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Sebastian Gjertsen

12. desember 2016

- Introduction to FSI and its applications
- Mathematical theory
- Numerics with FEniCS
- Benchmarks with Navier-Stokes and FSI
- Main problem, Aneurysm or whatever
- Conclusion, discussion . . .

0.1 Introduction

- FSI background
- Short medical background

0.2 Mathematical theory

- Governing equations:
- Navier-Stokes
- Structure equations
- ALE and mappings
- Boundary conditions, stresses and so on
- FSI, the ALE approach

0.3 Numerics with FEniCS

- Finite element method
- Spaces, Babuska-Brezzi etc
- FSI-CODE

0.4 Benchmark

- Hron - Turek problem defintion
- Results, cfd, csm , fsi
- Discussion

0.5 Main problem

- Aneurysm maybe
- Results

0.6 Conclussion

- Conculsion
- Discussion
- Further work