

# WONS'08 Program

Wednesday, January 23<sup>rd</sup>

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17.30 – 19.30

## Special Session: Underwater Networking

### Underwater Acoustic Communications: Design Considerations on the Physical Layer

*Milica Stojanovic (Massachusetts Institute of Technology)*

### Towards Optimal Broadcasting Policies for HARQ based on Fountain Codes in Underwater Networks

*Paolo Casari, Michele Rossi, Michele Zorzi (Univ. of Padova)*

### Sewage Grid: Drifting Sensors that Monitor the Wastewater Collection System

*Jungsoo Lim, Mario Gerla (Univ. of California at Los Angeles)*

### Adaptive Routing in Underwater Delay/Disruption Tolerant Sensor Networks

*Zheng Guo (Univ. of Connecticut), Gioele Colombi (Univ. of Milano),  
Bing Wang (Univ. of Connecticut), Jun-Hong Cui (Univ. of Connecticut),  
Dario Maggiorini (Univ. of Milano), Gian Rossi (Univ. of Milano)*

20.00

Dinner

Thursday, January 24<sup>th</sup>

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08.30 – 09.30

## Session: Ad Hoc Networks

### Modeling and Analysis of Two-Flow Interactions in Wireless Networks

*Saqib Razak, Vinay Kolar, Nael Abu-Ghazaleh  
(State Univ. of New York, Binghamton)*

### Efficient Assessment of Available Bandwidth During DSR Route Discovery

*Stefan Penz, Alexander Achterfeld (RWTH Aachen Univ.)*

09.30 – 10.00

Coffee break

10.00 – 11.00

Session: Admission and Authentication

**Fuzzy Admission Control with Similarity Evaluation for VoW-LAN with QoS Support**

*Davide Bacciu, Alessio Botta, Leonardo Badia  
(IMT Lucca Institute for Advanced Studies)*

**Reducing the User Authentication Cost in Next Generation Networks**

*Christoforos Ntantogian, Christos Xenakis, Ioannis Stavrakakis  
(Univ. of Athens)*

11.00 – 12.20

Short papers session

**FRED - An Application for a Real-Life Large Scale Multihop Ad Hoc Network**

*Nils Glombitza, Martin Lipphardt, Horst Hellbrück, Stefan Fischer  
(Univ. of Lübeck)*

**VoIP Packet Delay in Single-Hop Ad-Hoc IEEE 802.11 Networks**

*Jaume Barceló, Boris Bellalta, Cano Cristina, Anna Sfairopoulou  
(Univ. Pompeu Fabra)*

**A Realistic Battlefield Model for the Evaluation of MANET**

*Adrian Pullin (Liverpool Hope Univ.),  
Colin Pattinson (Leeds Metropolitan Univ.)*

**AIS-Lib: An AIS Library for Ad Hoc and Sensor Wireless Networks**

*Martin Drozda, Sebastian Schildt, Sven Schaust, Sandra Einhellinger,  
Helena Szczerbicka (Leibniz Univ. of Hannover)*

16.30 – 17.00

Coffee break

17.00 – 17.30

Keynote speech

**Cooperation of Mobile Devices**

*Frank H.P. Fitzek (Aalborg University)*

17.30 – 18.00

Session: Energy Awareness

**Performance Evaluation of IEEE 802.15.4 LR-WPAN for Industrial Applications**

*Feng Chen, Nan Wang, Reinhard German, Falko Dressler  
(Univ. of Erlangen-Nuremberg)*

18.00 – 19.00

Short Papers Session

**Towards a Realistic Energy Model for Wireless Sensor Networks**

*Simon Kellner, Mario Pink, Detlev Meier, Erik-Oliver Bläß  
(Univ. of Karlsruhe)*

**Analysis of the Authenticated Query Flooding Protocol by Probabilistic Means**

*Frank Werner, Peter Schmitt (Univ. of Karlsruhe)*

**Increasing Throughput for WiseMAC**

*Philipp Hurni, Torsten Braun (Univ. of Bern)*

19.00 – 19.30

Keynote speech

**Smart Dust & Cellular Networks –  
Service opportunities for Mobile Network Operators**

*Hendrik Berndt (DoCoMo Communications Laboratories Europe)*

20.00

Conference banquet

**Friday, January 25<sup>th</sup>**

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08.30 – 09.30

Session: Mesh Networks

**Route Stabilization in Infrastructured Wireless Mesh Networks:  
an OLSRD Based Solution**

*Gianni Costanzi (Univ. di Trento), Andrea Ghittino, Stefano Annesi (CSP),  
Renato Lo Cigno (Univ. di Trento)*

**Performance Evaluation of Disjoint Path Routing for Multi-interface Multi-channel Wireless Mesh Network**

*Koji Tsubouchi, Yutaka Fukuda, Takeshi Ikenaga, Yuji Oie  
(Kyushu Institute of Technology)*

**09.30 – 10.00**

Coffee break

**10.00 – 12.00**

**Industry Panel: Wireless Mesh Networking – An industry perspective**

**Organizer: Bahar Sadeghi**

**16.30 – 17.00**

Coffee break

**17.00 – 18.00**

**Session: Broadcast and Multicast in Ad Hoc Networks**

**Cooperative Synchronous Broadcasting in Infrastructure-to-Vehicles Networks**

*Fabio Soldo (Politecnico di Torino), Renato Lo Cigno (Univ. di Trento),  
Mario Gerla (Univ. of California at Los Angeles)*

**Application-Layer Multicast in MANETs: To Broadcast or not to Broadcast?**

*Peter Baumung (Univ. of Karlsruhe)*

**18.00 – 19.00**

**Session: Cooperation and DTNs**

**On the effect of cooperation in wireless content distribution**

*Ólafur Helgason, Gunnar Karlsson (KTH, Royal Institute of Technology)*

**Performance limits of real delay tolerant networks**

*Alessandro Di Nicolò, Paolo Giaccone (Politecnico di Torino)*

**19.30**

Dinner