

Monday, October 12

08:30 - 09:30

Registration

09:30 - 09:45

Welcome

Room: Aqua

09:45 - 10:15

Keynote Presentation I

"Living longer at home: measurement as key enabling technology"

António Damasceno (CEO, Acting, Intellicare - Intelligent Sensing in Healthcare)

Room: Aqua

10:15 - 10:35

Coffee Break

10:35 - 12:25

Oral Session 1 - Energy

Room: Aqua

Chair: Antonio Pietrosanto

10:35 Estimation of the Harvestable Power on Wireless Sensor Nodes

Leander B Hörmann (Linz Center of Mechatronics GmbH, Austria)

Achim Berger (Linz Center of Mechatronics GmbH, Austria)

Albert Pötsch (Linz Center of Mechatronics GmbH, Austria)

Peter Priller (AVL List GmbH, Austria)

Andreas Springer (Johannes Kepler University Linz, Austria)

10:57 Algorithmic Development for Power Quality Monitoring by a Network of Wireless Sensors

Artur Patuleia (University of Beira Interior, Portugal)

António Espírito-Santo (University of Beira Interior, Portugal)

Vincenzo Paciello (University of Salerno, Italy)

Antonio Pietrosanto (University of Salerno, Italy)

11:19 Towards a new approach for electrical grid management: the role of the cloud

Antonello Monti (RWTH Aachen University, Germany)

Ferdinanda Ponci (RWTH Aachen University, Germany)

Mohsen Ferdowsi (RWTH Aachen University, Germany)

Padraic McKeever (RWTH Aachen University, Germany)

Artur Löwen (Gridhound UG, Germany)

11:41 Power quality in smart distribution grids

Antonio Del Giudice (ENEA, Italy)

Giorgio Graditi (ENEA, Italy)

Vincenzo Paciello (University of Salerno, Italy)

Antonio Pietrosanto (University of Salerno, Italy)

12:03 Autonomous recharge of drones through an induction based power transfer system

Leopoldo Angrisani (University of Naples Federico II, Italy)

Guido d'Alessandro (University of Naples Federico II, Italy)

Mauro D'Arco (University of Naples Federico II, Italy)

Vincenzo Paciello (University of Salerno, Italy)

Antonio Pietrosanto (University of Salerno, Italy)

12:25 - 13:40

Lunch

Room: Jardim

13:40 - 15:10

Oral Session 2 - Wireless Sensor Networks Modelling and Performance Assessment

Room: Aqua

Chair: Claudio Narduzzi

13:40 Radio Frequency Measurements on a SBX Daughter Board using GNU Radio and USRP N-210

Rafik Zitouni (LISSI / UPEC, France)

Stefan Ataman (LIGM / ESIEE Paris, France)

Marie Mathian (LIGM / ESIEE Paris, France)

Laurent George (LIGM / ESIEE Paris, France)

14:02 Wireless sensor network for derailment detection in freight trains powered from vibrations

Massimo Macucci (University of Pisa, Italy)

Paolo Marconcini (University of Pisa, Italy)

Bernardo Tellini (University of Pisa, Italy)

Stefano Di Pascoli (University of Pisa, Italy)

14:24 Experimental Characterisation of IEEE 802.15.4 Channel Running at 2.4GHz Inside Buildings

Laid Sadoudi (Université de Valenciennes et du Hainaut Cambrésis, France)

Ulrich Biaou (Université de Valenciennes et du Hainaut Cambrésis, France)

Michael Bocquet (Université de Valenciennes et du Hainaut Cambrésis, France)

Emmanuel Moulin (Université de Valenciennes et du Hainaut Cambrésis, France)

Atika Rivenq (Université de Valenciennes et du Hainaut Cambrésis, France)

Jamal Assaad (Université de Valenciennes et du Hainaut Cambrésis, France)

14:46 Frequency domain measurement node based on compressive sampling for sensors networks

Leopoldo Angrisani (University of Naples Federico II, Italy)

Francesco Bonavolontà (University of Naples Federico II, Italy)

Alessandro Tocchi (University of Naples Federico II, Italy)

Rosario Schiano Lo Moriello (University of Naples Federico II, Italy)

