

ORGANIZATIONAL DETAILS

- The course is free of charge
- Venue of the trainees (travel and accommodation) will be covered in case of researchers, early researchers and PhDs from European countries
- No costs are covered for people not involved in research activities (i.e. people from intermediaries or policy level)
- Participants will be selected on the basis of interest and CV
- Notification of acceptance will be sent after the selection process is completed

Participants will be asked to send some preliminary questions about their experience with social network analysis and specific policy questions of interest



Venue

Università della Svizzera italiana
Via Buffi 13
6904 Lugano, Switzerland

Start date

16th of February 2016, 10.30 AM

End date

18th of February 2016, 3PM

Deadline for application

November 30, 2015



The course is organized by the Institute for Interdisciplinary Data science of the Università della Svizzera italiana (www.idids.usi.ch) and by the Austrian Institute of Technology (www.ait.ac.at)

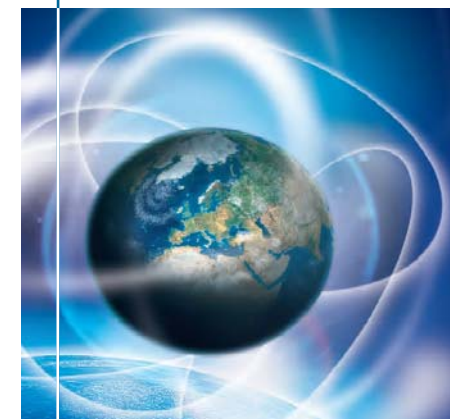
LOCAL ORGANIZING COMMITTEE

Prof. Alessandro Lomi, Dr. Benedetto Lepori, Dr. Paola Zappa

Contact person: Dr. Paola Zappa (paola.zappa@usi.ch)

Social Network Analysis. Introduction to methods and applications to the EUPRO database

Short Course



February 16-18, 2016



COURSE OBJECTIVES

This course aims at providing participants with an introduction to different methods of Social Network Analysis and give them the tools to apply the method to their work. The goal is to provide the participants with an understanding of the potential applicability of these methods to different types of networks and to various research questions.

The course will start with an introduction to simple descriptive methods to analyze and visualize social networks. It will then move to regression models, as widely used in spatial analysis, which try to explain the observed network characteristics from the characteristics of nodes, like their size and distance.

Finally, the course will introduce participants to novel statistical methods for social network analysis namely Exponential Random Graph Models, which address issues of dyadic dependence and allow analyzing network structure processes like network closure (the creation of sub-groups of nodes)

In order to demonstrate the analytical value for the research policy field, the course will include demonstrations and practical exercises done by combining the EU-PRO dataset on participation to European Framework Programs with other RISIS datasets providing data on the observed organizations, like the European Tertiary Education Register.

PROGRAMME AND CONTENTS

Day 1 - February 16, 2016

- 10.30-11:00 Introduction
- 11:00-12:30 Basic concepts of social network analysis (Alessandro Lomi)
- 14.00 – 15.30 Introduction to network descriptive analysis (Thomas Scherngell).
- 15.30 – 16.15 Regression methods with examples of FP networks from the EUPRO data (Thomas Scherngell).
- 16.30 – 18.30 Organization of the laboratory

Day 2 - February 17, 2016

- 9:00-12:30 Exponential Random Graph Models (Paola Zappa)
- 14.00 – 18.00 Laboratory work: application of regression techniques and of ERGM to inference on network structure.

Day 3 - February 18, 2016

- 8.30 – 10.30. Laboratory work. Interpretation of the results and preparation of the presentations.
- 11.00 – 14.30 Presentations by groups.
- 14.30 – 15.00 Final remarks and closing of the course.

Course Instructors

- Prof. Alessandro Lomi, Università della Svizzera italiana
Dr. Paola Zappa, Università della Svizzera italiana
Dr. Thomas Scherngell, Austrian Institute of Technology

AUDIENCE TARGETED

The course aims at involving up to 15 participants among the following categories:

- Senior scientists, early career researchers and PhDs at the last phase of their training
- People from the policy making level wishing to extend their analytical capabilities
- Research intermediaries (e.g. research association like Science Europe)

REQUIREMENTS FOR PARTICIPATION

- Basic knowledge of econometrics (statistical inference, linear regressions)
- Prior experience with network analysis is useful, no prior knowledge of ERGM required.



This course is part of the
Training Activities of the RISIS Project

risis.eu/training