$\begin{array}{c} {\rm Network\ Modeling} \\ {\rm Winter\ Term\ 2011/2012} \end{array}$

Assignments $\mathcal{N}^{\underline{0}}$ 4 - Part II

released: 15.12.2011 **due:** 20.12.2011, 10AM

Task 1: Model Interpretation

4 points

Assume we are involved in business consulting, investigating the evolution of hierarchy structure within an enterprise. Let some longitudinal network data indicate "who gives orders to whom" (year by year). Discuss the (un)suitability of the reciprocity and the 3-cycle effect in this setting!

Task 2: Markov Chains

6 points

Discuss the differences (and similarities) regarding the Markov chains we have described for ERGMs and SAOMs!