



IEEE  
COMMUNICATIONS  
SOCIETY



TCCC



**The 8<sup>th</sup> International Conference on  
Wireless On-demand Network Systems and Services**

**January 26-28, 2011, Bardonecchia, Italy**

**Program**

**Wednesday, January 26**

**4:00 PM - 4:30 PM**

*Welcome reception*

**4:30 PM - 5:00 PM**

*Welcome Address by Chairs*

**5:00 PM - 6:00 PM**

*Keynote: Energy Efficient Wireless Internet Access*

Marco Ajmone Marsan (Politecnico di Torino, Italy)

**6:00 PM - 7:00 PM**

*Content-Centric Networking*

Chair: Hannes Hartenstein (University of Karlsruhe, Germany)

*On the Design of Content-Centric MANETs*

Matteo Varvello (Bell Labs, Alcatel-Lucent, USA); Ivica Rimac (Bell Labs, Alcatel-Lucent, USA); Uichin Lee (Bell Labs, Alcatel-Lucent, USA); Lloyd Greenwald (LGS Innovations / Bell Labs, USA); Volker Hilt (Bell Labs/Alcatel-Lucent, USA)

*PACS: Chopping and shuffling large contents for faster opportunistic dissemination*

Nadjet Belblidia (UPMC Sorbonne Universités, France); Marcelo Dias de Amorim (UPMC Sorbonne Universités, France); Luís Henrique M. K. Costa (Federal University of Rio de Janeiro, Brazil); Jeremie Leguay (Thales Communications, France); Vania Conan (Thales Architecture Framework Centre, France)

**7:00 PM - 7:30 PM**

***Challenges Talk***

*Massive Data Migration on Wheels*

Serge Fdida (University Pierre & Marie Curie, France); Promethee Spathis (LIP6 - University of Paris VI, France); Marcelo Dias de Amorim (UPMC Sorbonne Universités, France)

**7:30 PM**

***Dinner (@ Hotel des Geneys)***

## **Thursday, January 27**

**8:30 AM - 10:00 AM**

***Vehicular Networking***

Chair: Matteo Varvello (Bell Labs, Alcatel-Lucent, USA)

*Running Consistent, Parallel Experiments in Vehicular Environment*

Ian Ku (UCLA, USA); Jui-Ting Weng (University of California, Los Angeles, USA); Eugenio Giordano (University of California at Los Angeles, USA); Giovanni Pau (UCLA, USA); Mario Gerla (University of California at Los Angeles, USA)

*Enhancing in Vehicle Digital Maps via GPS Crowdsourcing*

Roberto Carisi (Università di Bologna, Italy); Eugenio Giordano (University of California at Los Angeles, USA); Giovanni Pau (UCLA, USA); Mario Gerla (University of California at Los Angeles, USA)

*Vehicular Safety Communication at Intersections: Buildings, Non-Line-Of-Sight and Representative Scenarios*

Thomas Mangel (BMW Group Research and Development, Germany); Friedrich Schweizer (BMW Group Research And Development, Germany); Timo Kosch (BMW, Germany); Hannes Hartenstein (University of Karlsruhe, Germany)

**10:00 AM - 10:30 AM**

***Coffee break***

**10:30 AM - 11:30 AM**

***Keynote: On Security and Energy-Efficiency in Wireless Sensor Networks***

Martina Zitterbart (Karlsruhe Institute of Technology, Germany)

**11:30 AM - 12:00 PM**

***Challenges Talk***

*Untethered Local Communications: From Wireless Access to Social Glue*

Renato Lo Cigno (University of Trento, Italy)

**12:00 PM - 4:00 PM**

***Lunch/ski break (on your own)***

**4:00 PM - 4:15 PM**

***Coffee break (with light meal provided)***

**4:15 PM - 5:15 PM**

***Poster Presentations 1***

*Virtualization of 802.11 Interfaces for Wireless Mesh Networks*

Yahya Al-Hazmi (University of Passau, Germany); Hermann de Meer (University of Passau, Germany)

