Course Analysis: DN2264/5, Parallel Computations for Large Scale Problems I+II, 2008

Course Data

- Parallel Computations for Large Scale Problems I+II, DN2264/5, 6+3 ECTS
- Period 3/4, 2007/2008
- Responsibility: Michael Hanke
- Teaching hours:
  - Lectures/exercises: 24+4 h
  - Computer labs: 12 h
- Registered students: 26+17
- Literature: Wilkinson/Allen, Parallel programming 2nd ed., lecture slides
- Credits:
  - homework+"mid-term quiz": 3 ECTS (part I)
  - Computer lab: 3 ECTS (project) (part I)
  - project: 3 ECTS (partII)
- Performance index part I: 77% (as of May 13, 2007)
- Examination index part I: 73% (as of May 13, 2007)
- Examination index part II: 50% (as of May 31, 2007)

Aim The present course is intended to provide an introduction into the basic ideas and methods used for developing parallel applications. We have been concentrated on distributed memory architectures. Applications include simple numerical algorithms, image processing, sorting, algorithms on graphs, as well as more advanced numerical techniques.

A great deal of work wwas spent in hands-on exercises. For those who are not comfortable with C or Fortran, a short introduction to C has been provided.

Part II includes a larger project (almost) freely chosen by the students.

Changes compared to the last year None.

Conclusions According to the answers of the course evaluation form, the course was considered rather easy. It was considered very interesting and meaningful. The homeworks came to the point and their level was just right. The examination by homeworks/mid-term quiz has been well-received.

The introduction to C was considered very useful!

I would like to add that I got the impression that some students lack simple skills in programming in a unix environment. In a programming oriented course like the present, this may become a problem.

Teaching The teaching was done by lectures and computer labs in part I. Part II consists of two introductory lectures, scheduled and unscheduled personal consultations, and project presentations.

Examination The examination based on homework problems, a mid-term quiz, and a written project report in Part I. The project of part II was examined by a written report and an oral presentation in a “colloquium”.

Prerequisites No problem.

Planned changes None.

Grading No problems.