



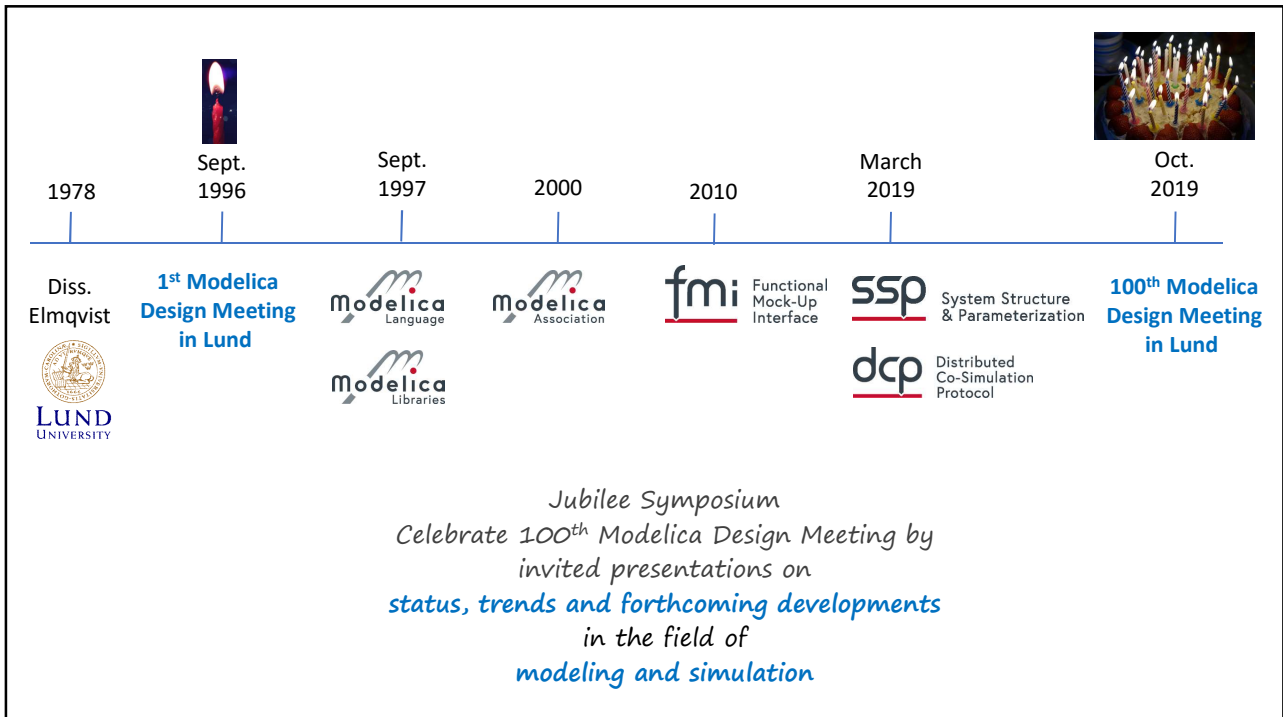
Jubilee Symposium  
**Future Directions of  
System Modeling and Simulation**

Sept. 30, 2019, Medicon Village, Lund, Sweden





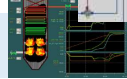






**LUND**  
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Welcome



## Presentations

Karl Johan Aström	<i>Modeling - a Control Engineering Perspective</i>		<i>Machine Learning and physical models</i>
Bengt Jacobson Mats Jonasson Peter Nilsson	<i>Needs for Physical Models and Related Methods for Development of Automated Road Vehicles</i>		<i>Autonomous vehicles</i>
Erik Frisk	<i>Structural analysis of models for fault diagnosis</i>		<i>Symbolic and graph algorithms</i>
Costas Pantelides	<i>Process modelling: current perspectives, future visions</i>		<i>Industrial applications</i>
Rüdiger Franke	<i>Model-based optimal dispatch and control of power systems and industrial applications</i>		<i>Optimization</i>
Oliver Lenord	<i>Standardizing eFMI for embedded systems with physical models in the production code software</i>		<i>Embedded models</i>
Miriam Mehl	<i>Partitioning and Coupling of Multi-Physics PDE Simulations</i>		<i>PDEs and DAEs</i>
Chris Rackauckas	<i>Recent advancements in differential equation solver software</i>		<i>Efficient solvers</i>
Hilding Elmqvist Martin Otter	<i>Modia - A Prototyping Platform for Next Generation Modeling and Simulation based on Julia</i>		<i>Modeling methodology</i>

## Symposium Program

10:30 – 10:45	<i>Opening session</i>
10:45 – 18:15	<b>Invited Presentations</b>
18:15 – 18:50	<i>Closing session with panel discussion:</i> Moderator: Hubertus Tummescheit Panel: Participants from industry
18:50 – 19:30	<ul style="list-style-type: none"> <li>▪ <i>Pre-dinner mingle and drink (in restaurant) or</i></li> <li>▪ <i>Hotel (checkin)</i></li> </ul>
19:30 - ....	<i>Dinner with Modelica History Session 1861 ... 2019 (by Hilding Elmqvist and Martin Otter)</i>

- Make photos of
- People of 1st Modelica Design Meeting
  - Modelica Association Board
  - Modelica Language Tool Vendors

Tomorrow (FMI newbies and guests)

Day 2, Oct 1			
Time	Giga (48)	Micro (20)	Mega (20)
0800-08:45		FMI design (mandatory for newbies and guests)** <small>(Host: Andreas Junghanns)</small>	

## Organizers of the Symposium



Martin Otter (DLR-SR)  
Hilding Elmqvist (Mogram)  
Dan Henriksson (Dassault Systèmes)  
Johan Akesson (Modelon)  
Martin Krammer (VIRTUAL VEHICLE)

Anton Cervin (Department of Automatic Control)  
Claus Führer (Center for Mathematical Sciences)  
Görel Hedin (Department of Computer Science)

Modelica Association Backoffice  
Leo Gall (LTX)  
Sonja Gall (LTX)

Eva Westin (Department of Automatic Control)

## Sponsors

*Thanks very much to make  
this Symposium possible*



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