

Preliminary Program

OpenModelica Annual Workshop February 1, 2016

Supported by
Open Source Modelica Consortium (OSMC) and Linköping University (LIU)

- 08.00-08.40** Registration and coffee, outside room A2, A-building, LiU
Session Chair: Rüdiger Franke
- 08.40-09.00** Peter Fritzson, Director of OSMC (Linköping University)
• Workshop Opening, Status and Directions of OpenModelica
- 09.00-09.25** Francesco Casella, Vice Director of OSMC (Politecnico di Milano)
• Modeling of Large-Scale Power Generation and Transmission Networks
- 09.25-09.50** Lars Eriksson (Linköping University)
• Turbocharged Gasoline and Diesel Engine Library with Applications
- 09.50-10.15** Lennart Ochel and Christoph Brinkrolf (FH Bielefeld)
• On the interaction of VANESA, PNlib and OpenModelica
- 10.15-10.45** Coffee
Session Chair: Gerhard Schmitz
- 10.45-11.10** Willi Braun, Bernhard Bachmann (FH Bielefeld)
• Comparison of Methods for Solving Non-linear Algebraic Loops in OpenModelica
- 11.10-11.35** Bernhard Thiele (Linköping University) and Lennart Ochel (FH Bielefeld)
• Status of Clocked Synchronous and State Machines Modeling in OpenModelica
- 11.35-12.00** Martin Sjölund (Linköping University)
• Cross-compilation and testing of OpenModelica-generated FMUs
- 12.00-12.20** Rüdiger Franke (ABB)
• Embedded Optimizing Control using the OpenModelica C++ Runtime
- 12.20-13.30** Lunch at Kårallen
Session Chair: Lars Eriksson
- 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** Volker Waurich (TU Dresden)
• Multi-Body-System Visualisation and Interactive Real-Time Simulation of FMUs for OpenModelica based Simulation
- 14.20-14.45** Martin Flehmig, Marc Hartung and Marcus Walther (TU Dresden)
• Design Approach for a Scalable and Generic Framework for Parallel FMU Simulation
- 14.45-15.10** Coffee
Session Chair: Bernhard Bachmann
- 15.10-15.30** Jan Šilar (Charles University, Prague)
• Partial Differential Equations in Modelica
- 15.30-15.50** Gustaf Thorslund (Linköping University)
• Implementation and evaluation of a PDE-solver using ParModelica
- 15.50-16.10** Mahder Gebremedhin (Linköping University)
• Dynamic load balancing in parallelization of equation-based models
- 16.10-16.25** Martin Sjölund, Arunkumar Palanisamy and Peter Fritzson (Linköping University)
• Generating OpenModelica web books including mathematical typesetting from OMNotebooks
- 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