

Workshop Program

9:00 Introduction and welcome to the EOOLT Workshop
Peter Fritzon

Session 1 : Integrated System Modeling Approaches

Session chair: François Cellier

9:00-9:30 *Multi-Paradigm Language Engineering and
Equation-Based Object-Oriented Languages*

Hans Vangheluwe (keynote talk)

9:30-9:50 *Seamlessly Integrating Software & Hardware
Modelling for Large-Scale System*

Toby Myers, Peter Fritzon, and Geoff Dromey

9:50-10:05 *The Impreciseness of UML and Implications
for ModelicaML*

Jörn Guy Süß, Peter Fritzon, and Adrian Pop

10:05-10:15 Discussion on Integrated System Modeling
Approaches

10:15-10:20 Short Break

Session 2 : Modeling for Multiple Applications

Session chair: David Broman

10:20-10:40 *Multi-Aspect Modeling in Equation-Based
Languages*

Dirk Zimmer

10:40-11:00 *Beyond Simulation: Computer Aided Con-
trol System Design Using Equation-Based Object-
Oriented Modeling for the Next Decade*

Francesco Casella, Filippo Donida, and Marco Lovera

11:00-11:20 *A Static Aspect Language for Modelica
Models*

Malte Lochau and Henning Günther

11:20-11:30 Discussion on Modeling for Multiple
Applications

11:30 - 12:00 Coffee and Continued Discussion

Session 3 : Modeling Language Design

Session chair: Peter Fritzon

12:00-12:20 *Higher-Order Acausal Models*

David Broman and Peter Fritzon

12:20-12:40 *Type-Based Structural Analysis for Modular
Systems of Equations*

Henrik Nilsson

12:40-13:00 *Introducing Messages in Modelica for Facili-
tating Discrete-Event System Modeling*

Victorino Sanz, Alfonso Urquía, and Sebastián Dormido

13:00-13:20 *EcosimPro and its EL Object-Oriented Mod-
eling Language*

Alberto Jorrín, César de Prada, and Pedro Cobas

13:20-13:30 Discussion on Modeling Language Design

13:30-15:30 Lunch and Continued Discussion

Session 4 : Equation Handling, Diagnosis, and Modeling

Session chair: François Cellier

15:30-15:50 *Activation inheritance in Modelica*

Ramine Nikoukhah

15:50-16:10 *Selection of variables in initialization of
Modelica models*

Masoud Najafi

16:10-16:30 *Supporting Model-Based Diagnostics with
Equation-Based Object Oriented Languages*

Peter Bunus and Karin Lunde

16:30-16:50 *Towards an Object-oriented Implementation
of von Mises' Motor Calculus Using Modelica*

Tobias Zaiczek and Olaf Enge-Rosenblatt

16:50-17:10 Discussion on Equation Handling, Diagnosis,
and Modeling

17:10-17:30 Summing Up - Future directions of equation-
based languages
