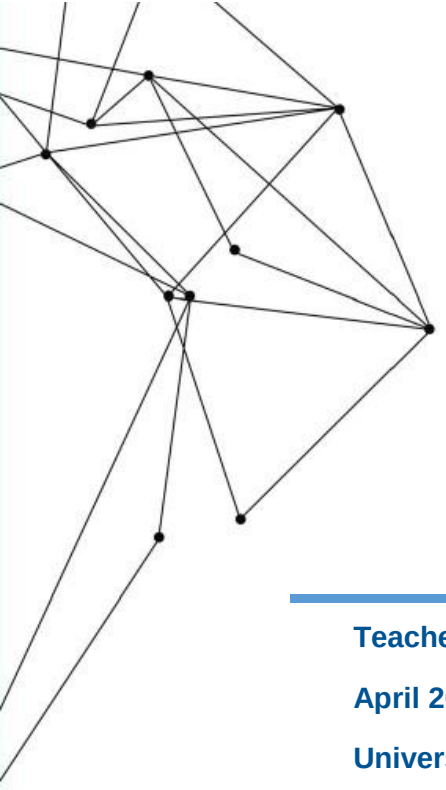

University of Pisa
Department of Political Sciences
Center on Theory and Methods of Social Network Analysis
AIS
ASSOCIAZIONE ITALIANA DI SOCIOLOGIA
Sezione "Metodologia"
I International Spring School on
Methods of Social Network Analysis with R
University of Pisa
April 2020, 20th-24th



Department of Political Sciences
Center on Theory and Methods of Social Network Analysis

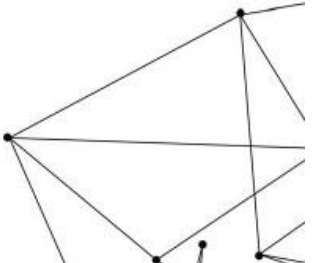
SUMMER SCHOOL
UNIVERSITÀ DI PISA

METHODS OF *SOCIAL NETWORK ANALYSIS* WITH *R*

Teacher: Dr. Lorien Jasny, University of Exeter

April 2020, 20th-24th

University of Pisa - Italy



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Welcome to Pisa!

After the success of three edition of the International Workshop "*Introduction to Social Network Analysis*", the Department of Political Science of the University of Pisa is now organizing an International Spring School on Methods of *Social Network Analysis* with *R*

The Spring School helps participants who are in the midst of a SNA research project or engaged in analysing network data for an earlier study. We will briefly discuss how to create a rendering of the participants' work that increases the power of their analysis, using the most recent and powerful tools offered by software packages such as "Statnet".

Presentation: here it is the Spring School!

Hi folks, I am Andrea Salvini, the organizer of the Spring School on "Methods of Social Network Analysis with R". Let me say just few words about our Spring School...

…it will be a five-day, intensive course mainly devoted to introducing participants to *Social Network Analysis* with a practical approach, and with the aim to giving answer to questions such as "*how do you research*", "*how to collect, analyse and interpret social network data*", using the "R" environment, especially the package "Statnet". Join us at the Spring School and be an active learner in our classes and in our collaborative groups. Meet interesting people you can interact with and discuss topics of your own interest concerning SNA methods and how to give answer to your daily research problems. Attending the International Spring School on "*Methods of Social Network Analysis with R*", students become members of a scientific community based on the continuous exchange and comparison between knowledge and experience.

The University of Pisa will acknowledge to each participant 4 ETCS, and you'll use them at your own convenience.

Teacher: Dr Lorien Jasny

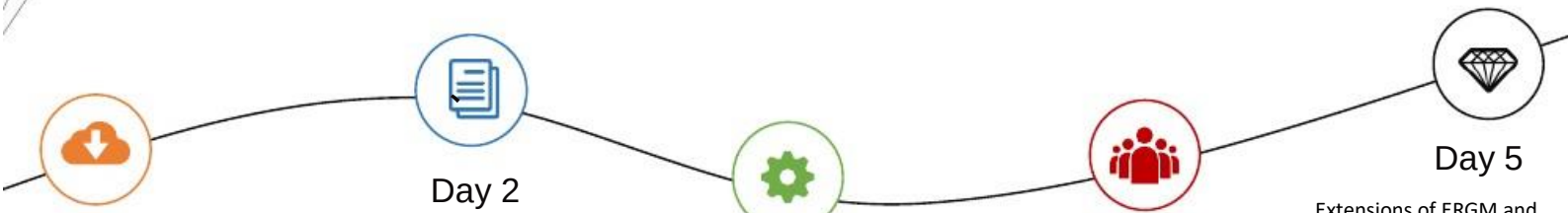
I am a computational social scientist in the Department of Politics at the University of Exeter. My work focuses on questions of public involvement and engagement in environmental decision making. In my research I explore two related themes – how the structure and dynamics of inter-organizational networks affect policy change, and how the structure and dynamics of belief networks affect behavioral change.

