

**EUNICE 2009**

**Barcelona, September, 7-9**



**EUNICE 2009**  
**THE INTERNET OF THE FUTURE**

Monday 7th - Wednesday 9th, September 2009



NeTSresearchgroup

BAMPLA



UNIVERSITAT  
POMPEU FABRA



	Monday September 7 <sup>th</sup>	Tuesday September 8 <sup>th</sup>	Wednesday September 9 <sup>th</sup>
9-9:30h	Registration	<b>Keynote: Hugo Zaragoza (Yahoo!):</b> Semantic Search, Automatic Web Content Understanding, and their impact on the WWW User Experience.	<b>Keynote: Michela Meo (Politecnico di Torino):</b> Green networking: improving networks energy efficiency
9:30-10:00h	<b>Opening Session</b> <b>Room 52.023.</b>	<b>Room 52.023</b>	<b>Room 52.023</b>
10:00-11:15h	<b>Keynote: Ángel Lozano (Universitat Pompeu Fabra):</b> Wireless Communications: Chronicle of a Technological Revolution. <b>Room 52.023</b>	<b>Session 2.1 – Future Internet Architectures and Models.</b> <b>Chair: Ralf Lehnert</b> <b>Room 52.023</b> - The Metalist Model: a Simple and Extensible Information Model for the Future Internet - On Designing for Tussle: Future Internet in Retrospect - NIT: A New Internet Topology Generator	<b>Session 3.1 -- Disruptive technologies for future services.</b> <b>Chair: Bilhanan Silverajan</b> <b>Room 52.023</b> - Primary Transmitter Discovery based on Image Processing in Cognitive Radio - A Flexible Framework for Complete Session Mobility and its Implementation - A Model-driven Approach for Telecommunications Network Services Definition
11:15-11:45h	Coffee Break – Room 55.TUNNEL	Coffee Break - Room 55.TUNNEL	Coffee Break - Room 55.TUNNEL
11:45-13:00h	<b>Session 1.1 – Traffic Engineering for the Internet.</b> <b>Chair: Aiko Pras</b> <b>Room 52.023</b> - Quantifying the Uncertainty in Measurements for MBAC - Ring Flushing for Reduced Overload in Spanning Tree Protocol Controlled Ethernet Networks - A Distributed Exact Solution to Compute Inter-Domain Multi-Constrained Paths	<b>Session 2.2 -- Pervasive Wireless Networks and Protocols.</b> <b>Chair: Paul Kühn</b> <b>Room 52.023</b> - Resource Allocation in MIMO-OFDMA Wireless Systems Based on Linearly Precoded Orthogonal Space-Time Block Codes - On the Influence of Packet Scheduling on the Trade-Off Between System Spectral Efficiency and User Fairness in OFDMA-Based Networks - RSSI-based Forwarding (RBF) for Multihop Wireless Sensor Networks	<b>Session 3.2 -- Innovative Algorithms for Network-Related Problems.</b> <b>Chair: Yvon Kermarrec</b> <b>Room 52.023</b> - A Pipelined IP Address Lookup Module for 100 Gbps Line Rates and Beyond - Improved Multicast Protection Algorithms Using Shared Links - Implementation and Evaluation of the Enhanced Header Compression (IPHC) for 6LoWPAN
13:00-14:00h	Lunch - Room 55.TUNNEL	Lunch - Room 55.TUNNEL (Presentation of Eunice 2010)	<b>Closing Session. Room 52.023</b>
14:00-15:15h	<b>Session 1.2 – P2P and multimedia.</b> <b>Chair: Finn Arve Aagesen</b> <b>Room 52.023</b> - Classification of P2P and HTTP Using Specific Protocol Characteristics - Network awareness in P2P-TV applications - Enhancing Progressive Encryption for Scalable Video Streams	<b>Session 2.3 – Traffic Analysis.</b> <b>Chair: Robert Szabo</b> <b>Room 52.023</b> - Detecting spam at the network level - Consistency Analysis of Network Traffic Repositories	
15:15-15:30h	Coffee Break - Room 55.TUNNEL	Coffee Break - Room 55.TUNNEL	
15:30-17:00h	<b>Session 1.3 – Advanced Applications for Next Generation Networks.</b> <b>Chair: David Rincón</b> <b>Room 52.023</b> - Characterizing User Groups in Online Social Networks - Route Prediction on Tracking Data to Location-Based Services - Context aware Programmable Trackers for the Next Generation Internet	<b>Poster Session</b> <b>Room 55.TUNNEL</b>	
17:00- 20:00h	<b>Social Event: Bike Tour around Barcelona</b> <b>Eunice General Assembly (GA members only). 55.430</b>	<b>Social Event: Modernism Walking Tour</b>	
20:30 h		<b>EUNICE Banquet: ATTIC Restaurant. Ramblas 120.-</b> 08002 Barcelona	

