Karlsruhe Institute of Technology

Institute for Fusion and Reactor Technology
Division Innovative Nuclear Systems
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Development of a postprocessing tool for the visualization of coupled simulations

Master Thesis / Diplomarbeit

Task description

Common 3D CFD codes like OpenFOAM can give very detailed insight into a wide range of flow conditions and heat transfer phenomena. But the simulation of a complete power plant cannot be done with todays computational resources available. Special so called 1D Systemcodes like ATHLET are used for this task. The coupling of these two types of codes is of big interest in todays research at the IFRT.

The main goal of this Master thesis is the development of a postprocessing tool for the visualization of these coupled simulations.

Prerequisites

- Student of mechanic engineering, chemical enginnering or Physics
- Basic knowledge of Fluid mechanics

Start date

now

Duration

4-6 months (depending of the scope of work)

Person in charge and contact

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