Substantively, I study how people try to bring about societal change in response to political and environmental concerns. Methodologically, the need to grapple with these often complex phenomena requires the use and development of techniques for handling large, dynamic, and relational datasets.
I have a long experience in teaching introductory and advanced courses in *Social Network Analysis.*

Program: take a look at what we will learn together

This course will begin with a brief introduction to networks and the R programming language (day 1), and then move into a variety of descriptive methods with examples of how these have been used in a variety of social science literatures (day 2).
The focus of the next two days will be how to develop questions about social networks in the socio-environmental context and appropriately test them with extensions of standard regression models (day 3) and exponential random graph models (day 4). Participants are encouraged to bring their own data to the course. We will have some independent time each day to try to apply the concepts learned to each dataset. For those without data on hand, the instructor will be able to help you find (an) interesting dataset(s) that you can play with during the course. We will try and keep the final part of the afternoon of each day for students to work on their own to adapt the day’s material for their own dataset. The final day (5) will be used for more advanced methods depending on the interests of the participants and also for students to present their own work as well as any networks related research ideas.

Program: take a look at what we will learn together



Day 1

Introduction to Networks

a. Why network analysis?
b. How is it different from other methods?
c. Some history
d. Terminology
e. Introduction to the R computing environment

Day 2

Descriptives

a. How do we talk about networks?
b. Node, neighborhood, and network level statistics

Day 3

Hypothesis testing

a. How do we take the descriptives and start to develop hypotheses at the node, neighborhood and network level?
b. QAP tests
c. Network autocorrelation models
d. Conditional Uniform Random Graph Tests

Day 4

Introduction to Exponential Random Graph Models

a. Valued models
b. Temporal models
c. Multiplex networks
d. Comparing multiple networks

Day 5

Extensions of ERGM and Individual presentations

a. Discussing participants' work
b. Question & Answer sessions

	Monday, 20th	Tuesday, 21th	Wednesday, 22th	Thursday, 23th	Friday, 24th
h. 9:30	Introduction to the Spring School, *Andrea Salvini*	Descriptives a. How do we talk about networks? b. Node, neighborhood, and network level statistics	Hypothesis testing a. How do we take the descriptives and start to develop hypotheses at the node, neighborhood and network level? b. QAP tests	Introduction to Exponential Random Graph Models a. Valued models b. Temporal models	Extensions of ERGM and individual presentations
h. 10:00	Introduction to Social Network Analysis a. Why network analysis? b. How is it different from other methods				
h. 11:30	*Coffee Break*	*Coffee Break*	*Coffee Break*	*Coffee Break*	*Coffee Break*
h. 11:45	c. Some history d. Terminology	Reprise Node, neighborhood and network level statistics	c. Network autocorrelation models d. Conditional Uniform Random Graph Tests	c. Multiplex networks d. Comparing multiple networks	a. Discussing participants' works
h. 13:30	*Lunch time*	*Lunch time*	*Lunch time*	*Lunch time*	*Lunch time*
h. 14:45	e. Introduction to the R computing environment	Excercise with Statnet	Excercise with Statnet	Excercise with Statnet	Discussing Participants' works
h. 16:15	Question & Answer Session	Question & Answer Session	Question & Answer Session	Question & Answer Session	Final Evaluation & Considerations
h. 17:00	*End of the day and Welcome drink*	*End of the day*	*End of the day*	*End of the day*	*End of the day & Farewell drink*

How to apply: Fees and Payment

Participant
A max number of 40 participants – that can be eventually increased to 50

Fees
500 euro (full): Professors, Researchers, Professionals (enrolled in Universities, Institutions and Companies)
450 euro: PhD Students
375 euro: Undergraduate and Postgraduate students

Fee includes course materials and social event
Travel, accommodation and food are on your own expenses

Deadline: March, the 31st

Bank transfer to the following account:
Università di Pisa
Dipartimento di Scienze Politiche
Banca di Pisa e Fornacette- Credito Cooperativo S.c.p.A.
IBAN: IT73N0856270910000011156627
BIC/SWIFT: BCCFIT33

Scholarship:
The University of Pisa and the Spring School provide for a scholarship, whose amount will cover the fee.

Causale/reason for payment: *Spring School on Methods of Social Network Analysis with R/ Name of participant*

All payments must be made in EURO. Any bank charges must be covered by participant.

How to apply: Enrollment

Enrolment Here: https://www.unipi.it/index.php/how-to-apply

You are required to go through the following procedural steps:
REGISTRATION: connect to the Alice portal and register:
https://www.studenti.unipi.it/Home.do;jsessionid=1B312E4508F3E81C06829D041DD428A0?cod_lingua=eng
Please read it carefully and follow the instructions step by step.