## Monday, Sep 7

11:45 AM - 1:00 PM

### **1.1: Traffic Engineering for the Internet**

Room: 52.023 Chair: Aiko Pras (University of Twente, The Netherlands)

#### ***Quantifying the Uncertainty in Measurements for MBAC***

Anne K Nevin (Norwegian University of Science and Technology, Norway); Peder Emstad (Norwegian University of Science and Technology, Norway); Guoqiang Hu (Norwegian University of Science and Technology, Norway); Yuming Jiang (Norwegian University of Science and Technology (NTNU), Norway)

#### ***Ring Flushing for Reduced Overload in Spanning Tree Protocol Controlled Ethernet Networks***

Daniel Horvath (Budapest University of Technology and Economics, Hungary); Gabor Kapitany (Budapest University of Technology and Economics, Hungary); Sandor Plosz (Budapest University of Technology and Economics, Hungary); Istvan Moldovan (BME-TMIT, Hungary); Csaba Lukovszki (Budapest University of Technology and Economics, Hungary)

#### ***A Distributed Exact Solution to Compute Inter-Domain Multi-Constrained Paths***

Gilles Bertrand (Institut Telecom; Telecom Bretagne, France); Samer Lahoud (IRISA - Université de Rennes 1, France); Geraldine Texier (Institut TELECOM ; TELECOM Bretagne, France); Miklos Molnar (INSA Rennes / IRISA, France)

2:00 PM - 3:15 PM

### **1.2: P2P and multimedia**

Room: 52.023 Chair: Finn Arve Agesen (NTNU, Norway)

#### ***Classification of P2P and HTTP Using Specific Protocol Characteristics***

John Hurley (Queens University of Belfast, United Kingdom)

#### ***Network awareness in P2P-TV applications***

Stefano Traverso (Politecnico di Torino, Italy); Emilio Leonardi (Politecnico di Torino, Italy); Marco Mellia (Politecnico di Torino, Italy); Michela Meo (Politecnico di Torino, Italy)

#### ***Enhancing Progressive Encryption for Scalable Video Streams***

Viktor Gergely (Budapest University of Technology and Economics, Hungary); Gabor Feher (Budapest University of Technology and Economics, Hungary)

3:30 PM - 5:00 PM

### **1.3: Advanced Applications for Next Generation Networks**

Room: 52.023 Chair: David Rincón (Universitat Politecnica de Catalunya, Spain)

#### ***Characterizing User Groups in Online Social Networks***

László Gyarmati (Budapest University of Technology and Economics, Hungary); Tuan Trinh Anh (Budapest University of Technology and Economics, Hungary)

#### ***Route Prediction on Tracking Data to Location-Based Services***

Attila István Petróczi (Budapest University of Technology and Economics, Hungary); Csaba Gáspár-Papanek (Budapest University of Technology and Economics, Hungary)

#### ***Context aware Programmable Trackers for the Next Generation Internet***

Pedro Sousa (University of Minho, Portugal)

## Tuesday, Sep 8

10:00 AM - 11:15 AM

### **2.1: Future Internet Architectures and Models**

Room: 52.023 Chair: Ralf J. Lehnert (Technische Universitaet Dresden (Dresden University of Technology, Germany))

#### ***The Metalist Model: a Simple and Extensible Information Model for the Future Internet***

Eric Renault (TELECOM & Management SudParis (ex GET-INT), France); Djamel Zeghlache (Institut TELECOM, TELECOM SudParis, France)

#### ***On Designing for Tussle: Future Internet in Retrospect***

Alexandros Kostopoulos (Athens University of Economics and Business, Greece); Costas Kalogiros (Athens University of Economics and Business, Greece); Alan Ford (Roke Manor Research, United Kingdom)

#### ***NIT: A New Internet Topology Generator***

Cristina D. Murta (Federal Center of Technological Education, CEFET-MG, Brazil); Joylan Maciel (União Dinâmica de Faculdades Cataratas - UDC, Brazil)

11:45 AM - 1:00 PM

### **2.2: Pervasive Wireless Networks and Protocols**

Room: 52.023 Chair: Paul J. Kuehn (University of Stuttgart, Germany)

#### ***Resource Allocation in MIMO-OFDMA Wireless Systems Based on Linearly Precoded Orthogonal Space-Time Block Codes***

Borja Dañobeitia (University of the Balearic Islands, Spain); Guillem Femenias (Universitat de les Illes Balears, Spain); Felip Riera-Palou (University of the Balearic Islands, Spain)

#### ***On the Influence of Packet Scheduling on the Trade-Off Between System Spectral Efficiency and User Fairness in OFDMA-Based Networks***