15:10 - 15:30

Coffee Break

15:30 - 17:00

Oral Session 3 - Special Session on Indoor Positioning

Room: Aqua

Chair: Antonio Moschitta

15:30 Use of Frequency Diversity to Improve the Performance of RSSI-Based Distance Measurements

Domenico Capriglione (University of Cassino and Southern Lazio, Italy)

Deborah Casinelli (University of Cassino and Southern Lazio, Italy)

Luigi Ferrigno (University of Cassino and Southern Lazio, Italy)

15:52 Indoor-Localization System for Smart Phones

Fabian Höflinger (University of Freiburg, Germany)

Joan Bordoy (University of Freiburg, Germany)

Nikolas Simon (University of Freiburg, Germany)

Johannes Wendeberg (University of Freiburg, Germany)

Leonhard Michael Reindl (University of Freiburg, Germany)

Christian Schindelhauer (University of Freiburg, Germany)

16:14 Data Processing Algorithm for Direction Tracking in Indoor Localization

Guglielmo Frigo (University of Padova, Italy)

Giada Giorgi (University of Padova, Italy)

Claudio Narduzzi (University of Padova, Italy)

16:36 Effects of antenna directivity on a 2.5D positioning technique based on multiple RF transceivers

Antonio Moschitta (University of Perugia, Italy)

Valter Pasku (University of Perugia, Italy)

Mario Luca Fravolini (University of Perugia, Italy)

17:30

Visit to Paço das Escolas and Social Dinner

Tuesday, October 13

08:30 - 10:20

Oral Session 4 - Traffic Monitoring and Intrusion Detection

Room: Aqua

Chair: Nuno Laranjeiro

08:30 Data Aggregation for Machine-to-Machine Communication with Energy Harvesting

André Riker (University of Coimbra, Portugal)

Eduardo Cerqueira (Federal University of Pará, Brazil)

Márcia Curado (University of Coimbra, Portugal)

Edmundo Monteiro (University of Coimbra, Portugal)

08:52 A Data Fusion Technique to Detect Wireless Network Virtual Jamming Attacks

Ginés Escudero-Andreu (Loughborough University, United Kingdom)

Konstantinos G Kyriakopoulos (Loughborough University, United Kingdom)

Francisco Javier Aparicio Navarro (Loughborough University, United Kingdom)

David Parish (Loughborough University, United Kingdom)

Diego Santoro (University of Naples "Parthenope", Italy)

Michele Vadursi (University of Naples "Parthenope", Italy)

09:14 A Proposal for Spatio-Temporal Analysis of Traffic Matrices Using HJ-Biplot

Francisco Javier Delgado Álvarez (University of Salamanca, Spain)

María Purificación Galindo Villardón (University of Salamanca, Spain)

09:36 Traffic Classification and Verification using Unsupervised Learning of Gaussian Mixture Models

Hassan Alizadeh (University of Aveiro, IEETA, Portugal)

Abdolrahman Khoshrou (University of Porto, Portugal)

André Zúquete (University of Aveiro, DETI & IEETA, Portugal)

09:58 Learning the Parameters of Periodic Traffic based on Network Measurements

Marina Gutiérrez (TTTech Computertechnik AG, Austria)

Wilfried Steiner (TTTech Computertechnik AG, Austria)

Radu Dobrin (Mälardalen University, Sweden)

Sasikumar Punnekkat (Mälardalen University, Sweden)

10:20 - 10:30

IMS TC-37 Presentation

Room: Aqua

10:30 - 10:50

Coffee Break

10:50 - 12:40

Oral Session 5 - Special Session on Sensor Networks for Human Safety

Room: Aqua

Chair: Bruno Andò

10:50 The exploitation of multiple MR measurements for diagnosis support

Fabio Baselice (Università degli Studi di Napoli Parthenope, Italy)

Vito Pascazio (Università degli Studi di Napoli Parthenope, Italy)

Giampaolo Ferraioli (Università degli Studi di Napoli Parthenope, Italy)

11:12 A Multi-User Assistive System for the User Safety Monitoring in Care Facilities

Vincenzo Marletta (University of Catania, Italy)

Bruno Andò (University of Catania, Italy)

