Reading Schedule "Introduction to Extreme Value Theory", Block 2, 2011-2012, Lecturer Thomas Mikosch

- The reference book is Embrechts, Kluppelberg, Mikosch *Modelling Extremal Events.*
- This schedule will be updated continuously.
- **Week 47:** Tools to be used throughout the course. *Regular variation.* The subexponential property of regularly varying distributions, Section 1.3.1. Karamata representation, Karamata's theorem, moment properties and much more can be found in Section A3.1. *Quantile function, generalized inverse, empirical distribution function* p. 130 and pp. 182-183.

  Limit probabilities of maxima Section 3.1.
- **Week 48:** *Weak convergence of maxima under affine transformations* Section 3.2. *Maximum domains of attraction and norming constants* Section 3.3.
- **Week 49:** Continuation of *Maximum domains of attraction and norming constants.* Section 3.3. *The generalized EVD and the generalized Pareto distribution.* Section 3.4.
- **Week 50:** *Problems of extreme value statistics and exploratary statistical tools in EVT.* Sections 6.1 and 6.2. *Estimation for the GEV.* Section 6.3. *Estimation under MDA conditions.* Section 6.4
- **Week 1:** Continuation of *Estimation under MDA conditions.* Section 6.4

Fitting excesses over high thresholds (POT method) Section 6.5.

- **Week 2:** *Extremes of dependent sequences. The extremal index* Section 8.1.