Emanuel B. Rodrigues (Technical University of Catalonia - UPC, Spain); Michael Walker (Università degli Studi di Padova, Italy); Ferran Casadevall (University Polyt. Catal., Spain)

#### ***RSSI-based Forwarding (RBF) for Multihop Wireless Sensor Networks***

Azlan Awang (TELECOM Bretagne, France); Xavier Lagrange (TELECOM Bretagne, France); David Ros (TELECOM Bretagne, France)

2:00 PM - 3:15 PM

### **2.3: Traffic Analysis**

Room: 52.023 Chair: Robert Szabo (Budapest University of Technology and Economics, Hungary)

#### ***Detecting spam at the network level***

Anna Sperotto (Twente University, The Netherlands); Gert Vlieg (University of Twente, The Netherlands); Ramin Sadre (University of Twente, The Netherlands); Aiko Pras (University of Twente, The Netherlands)

#### ***Consistency Analysis of Network Traffic Repositories***

Elmer Lastdrager (University of Twente, The Netherlands); Aiko Pras (University of Twente, The Netherlands)

3:30 PM - 5:00 PM

## Poster Session

Room: 55.TUNNEL

### ***A joint MAC/Routing cross-layer approach to the Collective QoS in WSN***

Jelena Skulic (University of Belgrade, Serbia); Boris Bellalta (Universitat Pompeu Fabra, Spain); Cristina Cano (Universitat Pompeu Fabra, Spain)

### ***Tuning the EDCA best-effort TXOP parameter***

Boris Bellalta (Universitat Pompeu Fabra, Spain); Jaume Barcelo (Universitat Pompeu Fabra, Spain); Andres Cisneros (Universitat Pompeu Fabra, Spain); Jose Luis Sanchez (Universitat Pompeu Fabra, Spain); Miquel Oliver (Pompeu Fabra University, Spain)

### ***An improved IMS authentication mechanism and its cost analysis***

Davide Proserpio (Universidad Carlos III de Madrid, Spain); Fabio Sanvido (Universidad Carlos III de Madrid, Spain); Daniel Diaz-Sanchez (Universidad Carlos III de Madrid, Spain); Florina Almenares (Universidad Carlos III de Madrid, Spain); Andres Marin (University Carlos III of Madrid, Spain)

### ***Minimizing Average Transmission Cost in Modeling Two-Level Hierarchical Network***

Chia-Cheng Hu (Naval Academy, Taiwan)

### ***A Dynamic Non-cooperative Game Approach for Competitive Spectrum Sharing in Wireless Networks***

Omar Raouf (Brunel University, United Kingdom)

### ***Anemone: Bringing IPv6 everywhere***

Benoit Le Texier (Telecom Bretagne, France); Nicolas Montavont (Institut Telecom / Telecom Bretagne, France); Tanguy Ropitault (ENST Bretagne, France); Bruno Stevant (Telecom Bretagne, France); Laszlo Bokor (Budapest University of Technology and Economics, Hungary)

### ***A Standard for Categorization Based Content Screening***

Johan Zuidweg (Universitat Pompeu Fabra, Spain)

### ***Distributed Malware Detection***

Peter Kenyeres (Budapest University of Technology and Economics, Hungary); Attila Szentgyörgyi (Budapest University of Technology and Economics, Hungary); Tamás Mészáros (Budapest University of Technology and Economics, Hungary); Gabor Feher (Budapest University of Technology and Economics, Hungary)

### ***MPLS-based local protection in ad-hoc networks***

Gerson Rodríguez de los Santos López (Universidad Carlos III de Madrid, Spain); Isaac Seoane (Universidad Carlos III Madrid, Spain); D. Larrabeiti (Universidad Carlos III de Madrid, Spain)

### ***Use of P2PSIP as signaling protocol in a real-time communication test bed***

Miquel Oliver (Pompeu Fabra University, Spain); Elias Baixas (Universitat Pompeu Fabra, Spain); Jorge Infante (UPF, Spain)

### ***Study Progress Visualized in a Web Portal***

Philip Hoyer (Karlsruhe Institute of Technology (KIT), Germany); Stefan Link (Karlsruhe Institute of Technology (KIT), Germany); Michael Gebhart (Karlsruhe Institute of Technology (KIT), Germany); Ingo Pansa (Karlsruhe Institute of Technology (KIT), Germany); Sebastian Abeck (Universität Karlsruhe (TH), Germany)

### ***A Generalized Seasonal Persistent Model for Video Traffic***

Piotr Zuraniewski (AGH University of Science and Technology, Poland); David Rincón (Universitat Politècnica de Catalunya, Spain)

### ***Delivering Continuous Service to Subscribers on the Move in Mobile WiMAX Networks***

Natalia Vassileva (Technical University of Catalonia (UPC), Spain); Yevgeni Koucheryavy (Tampere University of Technology, Finland); Francisco Barcelo-Arroyo (Universitat Politècnica de Catalunya (UPC), Spain)

