## Session 8, March 17, 2011, 12:30–16:15

## Program

- 1. 12:30–14:00 in G5-112. I will complete the proof of the inverse function theorem, Theorem 16.12 in [PF]. I will also give some examples of applications, and explain what you are assumed to do in the first exercise below concerning section 16.1. Then I will start the preparations for the proof of the implicit function theorem, sections 17.1 and 17.2 in [PF].
- 2. 14:00–16:15 in groups. See the list of exercises below. Note that there is extra time for solving problems today.

**Exercises** Solve the exercises in the order posed.

- 1. Go through section 16.1 in [PF] in detail, filling out any missing computations or arguments.
- 2. Section 16.1, Exercises 1, 2, 4, 5, 8.

Arne Jensen