ADP 2 – Numerical Modelling, 763315A spring 2009

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Introduction

The goal of this course is to learn to solve mathematical problems in physics with aid of a computer. The software we'll be using is Mathematica, which is a useful tool for light symbolic and numerical computation. The course is comprised of lecture-type excersices, in which we skim through a piece of the lecture material and an excercise sheet each. All material is available as mathematica notebooks in the homepage of this course.

Excercise Works and the Exam

There will be exam at the end of April or at the beginning of May. The date for the exam will be given later. Additionally, there are three excercise works, quite extensive tasks. A report have to be done and returned to the lecturer. **You must return all three reports before taking the exam!** Excercise works can be done at home or at specific excercise work sessions (see the schedule).

Schedule

All excercises and excercise work sessions will be held in the room **YL124**. The excercises are on 12th of January. The excercise work sessions will begin on week 5 or 6.

Excercises 2,5 h a week, 2 groups

- Mon 8.30-11

- Tue 12.00- 14.30

Excercise work sessions: 2h a week, 1 group

- Mon 16-18:

If you are going to participate in excercise work session, you must inform lecturer beforehand via email.

Using Mathematica at the University

The computer class YL124 is in public use when it's not reserved. Mathematica can also be used through SSH. Mathematica is installed to the computer`haapa`. Text-based Mathematica starts by typing `math` and for a graphical interface (for this you need X-window system in your computer) starts with `mathematica`.