

Preface

This book gives a concise and gentle introduction to finite element programming in Python based on the popular FEniCS software library. FEniCS can be programmed in both C++ and Python, but this tutorial focuses exclusively on Python programming, since this is the simplest and most effective approach for beginners. After having digested the examples in this tutorial, the reader should be able to learn more from the FEniCS documentation, the numerous demo programs that come with the software, and the comprehensive FEniCS book *Automated Solution of Differential Equations by the Finite Element Method* [26]. This tutorial is a further development of the opening chapter in [26].

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Comments and corrections can be reported as *issues* for the Git repository of this book¹, or via email to `logg@chalmers.se`.

Oslo and Smögen, November 2016 Hans Petter Langtangen, Anders Logg

¹ <https://github.com/hplgit/fenics-tutorial/>

Solving PDEs in Python

The FEniCS Tutorial I

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