



**The 9th Annual Conference on
Wireless On-demand Network Systems and Services
January 9-11, 2012, Courmayeur, Italy**

Program

Monday, January 9

- 15:00-16:15 **Registration**
- 16:15-16:30 **Welcome Address by the Chairs**
- 16:30-18:00 **Session 1: Security Aspects**
 - Obfuscating IEEE 802.15.4 Communication using Secret Spreading Codes
Björn Muntwyler (ETH Zürich, Switzerland); Vincent Lenders (Armasuisse, Switzerland); Franck Legendre (ETH Zürich, Switzerland); Bernhard Plattner (ETH Zurich, Switzerland)
 - POWJAM: A Power Reaction System against Jamming Attacks in Wireless Ad Hoc Networks
Ali Hamieh (University of Versailles, France)
 - Securing the 802.11 MAC in MANETs: A Specification-based Intrusion Detection Engine
Christoforos Panos (University of Athens, Greece); Platon Kotzias (University of Piraeus, Greece); Christos Xenakis (University of Piraeus, Greece); Ioannis Stavrakakis (National and Kapodistrian University of Athens, Greece)
- 18:00-18:15 **Coffee break**
- 18:15-19:30 **Poster&Demo 5-min Madness**
- 20:00 **Welcome dinner**

Tuesday, January 10

- **8:30-9:30 Keynote Speech**
The assault on Privacy - *Jean-Pierre Hubaux (EPFL, Switzerland)*
- **9:30-10:00 Coffee break**
- **10:00-11:00 Session 2 (short papers): Sensor and Vehicular Networks**
 - Exploring Wiener Filter Estimation of Node Population in a Sensor Network with Generally Distributed Node Lifetimes
Dinesh Kumar (IBM T.J. Watson Research Center, USA); Eitan Altman (INRIA, France); Tamer Başar (University of Illinois at Urbana-Champaign, USA)
 - A model to evaluate performance of a multi-brokers overlay for Publish/Subscribe in Wireless Sensor Networks
Claude Chaudet (Telecom Paristech, France); Isabelle Demeure (Telecom Paristech, France); Salma Ktari (TELECOM ParisTech, France)
 - SNOMC: An Overlay Multicast Protocol for Wireless Sensor Networks
Gerald Wagenknecht (University of Bern, Switzerland); Markus Anwander (University of Bern, Switzerland); Torsten Ingo Braun (University of Bern, Switzerland)
 - Non-cooperative RSU Deployment in Vehicular Networks
Ilario Filippini (Politecnico di Milano, Italy); Francesco Malandrino (Politecnico di Torino, Italy); György Dán (KTH, Royal Institute of Technology, Sweden); Matteo Cesana (Politecnico di Milano, Italy); Claudio E. Casetti (Politecnico di Torino, Italy); Ian Marsh (University of Oporto, Faculty of Electrical Engineering and Computers, Portugal)
- **11:00-12:30 Session 3: Fundamental Aspects**
 - DKM: Distributed k-Connectivity Maintenance in Wireless Sensor Networks
Piotr Szczytowski (Technical University of Darmstadt, Germany); Abdelmajid Khelil (Technische Universität Darmstadt, Germany); Neeraj Suri (Technical University of Darmstadt, Germany)
 - Stochastic Geometry based Jamming Games in Mobile Ad hoc Networks
Manjesh Kumar Hanawal (INRIA, Sophia Antipolis, France); Eitan Altman (INRIA, France)
 - Simulation of 802.11 PHY/MAC: The Quest for Accuracy and Efficiency
Michele Segata (University of Trento, Italy); Renato Lo Cigno (University of Trento, Italy)
- **12:30-16:30 Lunch break**
- **16:30-17:15 Coffee break and Poster/Demo exhibition**
 - Privacy in the Pervasive Era: A Distributed Firewall Approach
Leonardo Maccari (University of Trento, Italy); Renato Lo Cigno (University of Trento, Italy)
 - Future Mobile Network Management With Attractor Selection
Gen Motoyoshi (NEC Corporation, Japan); Naoki Wakamiya (Osaka University, Japan); Murata Masayuki (Osaka University, Japan)
 - A Risk-Aware Workload Scheduler to Support Secure and Efficient Collaborative Data Transfer in Mobile Communities
Sadia Saleem (The University of Manchester, United Kingdom); Ning Zhang (University of Manchester, United Kingdom)

