EOOLT 2016

April 18, Milano – Italy www.eoolt.org

7th International Workshop on Equation-Based Object-Oriented Modeling Languages and Tools **Final Program** Aula Castigliano, Building n. 5 Politecnico di Milano Piazza Leonardo da Vinci 32

Session 1: Creating and Processing Models (Session Chair: Peter Fritzson)		
	09:50	Coffee Break
	09:10	Invited Keynote: Gianni Ferretti: Object-oriented modelling and FEM: a strategic partnership for virtual prototyping of mechatronic systems
	09:00	Francesco Casella and Dirk Zimmer: Welcome Address

10:20	Victorino Sanz and Alfonso Urquia: Modelica Extensions for Supporting Message Passing Communication and Dynamic Data Structures (WIP)
10:40	Hilding Elmqvist and Sven Erik Mattsson: Exploiting Model Graph Analysis for Simplified Modeling and Improved Diagnostics
11:10	Christoph Höger: Modeling With Monads
11:40	Coffee Break

Session 2: Teaching and Understanding Equation-Based Languages (Session Chair: Francesco Casella)

12:10	Viktor Kozma and David Broman: MORAP: a Modular Robotic Arm Platform for Teaching and Experimenting with Equation-based Modeling Languages (WIP)
12:30	Alexander Pollok and Andreas Klöckner: The use of Ockham's Razor in Object-Oriented Modeling
13:00	Lunch Break

Session 3: Model-Based Methods and Tools (Session Chair: David Broman)

14:30	Andreas Seefried and Andreas Pfeiffer:
	Nonlinear Model Predictive Control in Modelica using FMI and Optimization library (WIP)
14:50	Daniel Bender:
	DESA - Optimization of variable structure Modelica models using custom annotations
15:20	Coffee Break

Session 4: Efficient Simulation of DAE Systems (Session Chair: Dirk Zimmer)

15:50	Volker Waurich and Martin Flehmig: Task Graph Based System Partitioning for Multirate Integration (WIP)
16:10	Lennart Ochel, Patrick Täuber and Bernhard Bachmann: Dynamic Tearing - Efficiency Enhancement of Tearing Methods by Consideration of Solvability Criteria during Runtime
16:40	Federico Bergero, Akshay Ranade and Francesco Casella: QSS and Multi-Rate Simulation of Object-Oriented Models
17:10	Short Coffee Break, Final Discussion and Wrap-up
18:00	End of Workshop