Maplesoft Tutorial at the 9th International Modelica Conference

Advanced Analysis of Modelica Models using MapleSim and Maple

Presented by Dr. Orang Vahid, Senior Modeling Engineer, Maplesoft

Since its inception, Modelica has held the promise of letting engineers go further with physical modeling than just running simulations. With recent developments in MapleSim and Maple, users can create and document their own symbolic and numeric analyses of Modelica models in a rich problem-solving environment, in addition to performing traditional simulations.

This tutorial will guide you through the process of loading a Modelica model into Maple and then extracting the model equations into a form amenable to a wide range of analysis. Through hands-on exercises, it will provide you with basic skills in developing your own analyses in Maple, and implementing the results in MapleSim.

Examples will include control design, frequency analysis, vibration attenuation, parameter sweeps, Monte-Carlo and optimization, and sensitivity analysis.



Attendees will be provided with an evaluation copy of Maple and MapleSim for use on their own computer.



© Maplesoft, a division of Waterloo Maple Inc., 2012. Maplesoft, Maple, and MapleSim are trademarks of Waterloo Maple Inc. All other trademarks are the property of their respective owners.