

## DM528 – Weekly Note 6

### Lectures in week 50

#### Monday, December 12

- Cormen, Leiserson, Rivest, and Stein: Introduction to Algorithms, 3rd ed.
  - Section 5.3: Randomly permuting arrays
- Kleinberg and Tardos: Algorithm Design (photocopies)  
If you have not got a copy yet, you can pick it up in my office or at IMADA's secretariat.
  - Section 13.1: Contention Resolution
  - Section 13.2: Global Minimum Cut
  - Part of Section 13.3: Collecting Coupons

#### Friday, December 16

- Kleinberg and Tardos: Algorithm Design
  - Section 13.4: MAX 3-SAT
  - Section 13.5: Randomized Divide and Conquer:  
Median-Finding and Quicksort

### Exercises for week 50

#### Tuesday, December 13 / Wednesday, December 14

- Cormen, Leiserson, Rivest, and Stein: Introduction to Algorithms, 3rd ed.
  - Exercise 5.3-2
  - Exercise 5.3-3  
Hint: Look at an array with four elements.
  - Exercise 5.3-4
  - Exercise 5.3-7
  - Problem 5-2  
Question d: Hint: Recall the coupon collector's problem  
Question f: Look only at  $k \leq 2$ .

