

# 14<sup>th</sup> Modelica Conference

September 20-24, 2021  
Linköping, Sweden

# FMI User Meeting - Industrial Usage of FMI and Companion Standards SSP / DCP/ eFMI

Chair: Christian Bertsch



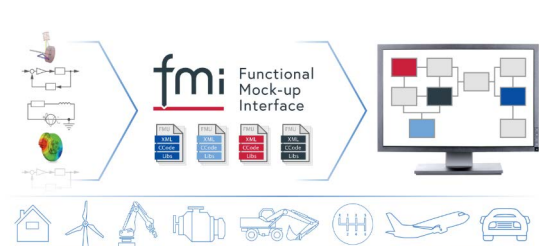
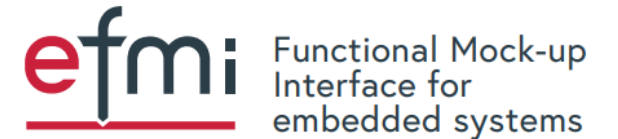
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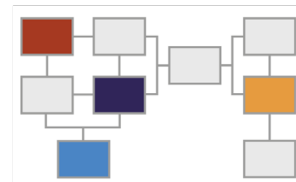
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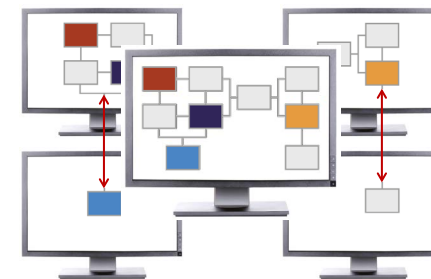
# FMI - DCP - SSP - eFMI : a Coordinated Set of Standards



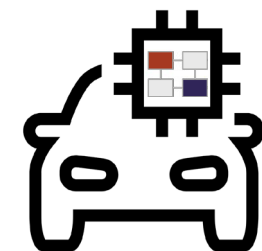
*Semantics, API and XML format for exchange of simulation models and co-simulation*



*File format and XML schemas for description of architectures and sets of parameters*



*Semantics, protocol and XML schema for network based co-simulation*



*Container architecture for the step-wise refinement of a high-level algorithmic solution to an embedded implementation*

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# Agenda

Welcome, Overview on FMI / SSP / DCP / eFMI Standards (5 Min.)

## Industrial user talks

- Initial Steps in Deploying and Calibrating Power System Models on a Synchrophasor Data Cloud Platform using FMI (15 Min., Luigi Vanfretti, Giuseppe Laera, Marcelo de C. Fernandes, Chen Wang, Chetan Mishra and Kevin D. Jones)
- FMI-based simulation workflows based on open source and commercial tools (15 Min., Christian Bertsch, Fabian Jansen, Andreas Babucke and Torsten Sommer)
- Open Simulation Platform - Towards a maritime ecosystem for efficient co-simulation (15 Min., Lars Tandle Kyllingstad)

FMI3 development (Status, roadmap, layered standards) (15 Min., Andreas Junghanns)

Demo of FMI3 support in tool prototypes (60 Min)

*Short Break (10 Min.)*

Status and outlook SSP Standard (5 Min, Jochen Köhler)

## Industrial user talks

- Use of SSP, FMI and OSI for Simulation-based Testing of an Automated Vehicle (15 Min., Jochen Koehler, Heinz Sachsenweger, Arun Das, Markus Deppe and Hans-Martin Heinkel)
- Model-based development of a traction control unit with SSP and FMI (15 Min., Nicolas Ochoa Lleras, Hasan Esen, Pierre Mai, Klaus Mai and Hiroshi Tashiro)
- SSP Traceability Demonstrator (15 Min., Dag Brück, Hans-Martin Heinkel, Peter Lobner and Pierre Mai)

Status and Outlook DCP Standard (15 Min., Martin Krammer)

Status and Outlook eFMI Standard (15 Min., Christoff Bürger)

General Q&A + End