SOE 16: Networks (Invited Talk Kim Sneppen)

Time: Wednesday 15:00–15:45 Location: H37

 $\begin{tabular}{ll} \textbf{Invited Talk} & SOE 16.1 & Wed 15:00 & H37\\ \textbf{Information spreading and multi-stability in social systems}\\ -- \bullet \texttt{KIM SNEPPEN} -- \texttt{Niels Bohr Institute, Copenhagen, Denmark}\\ \end{tabular}$

Information spreading and "winner takes all" competition are ingredients in social system formation. Using word spreading and language competition as model systems, I will discuss [1] a simple model for word spreading, that emphasize information age as a selection principle, [2] a simple model for idea spreading, that emphasize the effect

of social thresholds and [3] a model for preservation of diversity when multiple languages/opinions compete for dominance. Finally, I will briefly discuss implications for scale free versus modular structures of social networks [4].

- [1]L. Lizana, N. Mitarai, H. Nakanishi, and K. Sneppen, PRE 83 (2011)
- [2] S. Bornholdt, M. H. Jensen and K. Sneppen, PRL 106 (2011)
- [3] K, Sneppen and N. Mitarai, PRL. 109 (2012)
- [4] M. Rosvall and K. Sneppen, PRE 79 (2009)