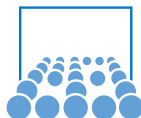


Seminar on Partitioned Fluid-Structure Interaction

Kick-off Meeting

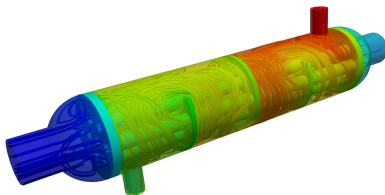
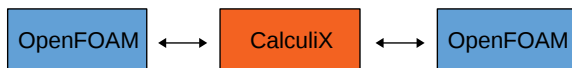
Benjamin R uth, Benjamin Uekermann

April 12, 2018



Partitioned Fluid-Structure Interaction

- Reuse of existing software
- Tailored numerics for every field
- We only operate on boundary conditions in an input-output fashion $F : d \mapsto f$, $S : f \mapsto d$



Dates I

First and second block

- Basic topics
- Start preparation after exams, on February 21
- Presentations: April 23 and 26
- Paper deadline: May 4

Third and fourth block

- Advanced topics, built upon basic topics
- Start preparation at the beginning of the lecture period, in April
- Presentations: June 28 and July 5
- Paper deadline: July 13

Dates II

First block, Monday, April 23, 9-12am

- **1.1** *From partitioned to monolithic FSI*, Ramesh Kandan Murugan (supervisor: BR)
- **1.2** *Added-mass effect and explicit/implicit coupling*, Abinav Ravivenkatakrisnan (supervisor: BR)
- **1.3** *preCICE from user perspective*, Qunsheng Huang (supervisor: BR)

Second block, Thursday, April 26, 12-4pm

- **2.1** *A practical introduction to CFD*, Ayman Noureldin (supervisor: BU)
- **2.2** *A practical introduction to CSM*, Florian Munzinger (supervisor: BU)
- **2.3** *Brief overview of remaining topics*, BR and BU

Dates III

Third block, Thursday, June 28, 12-4pm

- **3.1** *Conjugate heat transfer*, Winfried Baumann (supervisor: BU)
- **3.2** *Interface quasi-Newton coupling*, Dominik Volland (supervisor: BR)
- **3.3** *Data mapping methods*, Themistoklis Tzoulis (supervisor: BU)

Fourth block, Thursday, July 5, 12-4pm

- **4.2** *Moving geometries*, Jacob Förner (supervisor: BR)
- **4.4** *Showcase tbd*, Daniel Appel (supervisor: BU)

Rules

- Paper and talk, both mandatory (one fail all fail), 1:1 weight
- Talk should be 45 minutes + 10 minutes discussion.
- We start on time. Test and prepare beamer before!
- IEEE paper template (download on webpage), 5-6 pages (including everything)
- Hard paper deadlines (11:59pm)
- You have to be present for all presentations (doctor's note necessary for absence).
- Good scientific practice!

Evaluation Criteria

Talk

- Did the speaker understand the topic?
- Did the audience learn something from the talk?
- Style and formalities

Paper

- Is the content of the paper correct and meaningful?
- Is the content of the paper well explained?
- Style and formalities