# Contents

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### Introduction

• FSI background

# Mathematical theory

- Navier-Stokes
- Structure equations
- ALE and mappings
- ullet Boundary/Interface conditions
- Robin-Neumann

#### Numerics with FEniCS

- Finite element method
- What spaces to use and why
- FSI-CODE ??

## Benchmark

- Taylor Green
- Hron Turek. Defintion, Results and Discussion
- Pressure wave tube??

#### Conclussion

- ullet Conclusion
- Discussion
- Further work