Institut for Matematik og Datalogi Syddansk Universitet

# DM553 Lecture 16 — DM508 Lecture 7

### Lecture, May 4

We covered section 3.5 from the notes. Then we began on approximation algorithms from chapter 35 of CLRS, covering up to and including section 35.2.

## Lecture, May 6 (in U10)

We will continue with approximation algorithms from chapter 35 of CLRS, covering sections 35.3 and 35.5.

## Lecture, May 11

We will finish with approximation algorithms (skipping MAX-3-SAT since that is done in another course) and possibly begin on median finding from section 9.3 in CLRS.

## Problems to be discussed in U142 on May 12

Do the following problems in CLRS:

- 1. 35.3-1, 35.1-2, 35.3-5.
- 2. 35.5-1, 35.5-2, 35.5-3, 35.5-4.
- 3. 35-1. (For part (a), you might consider reducing from the set-partition problem which is defined in exercise 34.5-5. Note that first-fit actually has an approximation ration better than 2, but that result is harder to prove.)