

## Tuesday, October 10

08:30 - 13:00 <b>Registration</b>		
08:30 - 09:00 <b>Opening Ceremony (VENETO)</b>		
09:30 - 10:30 <b>Keynote Speaker: (VENETO)</b>		
<b>VENETO</b>	<b>BARBERINI</b>	<b>TREVI</b>
10:30 - 11:00 <b>Coffee Break</b>		
11:00 - 12:30 <b>M1</b>	11:00 - 12:30 <b>M2</b>	11:00 - 12:30 <b>W1</b>
12:45 - 14:00 <b>Lunch</b>		
14:00 - 15:30 <b>M3</b>	14:00 - 15:30 <b>M4</b>	14:00 - 15:30 <b>W2</b>
15:30 - 16:00 <b>Coffee Break</b>		
16:00 - 17:30 <b>3W</b>	16:00 - 17:30 <b>G(3)</b>	16:00 - 17:30 <b>W3</b>
20:00 <b>Conference Banquet</b>		

When not indicated between brackets it is 4 papers. i.e., M1 = 4 papers of WiMob WNMN or G(3) = 3 papers of GSCN or 3W 3 papers of WC

### Legend:

Workshops: **E**: EN4PPDER – **H**: eHPWAS – **N**: SEUNet – **S**: STWiMob – **C**: CWN – **P**: PerCAM

Main Conference: **U**: WiMob UCSA track – **W**: WiMob WC track – **M**: WiMob WNMN track –

**G**: WiMob GSCN track – **Se**: WiMob SWMN track

Rooms for sessions: VENETO, BARBERINI, TREVI, SISTINA

General Session Keynote Talks: VENETO

# Wednesday, October 11

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09:30 - 10:30 <b>Keynote Speaker: (VENETO)</b>		
<b>VENETO</b>	<b>BARBERINI</b>	<b>TREVI</b>
10:30 - 11:00 <b>Coffee Break</b>		
11:00 - 12:30 <b>M5</b>	11:00 - 12:30 <b>Se1</b>	11:00 - 12:30 <b>U1</b>
12:45 - 14:00 <b>Lunch</b>		
14:00 - 15:30 <b>M6 (-1 on 9th)</b>	14:00 - 15:30 <b>Se2</b>	14:00 - 15:30 <b>U2</b>

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# Tuesday, October 10

09:30 – 10:30

**Room:** VENETO

## **Keynote1: 5G and the Evolution of the Automotive Sector**

Dr. Stefano Sorrentino, Ericsson Research Stockholm, Sweden

11:00 – 12:30

**Room:** VENETO

## **M1: Energy Efficiency in Wireless and Mobile Networks**

### **An Energy Efficient Optimum Shared Cell Scheduling for TSCH Networks**

Baver Ozceylan and Berk Unlu (Middle East Technical University, Turkey); Buyurman Baykal (Middle East Technical University & Havelsan Inc., Turkey)

### **Optimize Wireless Networks for Energy Saving by Distributed Computation of Čech Complex**

Ngoc Khuyen Le and Anaïs Vergne (Telecom ParisTech, France); Philippe Martins (Telecom Paristech, France); Laurent Decreusefond (Telecom ParisTech & LTCl, France)

### **Energy-Efficient Massive Cellular IoT Shared Spectrum Access via Mobile Data Aggregators**

Ghaith Hattab (University of California, Los Angeles, USA); Danijela Cabric (University of California Los Angeles, USA)

### **Singer Cyclic Difference Sets for an Energy-Efficient Joining Scheme**

Elodie Morin (Université Grenoble Alpes & UJF, France); Mickael Maman (CEA-Leti Minatec Campus, France); Roberto Guizzetti (STMicroelectronics, France); Andrzej Duda (Grenoble Institute of Technology, France)

**Room:** BARBERINI

## **M2: LoRa Networks**

### **Evaluating LoRa Energy Efficiency for Adaptive Networks: From Star to Mesh Topologies**

Moises Nunez Ochoa (CEA-LETI Minatec Campus, France); Arturo Guizar (CEA-LETI Minatec Campus & Inria, France); Mickael Maman (CEA-Leti Minatec Campus, France); Andrzej Duda (Grenoble Institute of Technology, France)

