# Homework Sheet 1

## VU Numerical Algorithms, SoSe 2018

due date: 23.4.2018, 18:00

• Please submit an anonymized version of your report without your name or your Matrikelnummer appearing in the document.

# **Prerequisites**

#### 1. Basics:

- No global variables allowed.
- Pay attention to the interface definitions (i.e., use the specified terms! In/output parameters must be in the specified order!)
- Your routines should always check the number and types of input arguments.
- Do not plot results in predefined routines! Plot results in scripts or self defined routines only.
- $\mathbf{x}$  (Produce separate routines (i. e., for Part I: preparation of the input matrices, LU decomposition). Write modular code! Use consistent interfaces for your routines.)

### 2. Submission:

- Upload a single zip archive with all your source code files and your report (as a single PDF file named *report.pdf* with all plots and discussions of results) on the course page in Moodle.
- Name your archive a < matriculation number > .zip (e.g. a01234567.zip)
- Directories in the archive are not allowed.
- A complete submission should include the following files:
  - a) Routines: accuracy.m, linSolve.m, plu.m, solveL.m, solveU.m, self defined routines (optional)
  - b) Scripts: part1.m, part2.m, part3.m
  - c) Documentation: report.pdf