- A Survey and Comparison Study on Weighting Algorithms for Access Network Selection
Lahby Mohamed (Faculté des sciences et techniques de mohammedia, Morocco); Charkaoui Leghris (FST Mohammedia, Morocco); Abdellah Adib (Faculté des Sciences et Techniques de Mohammedia, Morocco)
- Caching in Opportunistic Networks with Churn
Sanpetch Chupisanyarote (KTH, Royal Institute of Technology, Sweden); Sylvia Kouyoumdjieva (KTH, Royal Institute of Technology, Sweden); Olafur R Helgason (KTH, Royal Institute of Technology, Sweden); Gunnar Karlsson (KTH Royal Institute of Technology, Sweden)
- Demo - WiFi network residual bandwidth estimation: a prototype implementation
Andrea Ghittino (CSP, Italy); Nazario Di Maio (CSP, Italy); Domenico Di Tommaso (CSP, Italy)
- Demo - Towards Experimentation-Service duality within a Smart City scenario
Jose A Galache (University of Cantabria, Spain); Juan Santana (University of Cantabria, Spain); Veronica Gutierrez (University of Cantabria, Spain); Luis Sanchez (University of Cantabria, Spain); Pablo Sotres (University of Cantabria, Spain); Luis Muñoz (University of Cantabria, Spain)
- **17:15-18:45 Session 4: Special Session on Cognitive Radio and White Space**
 - A Dual-Radio Contention-Based Protocol for Paired Spectrum Access and TV White Space
Stefan Mangold (Disney Research, Switzerland); Thomas Gross (ETH Zurich, Switzerland)
 - Management of Opportunistic Networks through cognitive functionalities
Jens Gebert (Alcatel-Lucent Bell Labs, Germany); Andreas Georgakopoulos (University of Piraeus, Greece); Dimitrios Karvounas (University of Piraeus, Greece); Vera Stavroulaki (University of Piraeus, Greece); Panagiotis Demestichas (University of Piraeus, Greece)
 - Cog-Fi: A Cognitive Wi-Fi Channel Hopping Architecture for Urban MANETs
Brian Sung Chul Choi (University of California, Los Angeles, USA); Mario Gerla (University of California at Los Angeles, USA)
- **18:45-19:45 Session 5 (short papers): Architecture and Protocols**
 - Looking Beyond Green Cellular Networks
Antonio Capone (Politecnico di Milano, Italy); André Fonseca dos Santos (Bell Labs, Alcatel-Lucent, Germany); Ilario Filippini (Politecnico di Milano, Italy); Bernd Gloss (Bell Labs, Alcatel Lucent, Germany)
 - Can P2P Swarm Loading improve the robustness of 6LoWPAN data transfer?
Marcel Bosling (RWTH Aachen University, Germany); Torsten Redmann (RWTH Aachen University, Germany); Jean Tekam (RWTH Aachen University, Germany); Elias Weingärtner (RWTH Aachen University, Germany); Klaus Wehrle (RWTH Aachen University, Germany)
 - Towards Energy Consumption Evaluation of the SSL Handshake Protocol in Mobile Communications
Sophia Petridou (Aristotle University of Thessaloniki, Greece); Stylianos Basagiannis (Aristotle University of Thessaloniki, Greece)
 - Collaborative data retrieval using opportunistic networking
Giuseppe Corrente (Dipartimento di Informatica - Università di Torino, Italy); Rossano Gaeta (Università di Torino, Italy); Marco Grangetto (Università di Torino, Italy); Matteo Sereno (University of Torino, Italy)
- **20:00 Banquet**

