Rotating machinery in FOAM-extend

Instructor: Håkan Nilsson

Training type: Advanced

Session type: Lecture with examples

Software stack:

- foam-extend 3.3
- kompare

Full description

The focus is on theory and application of functionality that is related to rotation, such as SRF, MRF, rotating mesh, ggi, overlapGgi, mixingPlane, specific boundary conditions, etc. We investigate the difference between the basic solvers and the ones including rotation, and we have a look at the libraries and classes that are related to rotation. The examples are for incompressible flow, and we use tutorials in the FOAM-extend distribution that have been designed for this specific purpose.

The participant should be familiar with Linux, have experience with basic OpenFOAM/FOAM-extend usage, and preferably have some experience in reading C++ code. We will read some code to verify what it does. The training is given as a lecture with examples, to keep the speed up and to cover as much as possible of the material.

The slides are for hands-on, so anyone interested can repeat afterwards. There is not time enough at the lecture.