Required documents:

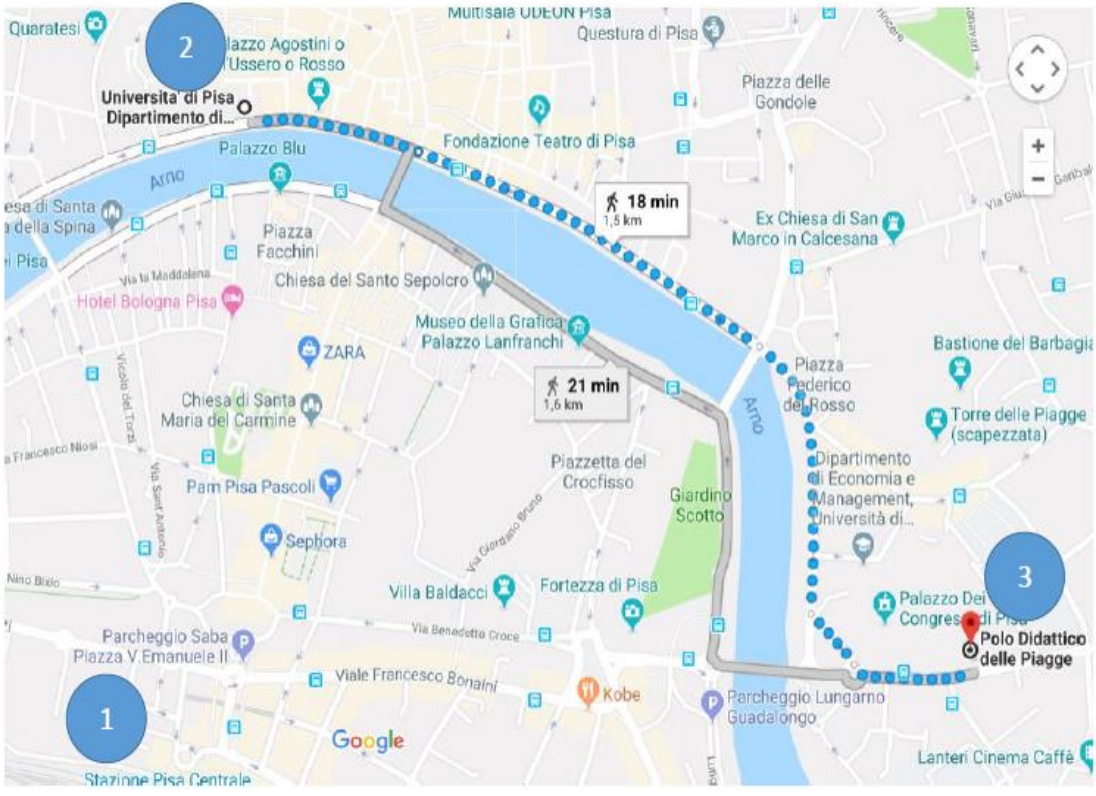
- Identity Document ("PASSPORT in case you are a foreign student")
- Enrolment Form
- Curriculum Vitae

ALL THE DOCUMENTS MUST BE IN PDF FORMAT, IN ORDER TO UPLOAD THEM ON THE PORTAL WHEN REQUIRED.

Please remember that the enrolment procedure will be complete only after the payment of the fee

More information: https://www.unipi.it/index.php/society-economics-and-law/item/16597-methods-social-network-analysis-r

You will find more information on the website: http://sna.sp.unipi.it/
The website in under construction – it will be active on Christmas 2019!



1 RAILWAY STATION

To go from Pisa Airport to the Railway Station take PISAMOVER

From Railway Station you can easily go downtown, the Laning Tower of Pisa and Polo Piagge.

To reach Polo Piagge from here, you can go by feet or by bus (LAM Rossa).

2 DEPARTMENT OF POLITICAL SCIENCE

To go to the Summer School location (Polo Piagge) from the Department, you can walk or take the bus (Line 13, Line 5).

3 POLO PIAGGE

Via Giacomo Matteotti 3 - Pisa

Spring School: useful information

Polo Didattico “Le Piagge”

Residence “Le Benedettine”

Accommodation

If you’re looking for a cheap accommodation, we suggest to contact:

Residence “Le Benedettine”
http://it.residence.unipi.it/home_it/

Bed & Breakfast in Pisa
http://www.bed-and-breakfast.it/it/pisa

You can also find many B&Bs on http://sna.sp.unipi.it/ and browsing internet in downtown Pisa or in the wonderful surroundings.

Requisites and Bibliography

There are no special requisites for attending the Spring School. We will start from scratching both in SNA techniques and in R (“Statnet”) environment of analysis.
There are many publications available on SNA.
We suggest the following introductory readings:

- **John Scott, *Social Network Analysis*, Sage, 2017 (4th Edition)**
- **Garry Robins, *Doing Social Network Research*, Sage, 2015**

It will be certainly useful to have a look at *Statnet* website and *Statnet* Wiki at:

http://statnet.org/

See you soon in Pisa!

Do you need more info?
Send an e-mail to:

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Dr. Antonietta Riccardo: antonietta.riccardo@phd.unipi.it

Summer/Winter School Office: support.summerschool@adm.unipi.it