Programm EMC² Summit, 11. April 2016, CPS-Week

09:00 **Welcome and Introduction**
E. Schoitsch (AIT)

09:10 KEYNOTE:
Model Driven Engineering of Critical Systems
Prof. Stefano Russo, University of Naples

09:50 **The EMC² Project on Embedded Microcontrollers - Progress After Two Years (Poster)**
(Werner Weber, Thomas Söderqvist, Albert Cohen, Elena Garcia Valderas, Sergio Saez, Juan Carlos Pérez-Cortés, Xing Cai, Björn Nordmoen, Hans Petter Dahle, Michael Geissel, Jürgen Salecker, and Pavel Zemčík)

10:05 **The S3P Project and S3P Alliance – an IoT Opportunity** (Safe, Smart and Secure Platform)
(Chahinez HAMLAOUI (Systematic-Paris-Region, European Cluster of Excellence))

10:15 Coffee Break

AUTOMOTIVE and MOBILITY SESSION

10:30 **Process- and Product-based Lines of Argument for Automotive Safety Cases**
(Helmut Martin, Martin Krammer, Robert Bramberger (VIRTUAL VEHICLE Research Center, Graz, Austria), Eric Armengaud (AVL List GmbH, Graz, Austria))

11:00 **Implementation of active safety system for pedestrian detection in Volvos cars and real benefit of the system based on selected real-life fatal pedestrian accidents**
(Peter Vertal, Gustav Kasauicky (University of Zilina, Slovakia), Hermann, Steffau (Dr.Steffan Datentechnik, Linz, Austria))

11:30 **Seamless tool integration in an automotive use case: An experience report**
(Andrea Leitner, Christian El Salloum, AVL List GmbH, Graz, Austria)

12:00 **SOA Real-time System Development – An Automotive Case Study (Poster)**
(Cuong M. Tran, Kung-Kiu Lau, Simone Di Cola (University of Manchester, UK))

12:15 **Embedded Intelligence in Smart Cities through Urban Sustainable Mobility-as-a-Service: research achievements and challenges**
(George Dimitrakopoulos, George Bravos and Ilianna Stampologlou, (Harokopio University of Athens))

12:45 Lunch Break

AEROSPACE and RAIL

13:45 **Implementing mixed-critical application on next generation multicore aerospace platforms (Poster)**
(F. Federici, V. Muttillo, L. Pomante, G. Valente (University of L'Aquila, Italy), D. Andreetti, D. Pascucci (Thales Alenia Space, Rome, Italy))

14:00 **A comparison between Hardware and Software Solutions for Resource Partitioning in Multicore-based Mixed Criticality Applications (Poster)**
(Stefano Esposito, Sehriy Avramenko, Massimo Violante (Politecnico Tdi orino, Italy), Marco Sozzi, Massimo Traversone (Selex ES, Nerviano, Italy), Marco Binello, Marco Terrone (Alenia Aermacchi, Torino, Italy))

14:15 **A Model-Based ESL HW/SW Co-Design Framework for Mixed-Criticality System (Poster)**
(F. Federici, V. Muttillo, L. Pomante, P. Serri, G. Valente (Università Degli Studi Dell'Aquila, L'Aquila, Italy))

14:30 **Deterministic Parallel Programming for Railway Applications**
(Oscar Medina Duarte, Peter Tummeltshammer (Thales Austria, Vienna))

15:00 Coffee Break

SECURITY

15:30 **RoViM: Rotating Virtual Machines for Security and Fault-Tolerance**
(Dorottya Papp, Levente Buttyan (Budapest University of Technology and Economics, Hungary), Zhendong Ma, AIT Austrian Institute of Technology, Austria))

16:00 **Survey on Camera based Communication for Location-Aware Secure Authentication and Communication**
(Hannes Plank, Thomas Ruprechter, Gerald Holweg, Norbert Druml (Infineon Technologies Austria AG, Graz, Austria), Christian Steger (Graz University of Technology, Austria))

CONCURRENCY, MULTI-PROCESSING and DYNAMIC SYSTEMS

16:30 **Asymmetric Multiprocessing on industrial ZYNQ board with HDMI I/O**
(Jiri Kadlec, Zdenek Pohl, Lukas Kohout (UTIA, Prague, Czech Republic))

17:00 **Mining Concurrency Bugs**
(Paolo Ciancarini, Francesco Poggi, Davide Rossi (University of Bologna, Italy), Alberto Sillitti* (Center for Applied Software Engineering, Italy), (*Consorzio Interuniversitario Nazionale per l'Informatica, Italy))*

17:30 **Towards safe mixed critical embedded multi-core systems in dynamic and changeable environments (Poster)**
(Christoph Dropmann, Tiago Amorim, Daniel Schneider (Fraunhofer IESE, Kaiserslautern Germany), Alejandra Ruiz (ICT-European Software Institute Division, TECNALIA. Derio, SPAIN))

17:45 **Profile Driven Application Parallelization (Poster)**
(Imran Ashraf, Nader Khammassi, Koen Bertels (TU Delft, The Netherlands))

18:00 **Welfare - End of the SUMMIT**