Introduction to MATLAB

This short introductory course is based on one developed by Nick Trefethen, Mark Embree and Kathryn Gillow, and we are very grateful to them for letting us use their materials.

There are ten files (apart from this one) associated with this course and they should be worked through in the following order:

1. **Introduction.pdf** Read this first, but please replace Sections 2 and 3 (which were written for the linux operating system) with the following:

Section 2 You should first of all install MATLAB on your computer if necessary. This can be done by following the instructions at <u>http://www.maths.ox.ac.uk/help/software/matlab</u>. You may then wish to create a folder within which to keep your MATLAB work.

Section 3 To launch MATLAB just click on the icon that should appear on your Desktop after installation.

- 2. **lecture1.pdf** This was originally given as a lecture, with the lecturer typing in the MATLAB commands. You should type them into a MATLAB command window yourself, and see what each command does.
- 3. **practical1.pdf** This is a problem sheet for you to work through, based on the lecture1 'Playing with MATLAB' material.
- 4. **solutions1.pdf** This contains the answers to practical 1.
- 5. lecture2.pdf as for lecture1
- 6. practical2.pdf as for practical1
- 7. solutions2.pdf as for solution1
- 8. lecture3.pdf as for lecture1
- 9. practical3.pdf as for practical1
- 10. solutions3.pdf as for solution1

Recommended Reading There are plenty of introductory texts on MATLAB. For example:

MATLAB DeMYSTiFieD by David McMahon (McGraw Hill)

MATLAB Practical Approach by Stormy Attaway (Butterworth Heinemann)

If you have any queries whilst working through this material please contact Cath Wilkins wilkins@maths.ox.ac.uk .