*Energy-aware Resource Sharing with Mobile Devices*

Jochen Furthmüller (Karlsruhe Institute of Technology (KIT), Germany); Oliver P. Waldhorst (Karlsruhe Institute of Technology (KIT), Germany)

*Congestion Aware Forwarding in Delay Tolerant and Social Opportunistic Networks*

Milena Radenkovic (University of Nottingham, United Kingdom); Andrew Grundy (University of Nottingham, United Kingdom)

*TinyKey: A light-weight architecture for Wireless Sensor Networks securing real-world applications*

Roberto Doriguzzi Corin (CREATE-NET Research Center, Italy); Giovanni Russello (CREATE-NET, Italy); Elio Salvadori (Create-Net, Italy)

*Session mobility solution for client-based application migration scenarios*

Kim Højgaard-Hansen (Aalborg University, Denmark); Hans-Peter Schwefel (Forschungszentrum Telekommunikation Wien, Austria); Huan Cong Nguyen (Aalborg University, Denmark)

*A Computationally Inexpensive Empirical Model of IEEE 802.11p Radio Shadowing in Urban Environments*

Christoph Sommer (University of Erlangen, Germany); David Eckhoff (University of Erlangen, Germany); Reinhard German (University of Erlangen, Germany); Falko Dressler (University of Erlangen, Germany)

**5:15 PM - 6:45 PM**

***Special Session: Privacy and Security in Mobile Networks***

organized by Frank Kargl (University of Twente, Netherlands)

Chair: Frank Kargl (University of Twente & Universität Ulm, The Netherlands)

*Privacy Implications of In-Network Aggregation Mechanisms for VANETs*

Stefan Dietzel (University of Twente, The Netherlands)

*Adaptive Message Authentication for Multi-Hop Networks*

Nikodin Ristanovic (EPFL, Switzerland); Panagiotis (Panos) Papadimitratos (KTH, Sweden); George Theodorakopoulos (EPFL, Switzerland); Jean-Pierre Hubaux (EPFL, Switzerland); Jean-Yves Le Boudec (EPFL, Switzerland)

*Territorial Privacy in Ubiquitous Computing*

Bastian Könings (Ulm University, Germany); Florian Schaub (Ulm University, Germany)

**7:00 PM**

***Banquet dinner (bus leaves at 7pm for the first group and at 8pm for the second group)***

## **Friday, January 28**

**8:30 AM - 10:00 AM**

***Special Session: Channel and Network Conditions in Vehicular Environments***

organized by Hannes Hartenstein (Karlsruhe Institute of Technology, Germany)

Chair: Mario Gerla (University of California at Los Angeles, USA)

*Accurate Knowledge of Radio Channel and Network Conditions - When Does it Matter?*

Natalya An (Karlsruhe Institute of Technology (KIT), Germany); Jens Mittag (Universität Karlsruhe (TH), Germany); Felix Schmidt-Eisenlohr (Karlsruhe Institute of Technology (KIT), Germany); Marc Torrent-Moreno (Barcelona Digital Centre Tecnològic, Spain)

*A survey of V2V channel modeling for VANET simulations*

Hervé Boeglen (Laboratoire MIPS-GRTC, France); Benoit Hilt (University of Haute Alsace, France); Pascal Lorenz (University of Haute Alsace, France); Jonathan Ledy (Université de Poitiers, France); Anne-Marie Poussard (Université de Poitiers, France); Rodolphe Vauzelle (University of Poitiers, France)

*On the Importance of Application Requirements in Cooperative Vehicular Communications*

Miguel Sepulcre (University Miguel Hernandez of Elche, Spain); Javier Gozalvez (Universidad Miguel Hernandez de Elche, Spain)