### **EXPLoRa: EXTending the Performance of LoRa by suitable spreading factor allocations**

Francesca Cuomo (University of Rome Sapienza, Italy); Manuel Campo (Sapienza, Italy); Alberto Caponi (University of Rome "Tor Vergata" & CNIT, Italy); Giuseppe Bianchi (University of Rome "Tor Vergata", Italy); Giampaolo Rossini and Patrizio Pisani (Unidata SpA, Italy)

### **Investigating interference between LoRa and IEEE 802.15.4g networks**

Charalampos Orfanidis and Laura Marie Feeney (Uppsala University, Sweden); Martin Jacobsson (KTH Royal Institute of Technology & Uppsala University, Sweden); Per Gunningberg (Uppsala University, Sweden)

### **Enabling RPL multihop communications based on LoRa**

Benjamin Sartori (Vrije Universiteit Brussel (VUB), Belgium); Maite Bezunartea (Vrije Universiteit Brussel & Imec, Belgium); Steffen Thielemans and An Braeken (Vrije Universiteit Brussel, Belgium); Kris Steenhaut (Vrije Universiteit Brussel & Imec, Belgium)

**Room: TREVI**

**W1: Performance evaluation of wireless communication systems**

**Capacity Analysis of Two-Tier Networks with MIMO Cognitive Small Cells in Nagakami-m Fading**

Thi My Chinh Chu and Hans-Juergen Zepernick (Blekinge Institute of Technology, Sweden)

**BER Analysis of Overloaded MC-CDMA Cellular System Employing Sphere Decoder in Non-Ideal Sectorization Scenario**

Henry Carvajal and Nathaly Orozco (State University of Campinas - UNICAMP, Brazil); Celso Almeida (Unicamp, Brazil)

**Study and Analysis of Ultra Wideband through Glass Propagation Channel Characteristics**

Richa Bharadwaj and Shibani K Koul (Indian Institute of Technology Delhi, India)

**An Approximation for the Distribution of the Peak-to-Average Power Ratio in Carrier-aggregated OFDM Signals Using Level Crossing Rate Analysis**

Mariam Issa (American University of Beirut, Lebanon); Abdel-karim Ajami (American University of Beirut (AUB), Lebanon); Hassan A. Artail and Youssef Nasser (American University of Beirut, Lebanon)

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14:00 – 15:30

**Room: VENETO**

**M3: Low Power Wireless Networks**

**Low Power Radiolocation through Long Range Wide Area Networks: a performance study**

Nicola Accettura (LAAS-CNRS, France); Samir Medjah (LAAS-CNRS & Université Paul Sabatier, France); Balakrishna Prabhu (LAAS-CNRS, France); Thierry Monteil (LAAS-CNRS, University of Toulouse, France)

**Collision Prevention in Distributed 6TiSCH Networks**

Ali Fahs (Lab d'Informatique de Grenoble & Verimag, France); Rodolphe Bertolini (Université Grenoble Alpes, France); Olivier Alphand and Franck Rousseau (Université Grenoble Alpes & Grenoble INP, France); Karine Altisen (University of Grenoble, France); Stéphane Devismes (Université Joseph Fourier, France)

**Improving Reliable Data Transport in Wireless Sensor Networks through Dynamic Cache-aware Rate Control Mechanism**

Melchizedek I. Alipio (University of the Philippines Diliman, Philippines); Nestor Michael C. Tiglao (University of the Philippines, Philippines)

**DCC-enabled Contention based Forwarding Scheme for VANETs**

Thiwiza Bellache (UVSQ, France); Oyunchimeg Shagdar (VEDECOM, France); Samir Tohme (University of Versailles, France)

**Room: BARBERINI**

**M4: Optimization in Wireless Networks**

**SEBRA: SAND-Enabled Bitrate and Resource Allocation algorithm for network-assisted video streaming**

Evgeny Khorov, Artem Krasilov and Mikhail Lyubogoshchev (IITP RAS, Russia); Suwen Tang (Huawei Shanghai Research Institute, P.R. China)

**Cross-layer Analysis of Optimal Relaying Strategies for Terahertz-band Communication Networks**

Qing Xia and Josep M Jornet (University at Buffalo, USA)

**Complete Edge Function Onloading for Effective Backend-driven Cyber Foraging**

Flavio Esposito (Saint Louis University, USA); Andrej Cvetkovski (Mother Teresa University, Macedonia, the former Yugoslav Republic of); Tooska Dargahi (University of Rome "Tor Vergata", Italy); Jianli Pan (University of Missouri, St. Louis, USA)

