



## MSCPES 2014

### Workshop on Modeling and Simulation of Cyber-Physical Energy Systems 2014

14 April 2014, Berlin, Germany

#### Program

08:00	Registration
<b>09:00 - 11:00</b>	<b>First morning session – Keynotes</b>
09:00	Opening
09:10	Marija Ilic (Carnegie Mellon University): <i>Integration of Heterogeneous Small Test Beds for Emulating Large-Scale Smart Power Grids: The Emphasis on Control Architectures</i>
10:00	Torsten Blochwitz (ITI): <i>The Functional Mockup Interface - Standard based Co-Simulation with FMU</i>
<b>11:00 - 11:30</b>	<b>Coffee break</b>
<b>11:30 - 13:00</b>	<b>Second morning session – Co-Simulation of Energy Systems</b>
11:30	Eero Vesaoja, Chen-Wei Yang, Heikki Nikula, Paul Flikkema, Seppo Sierla, Tommi Karhela: <i>Hybrid Modeling and Co-Simulation of District Heating Systems with Distributed Energy Resources</i>
12:00	Edmund Widl, Benoit Benoit Delinchant, Svea Kübler, Wolfgang Müller, Victor Norrefeldt, Thierry Stephane Noudui, Sebastian Stratbücker, Michael Wetter, Frederic Wurtz, Wangda Zuo: <i>Novel Simulation Concepts for Buildings and Community Energy Systems based on the Functional Mock-up Interface Specification</i>
12:30	Bernhard Heinzl, Wolfgang Kastner, Fabian Dür, Friedrich Bleicher, Ines Leobner, Iva Kovacic: <i>Using Coupled Simulation for Planning of Energy Efficient Production Facilities</i>
<b>13:00 - 14:00</b>	<b>Lunch</b>
<b>14:00 - 16:00</b>	<b>First afternoon/evening session – Communication and controls</b>
14:00	Davood Babazadeh, Lars Nordström: <i>Agent-based Control of VSC-HVDC Transmission Grid – A Cyber Physical System Perspective</i>
14:35	Kaliappa Ravindran, Mohammad Rabby and Arun Adiththan: <i>Model-based Control of Device Replication for Voting-based High Assurance Data Collection</i>
15:00	Matthias Stifter, Jawad Kazmi, Filip Andrén, Thomas Strasser: <i>Co-Simulation of Power Systems, Communication and Controls</i>
15:30	Antoine Lemay, José M. Fernandez, Scott Knight: <i>Modelling Physical Impact of Cyber Attacks</i>
<b>16:00 - 16:30</b>	<b>Coffee break</b>
<b>16:30 - 18:00</b>	<b>Second afternoon/evening session - Modelling and Simulation</b>
16:30	Sohail Khan, Hadrien Bosetti, Peter Palensky, Wolfgang Gawlik: <i>A Replicator Dynamics Method for the Unit Commitment Problem</i>
17:00	Boguslaw Jablkowski, Markus Kuech, Olaf Spinczyk, Christian Rehtanz: <i>A Hardware-in-the-Loop Co-Simulation Architecture for Power System Applications in Virtual Execution Environments</i>
<b>17:30 - 18:00</b>	<b>Discussion and closing of the conference</b>
<b>18:00</b>	<b>End of conference</b>