## Wednesday, Sep 9

10:00 AM - 11:15 AM

### **3.1: Disruptive technologies for future services**

Room: 52.023 Chair: Bilhanan Silverajan (Tampere University of Technology, Finland)

#### **Primary Transmitter Discovery based on Image Processing in Cognitive Radio**

Liliana Bolea (Universidad Politecnica de Catalunya, Spain); Jordi Perez-Romero (Universitat Politècnica de Catalunya, Spain); Ramon Agusti (Universitat Politècnica de Catalunya, Spain); Oriol Sallent (Universitat Politècnica de Catalunya, Spain)

#### **A Flexible Framework for Complete Session Mobility and its Implementation**

Marc Barisch (University of Stuttgart, Germany); Jochen Kögel (University of Stuttgart, Germany); Sebastian Meier (University of Stuttgart, Germany)

#### **A Model-driven Approach for Telecommunications Network Services Definition**

Vanea Chiprianov (Telecom Bretagne, France); Yvon Kermarrec (ENSTB, France)

11:45 AM - 1:00 PM

### **3.2: Innovative Algorithms for Network-Related Problems**

Room: 52.023 Chair: Yvon Kermarrec (ENSTB, France)

#### **A Pipelined IP Address Lookup Module for 100 Gbps Line Rates and Beyond**

Domenic Teuchert (University of Stuttgart, Germany); Simon Hauger (University of Stuttgart, Germany)

#### **Improved Multicast Protection Algorithms Using Shared Links**

Samer Sulaiman (TU Dresden, Germany); Ralf J. Lehnert (Technische Universität Dresden (Dresden University of Technology, Germany)

#### **Implementation and Evaluation of the Enhanced Header Compression (IPHC) for 6LoWPAN**

Alessandro Ludovici (Universitat Politècnica de Catalunya, Spain); Anna Calveras (Universidad Politecnica de Catalunya (UPC), Spain); Marisa Catalan (Technical University of Catalonia (UPC), Spain); Carles Gomez (UPC, Spain); Josep Paradells (UPC, Spain)

**EUNICE 2009. Barcelona, 7-9th September. Universitat Pompeu Fabra-Universitat Politècnica de Catalunya  
C/ Roc Boronat, 138, 08018 Barcelona**

**Some useful information**

**EUNICE Rooms**

- Key note and oral presentations will be held in **52.023 room** (behind the lifts), on the main floor of the Roc Boronat building at UPF.
- Poster session as well as coffee breaks and lunch at **55.TUNNEL** place on the basement -2 floor of Roc Boronat building connecting Tanger building.
- The General Assembly will be in 55.430 (Tanger building, fourth floor).

**WiFi Acces Instructions:**

- If you belong to one of the institutes of the Eduroam network you can still use it here with your username and password.
- The other option is the WiFi Network of the UPF (ssid: UPF) with username: u47199 and password: eunice09

**EUNICE 2009 Best paper award** may be delivered in any session during EUNICE 2009.

**Next EUNICE event 2010** will be announced on Tuesday during the lunch

**Chairs and speakers** will meet during the coffee break/lunch right before the session at the registration desk

**EUNICE mailing list:** [eunice09@llista.upf.edu](mailto:eunice09@llista.upf.edu)

**Social Activities**

**Social Event on Monday: Bike Tour**

- The tour is set on Monday from 5.15pm-8pm
- Round tour, starting and ending at UPF
- Wear comfortable clothing for riding a bike
- There will be two guides per 20-people group will providing English explanations
- Ride safely, following guide instructions. No medical insurance contracted.

**EUNICE Banquet** is at the ATTIC Restaurant, located in the famous Ramblas of Barcelona ([Ramblas 120](#)). Please select your menu choice (meat, fish or veggie) while registering. For those not participating on the walking tour the transportation is on your own.

How to reach ATTIC from UPF: From Glories metro station next to the UPF, take the red metro line (L1) and get off at metro station Catalunya. From there is only 100 metres walking. See also following map.

**Social Event on Tuesday: Barcelona Walking Tour "Modernisme".**

- Starting at 6pm "Casa de les Punxes", [Diagonal 416](#)
- Ending at 8.30pm "Restaurant ATTIC" Ramblas 120.
- Map with the route is given to all participants by the organizers of the tour before they start.
- Further instructions on how to get there will be provided during conference.



**Walking Tour Starting Point**

**Metro Catalunya**

**Restaurant Attic - EUNICE Banquete**

**Hotel Amrey**

**Hotel Silken**

**UPF Building - EUNICE Venue**

**Metro Glories**

**Hotel Glories**

**Hotel Icaria**

**Residencia Campus del Mar**