

**Call for Papers for a Special Issue on
"Network Analysis"**

The journal *Advances in Data Analysis and Classification* will publish a Special Issue on "Network Analysis"¹.

Network analysis has attracted considerable interest from the social, behavioral and other science communities in recent decades. This interest can be attributed to the importance and need to analyze (e.g., social) *relationships* among units, to detect any underlying structural patterns, and to infer implications of these relationships. Wasserman and Faust (1994) pointed out that the network perspective allows new leverage for answering standard social and behavioral science research questions by giving precise formal definitions to aspects of the political, economic, or social environment. In the context of social network analysis, 'environment' is expressed by patterns or regularities in relationships among interacting units.

While the origins of social network analysis can be found in sociometry (Moreno 1934), the social psychology of groups, and various sociological and social anthropological studies of factories and communities, in the last decade the development of network analysis is also influenced by the statistical approaches from physics (e.g., power law, mean field theory) and by applications in the context of internet, e-commerce, and Web 2.0. Already in 1978 the *International Network for Social Network Analysis (INSNA)* was formed in order to foster exchange of information and mutual intellectual support. It publishes the newsletter *Connections* and organizes an international Sunbelt conference each year.

At a recent conference ARS'09 scientific results and recent developments in the area of network analysis were presented: visualization of networks, dynamic networks, large networks, blockmodeling, collaboration networks, networks in politics and organization, new methodologies for relational data, statistics in network analysis, networks in business and economics.

In a similar vein the planned Special Issue of ADAC is designed to collect a range of high quality research papers from the field of network analysis, with an emphasis on data analysis and classification. Topics of particular interest may include, but are not limited to:

- Methodological innovations in the fields of network analysis (e.g., blockmodeling, dynamic networks, large networks).
- The development of computational and visualization tools that efficiently implement methods and models for network analysis.
- Innovative applications of network analysis in specific domains such as sociology, communication sciences, political science, psychology, bioinformatics, business, finance, signal processing, data mining, etc.

¹This is one of the main topics of the Workshop on Social Network Analysis: Models and Methods for Relational Data (ARS'09) held at the University of Salerno (Italy) on July 13-14, 2009. See: http://www.unisa.it/Centri_e_Vari/statlab/ars2009/

Researchers and practitioners are kindly requested to submit relevant and innovative papers for publication in this Special Issue.

Papers should be written in LaTeX, following the instructions given below. Submitted papers must contain original unpublished work that has not been submitted for publication elsewhere. All manuscripts submitted to this Special Issue will undergo the classical double-blind reviewing process.

Submission details: The full paper should not exceed 20 pages (A4 or Letter size with 12 point, fully double-spaced font), including illustrations and tables. The front page of the manuscript must contain a concise and informative title, the names, affiliations, and addresses of all the authors, the e-mail address, telephone, and fax number of the corresponding author, an abstract of 150 to 250 words, and 4 to 6 keywords which can be used for indexing purposes. Further formatting instructions are given on the journals homepage <http://www.springer.com/journal/11634> or can be downloaded from the website <http://www.stochastik.rwth-aachen.de/adac.php>.

The pdf file of the manuscript should be submitted by e-mail to Prof. Anuška Ferligoj at the address anuska.ferligoj@fdv.uni-lj.si. The subject line of the submission message should include the words "ADAC Special Issue on Network Analysis".

Important dates:

- Submission of full papers for the Special Issue: January 15, 2010 at the latest (earlier submission is encouraged).
- Notification to authors: June 15, 2010 (tentative).
- Final papers for the Special Issue: October 30, 2010 (tentative).

Guest Editors:

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