**Performance Analysis of Early Packet Loss Detection in WiFi Direct 802.11 Networks**

Gul Zameen Khan (Griffith University Australia, Australia); Eun-Chan Park (Dongguk University, Korea); Ruben Gonzalez (Griffith University, Australia)

**Room:** TREVI

**W2: Resource management in wireless communication systems**

**A New Centralized Access Control for mmWave D2D Communications**

Salvatore Riolo, Daniela Panno and Antonio Di Maria (University of Catania, Italy)

**Autonomous and Dynamic Inter-Cell Interference Coordination Techniques for Future Wireless Networks**

Mahdi Ezzaouia (IMT Atlantique & National School Of Engineering of Tunisia, Tunisia); Cedric Gueguen (University of Rennes 1, France); Mohamad Yassin (Orange Labs, France); Mahmoud Ammar (University Tunis El Manar, Tunisia); Xavier Lagrange (IMT Atlantique & IRISA, Université Bretagne Loire, France); Ammar Bouallegue (National School of Engineers of Tunis, Tunisia)

**Improving Resource Efficiency with Partial Resource Muting for Future Wireless Networks**

Qi Liao (Nokia Bell Labs, Germany); Renato L. G. Cavalcante (Fraunhofer Heinrich Hertz Institute, Germany)

**A Radio Resource Management Scheme in future Ultra-Dense Phantom Networks**

Antonio Di Maria and Daniela Panno (University of Catania, Italy)

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16:00 – 17:30

**Room:** VENETO

**3W: Coding in wireless communication systems**

**Binary Subchannel Decomposition of Lattice-based Multiple Access Schemes**

Abir Ben Hadj Fredj (Institut Mines-Telecom, France); Jean-Claude Belfiore (Ecole Nationale Supérieure des Télécommunications, France)

**Grouping of Subcarriers and Effective SNR Statistics in Wideband OFDM Systems using EESM**

Jérôme Gaveau (Thales, France); Christophe J. Le Martret (Thales Communications & Security & Signal Processing and Multimedia Dept., France); Mohamad Assaad (CentraleSupélec, France)

**Multilayered Wyner-Ziv Lattice Coding for Single-Cell Point-to-Multipoint Communications**

Sinda Smirani (Telecom SudParis, France); Juwendo Denis (Institut Telecom / Telecom SudParis, France); Badii Jouaber (Institut TELECOM - Telecom SudParis & cnrs UMR-SAMOVAR, France)

**Room:** BARBERINI

**W3: Resource Allocation**

**Stochastic Failure Dynamics in Communication Network under the Influence of Power Failure**

Pankaz Das (University Of New Mexico, USA); Rezoan A. Shuvro and Zhuoyao Wang (University of New Mexico, USA); Mahshid Rahnamay Naeini and Nasir Ghani (University of South Florida, USA); Majeed M Hayat (University of New Mexico, USA)

**A Scalable IoT Framework to Design Logical Data Flow using Virtual Sensor**

Le Kim Hung (EURECOM, France); Soumya Kanti Datta (EURECOM); Christian Bonnet (Institut Eurecom, France); Francois Hamon (GreenCityzen, France); Alexandre Boudonne (GreenCityZen, France)

**Optimizing D2D Transmission for Secure and Reliable Smart Grid Communication**

Muhammad Waqas and Zain Ali (COMSATS Institute of Information Technology, Islamabad, Pakistan); Haji Muhammad Furqan Ahmed Madni (Istanbul Medipol University & School of Engineering and Natural Science Electrical, Electronics and Cyber Systems, Turkey); Guftaar Ahmad Sardar Sidhu (COMSATS Institute of Information Technology & COMSATS Institute of Information Technology, Pakistan)

**Room:** TREVI

**W3: Channel, localization and MAC layer for wireless communications**

**Measurements for the Development of an Enhanced Model for Wireless Channels in Industrial Environments**

Ramona Croonenbroeck and Lisa Underberg (TU Dortmund University, Germany); Armin Wulf (TU Dortmund University & Technische Universität Dortmund, Germany); Ruediger Kays (TU Dortmund University, Germany)

