

M. Arnold, T. Blochwitz, C. Clauß, T. Neidhold, T. Schierz, S. Wolf

FMI-for-CoSimulation. In: The International Journal of Multiphysics, Special Edition: Multiphysics Simulations – Advanced Methods for Industrial Engineering. Selected contributions from 1st Fraunhofer Multiphysics Conference, Multi-Science Publishing Co. Ltd., Brentwood, Essex, UK, pp. 345-356, 2011.

Abstract. Co-Simulation is a rather general approach to the simulation of coupled technical systems and coupled physical phenomena in engineering. The Functional Mock-up Interface (FMI) for co-simulation provides interfaces between master and slaves as a standard for the coupling of two or more simulators. The interfaces address both data exchange issues and algorithmic issues. The paper presents the interface definition in terms of the programming language C as well as issues of application. The interface is defined to support both simple and more sophisticated master algorithms. This is a joint work supported by the German BMBF within the ITEA2 project MODELISAR.

Contact: blochwitz@iti.de