**10:00 AM - 10:30 AM**

***Coffee break***

**10:30 AM - 11:00 AM**

***Challenges Talk***

*Challenge: Network-Aware Human Traffic Adaptation*

Giuseppe Bianchi (University of Rome "Tor Vergata", Italy); Silvia Giordano (University of Applied Science - SUPSI, Switzerland)

**11:00 AM - 12:00 PM**

***Poster Presentations 2***

*Towards a Secure and Seamless Host Mobility for the real world*

Panagiotis Georgopoulos (Lancaster University, United Kingdom); Ben McCarthy (Lancaster University, United Kingdom); Christopher Edwards (Lancaster University, United Kingdom)

*A Random Linear Coding Scheme with Perimeter Data Gathering for Wireless Sensor Networks*

Cedomir Stefanović (University of Novi Sad, Serbia); Dejan Vukobratović (University of Strathclyde, United Kingdom); Vladimir Crnojević (Novi Sad, Serbia); Vladimir Stankovic (University of Strathclyde, United Kingdom)

*Monitoring and measuring wireless network performance in the presence of middleboxes*

Alessio Botta (University of Napoli Federico II, Italy); Antonio Pescapé (University of Napoli Federico II, Italy)

*A New Metric for Admission Control in Multi-Rate 802.11 WLANs*

Claudio Rossi (Politecnico di Torino, Italy); Claudio E. Casetti (Politecnico di Torino, Italy); Carla-Fabiana Chiasserini (Politecnico di Torino, Italy); Gianni Rondini (Politecnico di Torino, Italy)

*Mobile Sensing to Suggest Customized Tours to Visitors in Museums*

Sofia Ceppi (Politecnico di Milano, Italy); Antonio Capone (Politecnico di Milano, Italy)

**12:00 PM - 4:00 PM**

***Lunch/ski break (on your own)***

**4:00 PM - 4:15 PM**

***Coffee break (with light meal provided)***

**4:30 PM - 6:00 PM**

***Sensor Networks***

Chair: Renato Lo Cigno (University of Trento, Italy)

*Enabling Flexible Medium Access Design for Wireless Sensor Networks*

Junaid Ansari (RWTH Aachen University, Germany); Xi Zhang (RWTH Aachen University, Germany); Obaid Salikeen (RWTH Aachen University, Germany); Petri Mähönen (RWTH Aachen University, Germany)

*Tree-Based Routing Protocol for Mobile Wireless Sensor Networks*

Luca Borsani (Politecnico di Milano, Italy); Sergio Guglielmi (Politecnico di Milano, Italy); Alessandro E. C. Redondi (Politecnico di Milano, Italy); Matteo Cesana (Politecnico di Milano, Italy)

*Dynamic Sink Location Update Scope Control Mechanism for Mobile Sink Wireless Sensor Networks*

Yasir Faheem (Université Paris 13, France); Saadi Boudjit (University of Paris 13, France); Ken Chen (University of Paris, France)

**6:00 PM - 7:30 PM**

***Wireless Networks***

Chair: Christoph Sommer (University of Erlangen, Germany)

*WiFiX+: A Multicast Solution for 802.11-based Wireless Mesh Networks*

Rui Lopes Campos (INESC Porto, Portugal); Carlos Oliveira (INESC Porto, Portugal); José Ruela (INESC Porto, Portugal)

*Value of information exposed: wireless networking solutions to the parking search problem*

Evangelia Kokolaki (University of Athens, Greece); Merkourios Karaliopoulos (National and Kapodistrian University of Athens, Greece); Ioannis Stavrakakis (National and Kapodistrian University of Athens, Greece)

*Impact of Radio Range on Contact Characteristics in Bus-based Delay Tolerant Networks*

Michael Doering (Technische Universität Braunschweig, Germany); Wolf-Bastian Pöttner (Technische Universität Braunschweig, Germany); Tobias Pögel (Technische Universität Braunschweig, Germany); Lars C Wolf (Technische Universität Braunschweig, Germany)

**7:30 PM**

***Dinner (@ Hotel des Geneys)***