# On-Line Algorithms – F14 – Lecture 3

### Lecture, February 5

We covered up through Lemma 1.3 in chapter 1 in the textbook.

### Lecture, February 10

We will finish chapter 1 and begin on chapter 2 in the textbook. (We may finish chapter 2 in a discussion section.)

### Lecture, February 13

Kim Skak Larsen will lecture on chapter 3 and begin on chapter 4.

## Problems for February 17

- 1. Exercise 2.1 in the textbook.
- 2. Exercise 2.3 in the textbook (but only for the static case).
- 3. Show that there is a request sequence on which BIT's performance ratio is no better than  $\frac{7}{4}$  in the partial cost model. (It is sufficient to look at lists of length 2.)
- 4. Do Exercise 2.4. Note that the lower bound will depend on p, rather than being  $2 \epsilon$ .
- 5. How do you define BIT and COMB in the dynamic model?
- 6. Do Exercise 2.5 in the textbook.