

Tutorial at the

13th INTERNATIONAL **MODELICA** CONFERENCE

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Ostbayerische Technische
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Title:

Hacking FMI

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Abstract:

This tutorial takes a look behind the scenes of our popular open source and commercial FMI libraries:

- FMI Kit for Simulink - FMI import and export for Simulink
- FMPy - FMI import for Python
- Test FMUs - a set of FMUs for development, testing and debugging
- Unity FMI Add-on - FMI import for the Unity 3D engine

During the session we provide a step by step introduction starting with the installation and setup followed by an overview of the command line interface (CLI), graphical user interface (GUI), APIs, examples and test cases. In a hands-on we step deeper into the code and demonstrate how to set up the development environment, build prototypes and debug source code FMUs and the importing environment. Finally we demonstrate how to open issues to contribute to the projects. The tutorial concludes with an open-ended Q&A session where users can get in touch with the core developers and power users, share their experiences with FMI, give feedback and make suggestions for further development.