Wednesday, January 11

- **8:30-10:00 Session 6: Mobility and Energy Efficiency Aspects**
 - Geo-CoMM: a Geo-Community based Mobility Model
Matteo Zignani (University of Milano, Italy)
 - Maximum Likelihood trajectory estimation of a mobile node from RSS measurements
Angelo Coluccia (University of Salento, Italy); Fabio Ricciato (Università del Salento, Italy)
 - Energy-Efficient Planning and Management of Cellular Networks
Luca Chiaraviglio (Politecnico di Torino, Italy); Delia Ciullo (Politecnico di Torino, Italy); George Koutitas (International Hellenic University, Greece); Michela Meo (Politecnico di Torino, Italy); Leandros Tassioulas (University of Thessaly, Greece)
- **10:00 -10:45 Coffee break and Poster/Demo exhibition**
 - Road Side Unit coverage extension for data dissemination in VANETs
Pierpaolo Salvo (University of Rome La Sapienza, Italy); Francesca Cuomo (University of Rome Sapienza, Italy); Andrea Baiocchi (University of Roma "La Sapienza", Italy); Andrea Bragagnini (Telecom Italia, Italy)
 - Demo - Modeling and Simulating ITS Applications with iTETRIS
Jerome Haerri (EURECOM)
 - SINR Base Station Placement and Mobile Association Games under Cooperation
Angelo Coluccia (University of Salento, Italy); Eitan Altman (INRIA, France)
 - Non-parametric Maximum Likelihood Estimation of Pulsed Interference on Wireless Links
Douglas Leith (Hamilton, Ireland); Brad W. Zarikoff (Hamilton Institute, Ireland)
 - On the effect of combining cooperative communication with sleep mode
Thomas Demoor (Ghent University, Belgium); Sergey Andreev (Tampere University of Technology, Finland); Koen De Turck (Ghent University, Belgium); Herwig Bruneel (Ghent University, Belgium); Dieter Fiems (Ghent University, Belgium)
 - The Effect of Variable Wake Up Time on the Utilization of Sleep Modes in Femtocell Mobile Access Networks
Willem Vereecken (Ghent University, Belgium); Ivaylo J. Haratcherev (Alcatel-Lucent, France); Margot Deruyck (Ghent University / IBBT, Belgium); Wout Joseph (Ghent University, Belgium); Mario Pickavet (Ghent University, Belgium); Luc Martens (Ghent University, Belgium); Piet Demeester (Ghent University, Belgium)
- **10:45 -12:15 Session 7: Special Session on Machine-to-Machine Inter-networking**
 - Traffic generation application for simulating online games and M2M applications via wireless networks
Dejan Drajić (Ericsson, Yugoslavia (defunct)); Srdjan Krco (Ericsson Serbia, Serbia); Igor A. Tomic (Ericsson, Yugoslavia (defunct)); Philipp Svoboda (Vienna University of Technology, Austria); Milica Popovic (Telekom Srbija, Serbia); Navid Nikaein (Eurecom, France); Nenad Zeljkovic (Telekom, Italy)
 - Towards Experimentation-Service duality within a Smart City scenario
Jose A Galache (University of Cantabria, Spain); Juan Santana (University of Cantabria, Spain); Veronica Gutierrez (University of Cantabria, Spain); Luis Sanchez (University of Cantabria, Spain); Pablo Sotres (University of Cantabria, Spain); Luis Muñoz (University of Cantabria, Spain)
 - Challenges and Implications of Using Ultrasonic Communications in Intra-body Area Networks

Laura Galluccio (University of Catania, Italy); Tommaso Melodia (State University of New York at Buffalo, USA); Sergio Palazzo (University of Catania, Italy); Giuseppe Enrico Santagati (University of Catania, Italy)

- **12:15-12:30 Closing remarks**

- **17:00- 19:00 Special session in memory of Prof. Fabio Neri**
 - **Wireless MAC Processors: Programming MAC Protocols on Commodity Hardware**
Giuseppe Bianchi (University of Roma Tor Vergata, Italy)

 - **Vehicular Communications in the Green City: Closing the Loop between Congestion Sensing, Pollution Control and Navigations**
Mario Gerla (UCLA, USA)

 - **Board-Level Optical Interconnections**
Peter van Daele (Ghent University/IMEC, Belgium)