**Narrowband Distance Evaluation Technique for Indoor Positioning Systems based on Zadoff-Chu Sequences**

Giovanni Piccinni, Gianfranco Avitabile and Giuseppe Coviello (Politecnico di Bari, Italy)

**Backscatter MAC Protocol for Future Internet of Things Networks**

Md. Abdul Alim, Shunsuke Saruwatari and Takashi Watanabe (Osaka University, Japan)

**LTE Signal Fingerprinting Localization based on CSI**

Giovanni Pecoraro (University of Rome Tor Vergata, Italy); Simone Di Domenico (Università di Roma Tor Vergata, Italy); Ernestina Cianca (University of Rome Tor Vergata, Italy); Mauro De Sanctis (University of Rome "Tor Vergata", Italy & Peoples' Friendship University of Russia (RUDN), Russia)

# Wednesday, October 11

09:30 – 10:30

**Room:** VENETO

## **Keynote2: Ultra-Low Latency Heterogeneous Networking for Autonomous Vehicles**

Prof. Kwang-Cheng Chen, University of South Florida, USA

11:00 – 12:30

**Room:** VENETO

### **M5: WLAN Access**

#### **Non-Intrusive QoE Prediction in WLAN**

Lucía Jiménez-Padilla (Universidad de Málaga, Spain); Pablo Romero-Hierro (University of Malaga, Spain); Mari Carmen Aguayo-Torres (Universidad de Malaga, Spain); Carlos Cardenas and Janie Baños (AT4 Wireless, Spain)

#### **A station regrouping method for contention based IEEE 802.11ah wireless LAN**

Ziming Zhu (Toshiba Research Europe Ltd, United Kingdom (Great Britain)); Zhenzhe Zhong (Orange Labs, France); Zhong Fan (Keele University, United Kingdom (Great Britain))

#### **Fine-grained Access Provisioning via Joint Gateway Selection and Flow Routing on SDN-aware Wi-Fi Mesh Networks**

Dawood Sajjadi (University of Victoria, Canada); Rukhsana Ruby (Shenzhen University, P.R. China); Maryam Tanha and Jianping Pan (University of Victoria, Canada)

#### **NxWLAN: Towards Transparent and Secure Usage of Neighbors' Access Points in Residential WLANs**

Piotr Gawłowicz, Sven Zehl and Anatolij Zubow (Technische Universität Berlin, Germany); Adam Wolisz (TUB, Germany)

**Room:** BARBERINI

### **Se1: Network Security**

#### **Cooperative Anti-jamming for Secondary opportunistic Networks: A Colonel Blotto Game Model**

Mohamed Abdelraheem (Assiut University, Egypt); Mohammad M Abdellatif (The British University in Egypt, Egypt)

#### **A Comprehensive and Effective Mechanism for DDoS Detection in SDN**

Ankit Gangwal (University of Padova, Italy); Mauro Conti (University of Padova, Italy); Manoj Gaur (Malaviya National Institute of Technology, India)

#### **Secure Lightweight ECC-Based Protocol for Multi-Agent IoT Systems**

Haya Hasan, Tasneem Salah, Dina Shehada, Jamal Zemerly, Chan Yeob Yeun and Mahmoud Al-Qutayri (Khalifa University, United Arab Emirates); Yousof Al-Hammadi (Khalifa University of Science Technology and Research, United Arab Emirates)

#### **SNIFFO: Security of Networks and Intelligence for Field Operations**

Matteo Brunati (Cybrain srl, Italy); Mauro Conti and Alessandro Tezza (University of Padova, Italy)

**Room:** TREVI

### **U1: Protocols and Algorithms for Ubiquitous Computing and Services**

#### **Less Latency and Better Protection with AL-FEC Sliding Window Codes: a Robust Multimedia CBR Broadcast Case Study**

Roca Vincent (INRIA Rhone-Alpes, France); Belkacem Teibi (Inria, France); Christophe Burdinat and Tuan Thai Tran (EXPWAY, France); Cédric Thienot (Expway, France)

**Joint Optimization of QoE and Fairness Through Network Assisted Adaptive Mobile Video Streaming**

Abbas Mehrabi, Matti Siekkinen and Antti Yla-Jaaski (Aalto University, Finland)

