08:00 Registration

09:00 Workshop Opening

Maurizio Rebaudengo (Politecnico di Torino), Markus Rupp (Vienna University of Technology)

09:15 Invited Talk – RF Tag Sensing for Entertainment Applications

Joshua Griffin (Disney Research, USA)

10:15 Coffee break

10:35 - 11:50 Session 1 – Interference management

Chair: Javier Vales-Alonso, UPCT, Spain

Advanced Collision Recovery Receiver for RFID

Jelena Kaitovic, Robert Langwieser and Markus Rupp

Optimal scheduling in single channel dense reader RFID environments

Javier Vales-Alonso, F. J. Parrado-García, J. J. Alcaraz and Esteban Egea-López

Measurement and Simulation of Crosstalk and Crosstalk Compensation in UHF RFID

Robert Langwieser and Gregor Lasser

12:00 Lunch

13:00 Invited Talk - Industry Trends in the 13.56MHz Frequency Band

Thomas Leutgeb (Infineon Austria)

14:00 - 15:40 Session 2 – Test and Emulation

Chair: Thomas Kaiser, University of Duisburg-Essen, Germany

A Toolbox for RFID Protocol Analysis

Roel Verdult, Gerhard de Koning Gans and Flavio D. Garcia

Flexible Development and Testing Environment for Implementation of new Algorithms in RFID Systems

Salvador Grey and Gerd Vom Bögel

Hardware and Software Stack for an SDR-based RFID Test Platform

Martin Dusek, Vojtech Derbek, Ales Povalac, Jiri Sebesta and Roman Marsalek

Evaluation of the Additive Interference Model for RFID Reader Collision Problem

Linchao Zhang, Filippo Gandino, Renato Ferrero and Maurizio Rebaudengo

15:40 Coffee break

16:10 - 17:50 Session 3 – RF Transmission

Chair: Markus Rupp, TU Wien, Austria

Fast Algorithm for Leaking Carrier Canceller Adjustment

Gregor Lasser, Wolfgang Gartner, Robert Langwieser and Christoph F. Mecklenbräuker

Evaluating On-Body RFID Systems at 900MHz and 2.45GHz

Jasmin Grosinger and Michael Fischer

On the Transmit Signal Design at the Reader for RFID MIMO Systems

Feng Zheng and Thomas Kaiser

Development of a wireless power transmission system for embedded passive sensors using LF RFID technology

Iker Mayordomo, Norbert van der Heyd, Tobias Dräger and Josef Bernhard

18:00 Social Event

Friday 28 September 2012

09:00 Invited Talk – Pervasive Sensing by means of Passive UHF RFID Technology

Gaetano Marrocco (University of Roma Tor Vergata)

10:00 Coffee break

10:20 - 12:00 Session 4 – Applications

Chair: Maurizio Rebaudengo, Politecnico di Torino, Italy

An analysis of the performances of Low Frequency cylinder glass tags for the underwater tracking of pebbles on a natural beach

Giuliano Benelli, Alessandro Pozzebon, Duccio Bertoni, Giovanni Sarti, Paolo Ciavola and Edoardo Grottoli

RFID Standardization for Logistics Applications – Status Quo and Challenges from the Automotive Industry's Perspective

Malte Schmidt, Hanno Wolff, Florian Peppel and Lars Thoroe

Occupancy Monitoring using Passive RFID Technology for Efficient Building Lighting Control

Farhan Manzoor, David Linton and Michael Loughlin

Improving safety in operating room: design and experimentation of a RFId-based medical device for surgical sponges management

Luca Armisi, Arianna Corona, Silvia Colangelo, Nicola Rosato, Alessandra Lazzaro, Luca Iezzi, Nicola Di Lorenzo, Achille Lucio Gaspari, Ilaria Piccolo, Carlo Maria Medaglia, Sergio Sbrenni and S. Croci

12:00 Lunch

13:00 - 14:40 Session 5 – Improvements in RFID Technology

Chair: Jasmin Grosinger, Vienna University of Technology, Austria

The PTF-Determinator: A run-time method used to save energy in NFC-Systems

Manuel Menghin, Norbert Druml, Christian Steger, Reinhold Weiss, Holger Bock and Josef Haid

Low–Power CMOS Voltage Regulator Architecture for Implantable RF Circuits

Lijun Luo, Kyle De Gannes, Kyle Fricke, Shawon Senjuti and Robert Sobot

Enhancing WSN-based Indoor Positioning and Tracking through RFID Technology

Zhoubing Xiong, Zhen Yu Song, Andrea Scalera, Francesco Sottile, Riccardo Tomasi and Maurizio A. Spirito

Barcode Data Fusion through Application Level Events compliant middleware

Nikos Zarokostas, Panagiotis D. Dimitropoulos, John Soldatos and George Stamoulis

14:40	Coffee break

15:00 - 16:15	Session 6 – Tag Design and Development Chair: Filippo Gandino, Politecnico di Torino, Italy

Design and Characterization of Ink-jet and Screen Printed HF RFID Antennas

José F. Salmerón, Almudena Rivadeneyra Torres, Jesús Banqueri, Migue A. Carvajal and Manuel Agudo

Model Based Development of the Digital Part of a RFID Transponder with Xilinx System Generator for a FPGA Platform

Venkata Rajesh Pamula, Wolfram Strauß and Josef Bernhard

Automatic Optimization of Multichip RFID tags

Yuanhe Xiong, Stefano Caizzone, Cecilia Occhiuzzi, Gaetano Marrocco, Giuseppe Vecchi and Mario Orefice

16:15	Closure of the workshop and best paper awards