Markku Renfors (Tampere University of Technology, FI)
- 1569176337** Multidimensional 16-QAM Labeling of BI-STCM-ID Over 2x2 MIMO Channel
Maciej Krasicki (Poznan University of Technology, PL)
- 1569176777** A New Union Bound based on Holder Inequality for Space-Time Codes
Zhi Zhang; Xiaoguang Dai; William S. W. Cheung; Ti Yuk (The University of Hong Kong, HK)
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COFFEE BREAK (15:30-16:00)

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

WA-6: Room: Schiller 1

Session Title: Planning and Optimization I (*PlanNet Symposium*)

Session Chair: *Jie Zhang, University of Bedfordshire, UK*

1569174085 Dynamic System-Level Simulation of Dynamic Frequency Planning for Real Time Services in WiMAX Networks; *David Lopez-Perez; Alpár Jüttner; Jie Zhang (University of Bedfordshire, UK)*

1569182927 A Two-Step Method for the Optimization of Antenna Azimuth/Tilt and Frequency Planning in OFDMA Multihop Networks

Fernando Gordejuela-Sanchez; David Lopez-Perez; Jie Zhang (University of Bedfordshire, UK)

1569174041 Performance Comparison between Open-Loop and Closed-Loop Uplink Power Control in UTRAN LTE Networks

Robert Muellner; Carsten Ball; Kolio Ivanov (Nokia Siemens Networks, DE); Johann Lienhart (Siemens AG, AT); Peter Hric (Siemens AG, SK)

1569174305 Cross-Layered Wireless Network Planning and Modeling Methods and Tools

Andriy Luntovskyy; Dietbert Gütter; Stefan Uhlig (Dresden University of Technology, DE)

1569174629 A Genetic Approach for Wireless Mesh Network Planning and Optimization

Rastin Pries; Dirk Staehle; Marieta Stoykova; Barbara Staehle; Phuoc Tran-Gia (University of Wuerzburg, DE)

1569180085 Automatic Planning Tool for Deployment of Indoor Wireless Local Area Networks

Mariano Molina-Garcia (Universidad Politécnica de Madrid, ES); Alfonso Fernández-Durán

(Alcatel-Lucent Spain, ES); José I. Alonso (Universidad Politécnica de Madrid, ES)

1569183063 Virtual Drive Test – An In-situ Method for Network Measurements and Optimization

Avraham Freedman; Moshe Levin (Hexagon System Engineering, IL)

WA-7: Room: Schiller 2

Session Title: Wireless Network Applications II

Session Chair: *Wassim El-Hajj, UAEU, UAE*

1569183257 Instant Weighed Probability Model for Time Variant Channel in IEEE 802.16e scenario; *Floriano De Rango, Andrea Malfitano, Salvatore Marano, University of Calabria, IT*

1569183515 Trust-based SAODV Protocol with Intrusion Detection and Incentive Cooperation in MANET; *Floriano De Rango, Salvatore Marano, University of Calabria, IT*

1569182931 Fundamental Theories on New Pattern Exclusive Coding

Hsiao-Chun Wu (Louisiana State University, US); Shih Yu Chang; Ai-Chun Pang (National Taiwan University, TW)

1569182911 Game Theoretic Power Allocation in Sparsely Distributed Clusters of Wireless Sensors (GPAS), *Robert Strauss; Ali Abedi, University of Maine, US*

1569182933 IEEE 802.11 Wireless Location and Network Security Mechanism Through Fingerprint, Triangulation and Dynamic Obstacle Identification

André Peres (ULBRA, BR); Raul Weber (UFRGS - Universidade Federal do Rio Grande do Sul, BR); Paulo Torres; Rodrigo Vecchia (ULBRA, BR)

1569178841 Multiuser Detection Using Backpropagation Networks for CDMA Systems

Mohamed Moustafa Abd-El Aziz Moustafa (Akhbar El Yom Academy, Egypt, EG)

1569175115 Detection and separation in space time block coding using noisy compound PCA-ICA model; *(Abdelkrim Hamza, Salim Chitroub, Moncef Benmimoune, and Rachida Touhami, DZ)*

WA-8: Room: Everth

Session Title: Planning and Optimization II (*PlanNet Symposium*)

Session Chair: Yan Zhang, Simula Research Laboratory, NO

1569182275 Coverage and Capacity in WiMAX and TD-SCDMA Evolution: a Comparative Study
Ying Li (*NAE Institute, CN*); Yan Zhang (*Simula Research Laboratory, NO*)

1569183159 Planning and Performance Evaluation of OFDM/OFDMA Multi-carrier Cellular Systems with Femto Cells; Romeo Giuliano; Pierpaolo Loreti; Franco Mazzenga (*Università di Roma Tor Vergata, IT*); Giovanni Santella (*AGCOM, IT*)

1569183227 Estimating Cell Throughput of OFDMA Systems with Scheduling
Andreas Fernekess; Anja Klein; Bernhard Wegmann (*Nokia Siemens Networks, DE*); Karl Dietrich (*Nokia Siemens Networks, DE*)

1569175112 Fast Algorithm for Large-Scale UMTS Coverage Planning with Soft Handover Consideration; Lei Chen; Di Yuan; Linköping University, SE

1569183129 A Comparison of Channel Estimation Techniques in OFDM with a Proposed Improvement in FFT Based Estimator
Malik Muhammad Usman Gul (*National University of Sciences and Technology, Pakistan, PK*); Muhammad Azam; Ismail Shah; Jamil Ahmad (*Iqra University, H-9, Islamabad Campus, PK*)

1569183137 Truncated ARQ based OSTBC Cooperative Communication for Energy Constrained Wireless Networks; Irfan Ahmed (*Beijing University of Post and Telecommunications, CN*); Ismail Shah (*Iqra University, PK*)

CLOSING (18:00-18:30)