Introduction

M.Sc. in Mathematical Modelling & Scientific Computing,
Practical Numerical Analysis

Michaelmas Term 2020

Introduction to Practical Numerical Analysis

- ▶ Two lectures per week on Mondays at 2pm in L2 and on Fridays at 10am in L2.
- ▶ There will be one problem sheet per week to be submitted on Thursdays by 12noon.
- ▶ After week 1, the Friday lecture will go through concepts and the Monday lecture will go through the problem sheets.
- ▶ Idea is to learn more Matlab by a set of examples from Numerical Analysis.
- ▶ Our TAs will be Fabian Laakman and Constantin Puiu.
- ▶ Course materials, including slides and problem sheets, will be available from
  https://courses.maths.ox.ac.uk/node/51652/materials.

Introduction to Practical Numerical Analysis

Topics we will look are

- Interpolation
- Quadrature
- Rootfinding
- ODEs (initial value problems)

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The idea of the Friday lectures (and Monday in week 1) is to summarise the ideas for a topic. While there may be theorems stated, there will not (generally) be any proofs — this is meant to be a practical course.