Preliminary Program
OpenModelica Annual Workshop  February 2, 2015
Supported by
Open Source Modelica Consortium (OSMC) and Linköping University (LIU)

8.00-8.40 Registration and coffee, outside A2, A-building.
Session Chair: Gerhard Schmitz (University of Hamburg-Harburg)
8.40-9.00 Peter Fritzson, Director of OSMC (Linköping University)
  • Workshop Opening, Status and Directions of OpenModelica
9.00-9.40 Keynote. Rüdiger Franke, Specialist in Process Optimization Technology (ABB AG)
  • Mathematical optimization of dynamic systems with OpenModelica
9.45-10.10 Francesco Casella (Politecnico di Milano)
  • Modeling of Energy Systems with OpenModelica
10.10-10.35 Bernhard Bachmann, Willi Braun, Lennart Ochel, Vitalij Ruge (FH Bielefeld)
  • Symbolical and Numerical Approaches for Solving Nonlinear Systems
10.35-11.00 Coffee
Session Chair: Francesco Casella (Politecnico di Milano)
11.00-11.25 Jan Šilar (Charles University, Prague)
  • Partial Differential Equations in Modelica
11.25-11.50 Thibaut-Hugues Gallois, Jean Brac, Hassen Hadj-Amor and Thierry Soriano (IFP Energies Nouvelles)
  • A Benchmark of Adjustable Size and Coupling to Test ODE solvers
11.50-12.15 Willi Braun, Kaja Balzereit, Bernhard Bachmann (FH Bielefeld)
  • Comparison of Methods for Solving Sparse Linear Systems
12.15-13.30 Lunch in Kårallen
Session Chair: Bernhard Bachmann (FH Bielefeld)
13.30-13.55 Adrian Pop (OSMC & Linköping University, OSMC Technical Coordinator)
  • Current Status and Technical Overview of OpenModelica and its Development Environment
13.55-14.20 Kannan Moudgalya, Rakhi Rajalekshmi (Indian Institute of Technology Bombay)
  • Analysis and Design Optimization of Electronic Circuits using Oscad and OpenModelica
14.20-14.45 Mengjia Zhang, Maxime Baudette, Luigi Vanfretti (KTH)
  • Modeling Power System Components of the Norwegian Grid using Modelica
14.45-15.10 Coffee
Session Chair: Luigi Vanfretti (KTH)
15.10-15.30 Marcus Walther, Volker Waurich (TU Dresden)
  • High-Performance-Computing meets OpenModelica: Achievements in the HPC-OM Project
15.30-15.50 Lennart Ochel, Bernhard Bachmann (FH Bielefeld)
  • Efficient Handling of Simultaneously Under- and Overdetermined Initialization Problems
15.50-16.10 Marc Hartung (TU Dresden)
  • Efficient Clustering and Scheduling for Task-Graph based Parallelization
16.10-16.25 Bernhard Thiele (Linköping University)
  • State Machines in OpenModelica - Current Status and Further Development
16.30-17.00 Panel Discussion Chair: Peter Fritzson
  • Future Directions of OpenModelica
17.00-18.00 Open Source Modelica Consortium Annual Statutory Meeting
19.00 Dinner