

10th International Winter School on Inequality and Social Welfare Theory (January 11-15, 2015)

Applied Session: “Networks data analysis: An Introduction”

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Introduction

This session will introduce participants to the basic tools for the analysis of network data. The focus is primarily on providing some background on various networks, how they are measured, and useful ways of representing them. We will use the following softwares:

- Pajek: a comprehensive package for the analysis of network data (freely available [here](#))
- R: a language and environment for statistical computing and graphics (freely available [here](#))

Organization and presentation of material in this applied session will be based mainly on two sources:

- De Nooy, W., Mrvar, A. and Batagelj, V. (2005). “Exploratory Social Network Analysis with Pajek”. Cambridge University Press.
- Kolaczyk, E.D. and Csàrdi, G. (2014). “Statistical Analysis of Network Data with R”. Springer, New York.

References for a general overview of models and techniques for analyzing social and economic networks:

- Easley, D. and Kleinberg, J. (2010) “Networks, Crowds, and Markets: Reasoning about a Highly Connected World”. Cambridge University Press. (Complete pre-publication draft available for download [here](#))
- Hanneman, R. A. and Riddle, M. (2005). “Introduction to social network methods”. Riverside, California: University of California. (Free on–line textbook available for download [here](#))
- Jackson, M. (2008). “Social and Economic Networks”. Princeton University Press.
- “Social network analysis: Theory and applications”. (Free Wiki Book available for download [here](#))