

## DM19 – Fall06 – Weekly note 9

### Study orientation talks

If you havent done so already you should sign up for the obligatory study talks at IMADA in weeks 45 and 46. If you do not your IMADA account will be closed under the assumption that you are no longer an active student. See the full announcement (in Danish) on the home page of DM19.

### Stuff covered November 8, 2006

Pages 979-986, 995-996 and 1003-1012.

### Exercises November 14, 2006

- 34.2-7, 34.2-10.
- 34.3-2,34.3-3, 34.3-6, 34.3-7.
- 34.5-1 Hint: consider the Hamiltonian cycle problem
- 34.5-6 Hint: show how to reduce the Hamiltonian cycle problem to the Hamiltonian path problem. You should add some extra vertices to  $G$  so that  $G$  has a Hamiltonian cycle if and only if the new graph has a hamiltonian path with specified endvertices (among the new ones).
- 34.5-7
- 34-1 (a)-(c)

### Lecture November 15, 2006

Note that due to “Undervisningsdagen” the lecture will be thursday November 16th at 12-14 in U9

### Lecture November 16, 2006

Cook’s proof that Satisfiability is NP-complete. DM19 notes from Papadimitriou & Steiglitz pages 314 and 352-359. If there is more time we will finish Section 34.5.