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# Translating Simulink Models to Modelica using the Nsp Platform

Jean-Philippe Chancelier<sup>1</sup> Sébastien Furic<sup>2</sup> Pierre Weis<sup>2</sup>

<sup>1</sup>Université Paris-Est, CERMICS (ENPC), 77455 Marne-la-Vallée 2, France,  
jean-philippe.chancelier@enpc.fr

<sup>2</sup>Inria Paris, 2 rue Simone Iff, 75589 Paris, France & Université Paris-Est, CERMICS (ENPC), 77455 Marne-la-Vallée 2, France {sebastien.furic,pierre.weis}@inria.fr

## Abstract

We present a new Simulink to Modelica translation chain embedded into Nsp. Translated models can be edited (original Simulink diagrams are preserved through translation) and simulated. This translation chain makes use of the Simport tool, originally designed to translate Simulink models to Scicos models, and also relies on Modelicac, i.e. Scicos' Modelica companion compiler.

Using some examples, we demonstrate the effectiveness of the translation process and detail some technical aspects of it. This new Nsp feature extends Nsp's simulation capabilities and makes it a reference platform for users looking for means to simulate Simulink models within a Modelica framework. Resulting Modelica code can even be exported to other Modelica compatible tools. *Keywords: Nsp; Simulink; Modelica*