**Matrix Factorization on Semantic Trajectories for Predicting Future Semantic Locations**

Antonios Karatzoglou (Robert Bosch GmbH & Karlsruhe Institute of Technology (KIT), Germany); Stefan Lamp (Karlsruhe Institute of Technology (KIT), Germany); Michael Beigl (KIT & TECO, Germany)

**Choreography-based vs Orchestration-based Service Composition in Opportunistic Networks**

Fadhllallah Baklouti (University of south Brittany (UBS), France); Nicolas Le Sommer (IRISA, Université de Bretagne Sud, France); Yves Mahéo (IRISA, Université Bretagne Sud, France)

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14:00 – 15:30

**Room: VENETO**

**M6: Resource management in wireless communications**

**Self-Backhauled Autonomous LTE Mesh Networks**

Romain Favraud and Chia-Yu Chang (EURECOM, France); Navid Nikaein (Eurecom, France)

**Cooperation in Multi-User Wireless Powered Communication Networks**

Mariam Aboelwafa and Karim G Seddik (American University in Cairo, Egypt); Mustafa ElNainay (Alexandria University & Virginia Tech, Egypt)

**On Practical Multihop Wireless Communication: Insights, Limitations, and Solutions**

Abderrahmen Mtibaa (NMSU, USA); Ahmed Emam and Khaled A. Harras (Carnegie Mellon University, USA)

**Room: BARBERINI**

**Se2: Mobile and wireless security**

**DroidPosture: A Trusted Posture Assessment Service for Mobile Devices**

Sileshi Yalew (KTH Royal Institute of Technology, Sweden); Gerald (Chip) Maguire (Royal Institute of Technology (KTH), Sweden); Seif Haridi (KTH - The Royal Institute of Technology & SICS, Sweden); Miguel Correia (INESC-ID & Instituto Superior Técnico, Portugal)

**Super Learning for Anomaly Detection in Cellular Networks**

Pedro Casas (Austrian Institute of Technology (AIT), Austria); Juan Vanerio (Universidad de la República & ANTEL, Uruguay)

**Securing Cyber Physical Systems from injection attacks by exploiting random sequences**

Federica Battisti (Roma Tre University, Italy); Marco Carli (Roma Tre University, Italy); Federica Pascucci (Roma Tre University, Italy)

**On the Feasibility of Attribute-Based Encryption for WLAN Access Control**

Claudio Pisa (CNIT, Italy); Tooska Dargahi (CNIT - University of Rome "Tor Vergata"); Alberto Caponi (University of Rome "Tor Vergata" & CNIT, Italy); Giuseppe Bianchi and Nicola Blefari-Melazzi (University of Rome "Tor Vergata", Italy)

**TruApp: A TrustZone-based Authenticity Detection Service for Mobile apps**

Sileshi Yalew (KTH Royal Institute of Technology, Sweden); Pedro Mendonça (INESC-ID & Instituto Superior Técnico, Portugal); Gerald (Chip) Maguire (Royal Institute of Technology (KTH), Sweden); Seif Haridi (KTH - The Royal Institute of Technology & SICS, Sweden); Miguel Correia (INESC-ID & Instituto Superior Técnico, Portugal)



**Room:** TREVI

**U2: Advanced Techniques for Ubiquitous Computing Applications**

**Real-time Sampling Rate Adaptation based on Continuous Risk Level Evaluation in Wireless Body Sensor Networks**

Carol Habib (University of Franche-Comté and Antonine University); Abdallah Makhoul (University of Franche-Comté & FEMTO-ST, France); Rony Darazi (Antonine University, Lebanon); Raphael Couturier (University of Franche-Comte, France)

**Providing a Cloud-based Smart Meter Solution to Control and Monitor Electrical Quantities of Industrial Machines**

Marcelo Lopes (University of Vale do Itajaí, Brazil); Leonardo Rauta (Federal Institute of Santa Catarina, Brazil); Benjamin Mezger and Michelle Silva Wangham (University of Vale do Itajaí, Brazil)

**Feature-Based Diagnostic Distortion Measure for Unsupervised Self-Guided Biomedical Signal Compressors**

Jose Santos, Hamid Sharif, Michael Hempel and Dongming Peng (University of Nebraska-Lincoln, USA)

**Dejavu: A case for assisted email replies on smartphones**

Uma Parthavi Moravapalle (Georgia Institute Of Technology, USA); Raghupathy Sivakumar (Georgia Institute of Technology, USA)