# **ERCIM/EWICS/Embedded (Cyber-physical) Systems Workshop (Program)**

Safecomp 2012, Magdeburg, Germany, Tuesday Sept. 25<sup>th</sup>, 9:00 – 17:00

Co-hosted by ARTEMIS projects R3-COP, MBAT and SafeCer Please register for workshop for logistics reasons, although participation is free of charge! (SAFECOMP registration required)

Registration: via http://www-e.uni-magdeburg.de/safecomp

### 9:00 - 9:30 Introduction

# ERCIM, EWICS, ARTEMIS: Embedded Systems Safety, Security and European Strategy By organizers Erwin Schoitsch (AIT Austrian Institute of Technology), Amund Skavhaug (NTNU, Norway)

## 9:30 - 10:30 Session "Dependable Embedded Systems Applications"

#### A Systematic Elaboration of Safety Requirements in the Avionic Domain

Antoaneta Kondeva, Martin Wassmuth and Andreas Mitschke (EADS Innovation Works, Germany)

## Towards composable robotics: the R3-COP Knowledge-Base driven Technology Platform

E. Schoitsch, W. Herzner (AIT, Austria), C. Alonso-Montes (Tecnalia, Spain),

P. Chmelar (TU Brno, Czech Republic) and Lars Dalgaard (DTI, Denmark)

## 10:30 - 11:00 Coffee Break

## 11:00 - 12:30 Session "Secure Systems -Systems Security"

### On the Design of Secure Time-Triggered Systems

Florian Skopik, Thomas Bleier (AIT, Austria), Albert Treytl, Bernd Hirschler (Austrian Academy of Sciences), Armin Wasicek, Christian El-Salloum (TU Vienna, Austria), Arjan Geven and Andreas Eckel (TTTech, Austria)

### **Dependable and Secure Embedded Node Demonstrator**

Przemysław Osocha1, Fabio Giovagnini (SESM, Italy) and João Carlos Cunha (CISUC Coimbra, Portugal)

#### The Cyber-Physical Attacker

Roberto Vigo (DTU Technical University of Denmark)

#### 12:30 - 13:30 Lunch Break

# 13:30 - 15:00 Session "Validation, Verification and Qualification"

#### Parallel NuSMV: a NuSMV extension for the verification of complex embedded systems

Orlando Ferrante, Luca Benvenuti, Leonardo Mangeruca, Christos Sofronis and Alberto Ferrari (ALES S.r.l., Italy)

# **Towards the Automated Qualification of Tool Chain Design**

Fredrik Asplund, Matthias Biehl and Frederic Loiret (KTH, Sweden)

# A Framework for Simulation Based Design, Validation and Performance Analysis of Electronic Control Systems

Alexander Hanzlik and Erwin Kristen (AIT, Austria)

## 15:00 - 15:30 Coffee Break

# 15:30 - 16:30 Session "Systems Safety and Trust"

#### **Compiling for Time Predictability**

Peter Puschner (TU Vienna, Austria), Raimund Kirner (University of Hertfordshire, UK), Benedikt Huber and Daniel Prokesch (TU Vienna, Austria)

## **Supporting Assurance by Evidence-based Argument Services**

Janusz Górski, Aleksander Jarzębowicz, Jakub Miler, Michał Witkowicz, Jakub Czyżnikiewicz and Patryk Jar (Gdansk University of Technology, Poland)

## 16:30 - 17:00 Session "Ambient Assisted Living"

# Addressing the Needs of an Aging Population: An experiment for Monitoring Behaviour in a Domestic Environment

Marte E.B. Skjønsfjell, Aslak R. Normann, Amund Skavhaug (NTNU, Norway) and Dag Sjong (Norsk Automatisering, Norway)