Salvatore Baglio (University of Catania, Italy)

Cristian O. Lombardo (University of Catania, Italy)

11:34 Towards a Reference Ontology for Security in the Internet of Things

Bruno Mozzaquatro (New University of Lisbon, Portugal)

Ricardo Jardim-Goncalves (New University of Lisbon, Portugal)

Carlos Agostinho (New University of Lisbon, Portugal)

11:56 Multi-Frequency and Multi-Baseline Ground Based SAR for Environmental Monitoring

Fabio Baselice (Università degli Studi di Napoli Parthenope, Italy)

Giampaolo Ferraioli (Università degli Studi di Napoli Parthenope, Italy)

Diego Reale (CNR-IREA, Italy)

12:18 Design of a Low Cost Multipurpose Wireless Sensor Network

Attilio Di Nisio (Politecnico di Bari, Italy)

Tommaso Di Noia (Politecnico di Bari, Italy)

Carlo Guarnieri Calò Carducci (Politecnico di Bari, Italy)

Maurizio Spadavecchia (Politecnico di Bari, Italy)

12:40 - 13:55

Lunch

Room: Jardim

13:55 - 15:25

Oral Session 6 - Distributed Measurement Systems

Room: Aqua

Chair: Fabio Baselice

13:55 On the Accuracy of Packet-based Measurements in the PTP Telecom Profile

Giada Giorgi (University of Padova, Italy)

Claudio Narduzzi (University of Padova, Italy)

14:17 MOFI: Monitoring Ontology for Federated Infrastructures

Yahya Al-Hazmi (Technische Universität Berlin, Germany)

Thomas Magedanz (Fraunhofer Institute FOKUS, Germany)

14:39 From network-level measurements to expected Quality of Experience: the Skype use case

Thierry Spetebroot (INRIA Sophia Antipolis, France)

Salim Afra (University of Calgary, Canada)

Nicolás Aguilera (NIC Chile Research Labs, Chile)

Damien Saucez (INRIA Sophia Antipolis, France)

Chadi Barakat (INRIA Sophia Antipolis, France)

15:01 A distributed monitoring systems for Structural Early Warning

Bruno Andò (University of Catania, Italy)

Salvatore Baglio (University of Catania, Italy)

Antonio Pistorio (University of Catania, Italy)

15:25 - 15:40

Coffee Break

15:40 - 17:10

Oral Session 7 - Advances on Wireless Networks Design and Assessment

Room: Aqua

Chair: Francesco Verde

15:40 Stochastic Geometry Modeling of mmWave Cellular Networks: Analysis and Experimental Validation

Wei Lu (L2S Paris-Saclay University, CNRS University Paris-Sud XI, France)

Marco Di Renzo (Paris-Saclay University, CNRS University Paris-Sud XI, France)

16:02 Amplify-and-forward secondary spectrum access in multi carrier cognitive radio systems

Donatella Darsena (University of Napoli Parthenope, Italy)

Giacinto Gelli (University of Napoli Federico II, Italy)

Francesco Verde (University of Napoli Federico II, Italy)

16:24 Coverage Optimization of 5G Atto-Cells for Visible Light Communications Access

Stefano Pergoloni (Università La Sapienza di Roma, Italy)

Mauro Biagi (Università La Sapienza di Roma, Italy)

Stefania Colonnese (Università La Sapienza di Roma, Italy)

Roberto Cusani (Università La Sapienza di Roma, Italy)

Gaetano Scarano (Università La Sapienza di Roma, Italy)

16:46 An Alternative Method for Evaluating a Spatial Uniform and Isotropic Electromagnetic Field Within a Reverberating Chamber

Maurizio Migliaccio (Università degli Studi di Napoli Parthenope, Italy)

Jose Gil (Universidad de Zaragoza, Spain)

Antonio Sorrentino (Università degli Studi di Napoli Parthenope, Italy)

Ferdinando Nunziata (Università degli Studi di Napoli Parthenope, Italy)

Giuseppe Ferrara (Università degli Studi di Napoli Parthenope, Italy)

Angelo Gifuni (Università degli Studi di Napoli Parthenope, Italy)

17:10 - 17:35

Wrap-up

Room: Aqua