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Workshop on theories and methods for understanding human social networks

23 – 27 June 2008, University of Melbourne, Australia

Lecturers: Professor Pip Pattison & Associate Professor Garry Robins



The MelNet group at the University of Melbourne is holding a 5-day intensive workshop on social networks. The workshop comprises an introduction to social network analysis and a more detailed session exploring statistical models for social networks¹. Taken together, the two parts constitute an intensive five-day introduction to theories and methods for understanding human social networks and their role in social and organisational processes.

The workshop will initially focus on collection approaches, on various deterministic analytic methods (such as centrality, cohesive subsets, and structural equivalence) and degree distributions. These methods will be introduced in the context of important social network theories and empirical examples, including strong and weak ties, structural holes, and influence processes through cohesion and equivalence. There will be an introduction to small world and other global network structures.

The latter and major part of the workshop moves on to the more sophisticated area of statistical models for social networks. Emphasis is given to the theoretical rationale for statistical modelling approaches and to their application in empirical settings. Simple random (Bernoulli) and dyadic independence graph distributions will be presented. More advanced statistical topics will include: an introduction to exponential random graph (p^*) models including simulation and fitting models to data; new specifications for exponential random graph models; models for bipartite graphs and for network evolution. Selection and influence processes, and networks in organisations, will be discussed.

Practical exercises will involve network data collection and network analysis and will utilise a range of social network software such as Pajek, UCINET, and PNet. Participants will also have the opportunity to analyse their own data. The pre-requisite for the workshop is completion of some readings and practical exercises which will be sent in advance.

Workshop Fee: \$2000

The postgraduate student fee is \$1000, and for School of Behavioural Science, University of Melbourne postgraduate students the fee is \$200.

Bursaries:

- Payment might be reduced for external postgraduate students to \$200 if special interest/needs in the subject can be demonstrated.

Funding:

- Funding to cover transport and accommodation are available for PhD students who study at Universities participating in *ARCRNSISS*.

For further details (enrolment, bursary, fee, funding), contact Galina Daraganova, School of Behavioural Science, University of Melbourne, gda@unimelb.edu.au (Tel) +61 3 8344 4300.

¹ It is possible that attendees can do either the introduction session (2-day) or the statistical models sessions (3-day). Please contact Galina Daraganova for more details about this.