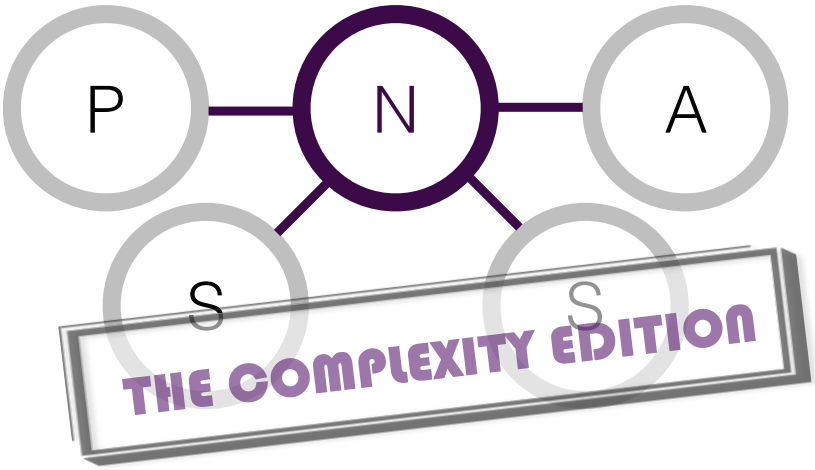
Universiteit van Amsterdam

The Psych Systems Project



WELCOME

TO THE PSYCHOLOGICAL NETWORKS AMSTERDAM SUMMER SCHOOL 2018

August 27 – August 31, 2018

#PNASS2018

Summary

Complexity research, in which behavior of a system is understood to be more than the sum of its parts, has been gaining a substantive foothold in psychological science during the past decade. From this notion, several lines of research emerged, such as the theoretical network perspective to psychology, network psychometrics aiming to map out complex interactions in network models, time-series analysis to study dynamics in individuals over time, and resilience indicators of phase transitions. In this special edition of the Psychological Networks Amsterdam Summer School (PNASS), we will introduce these topics from the complexity perspective. The summer school focuses on both theoretical foundations of complexity research in psychology, including philosophy of science and statistical mechanics, and practical skills, such as analyzing social networks, estimating psychological networks from cross-sectional and time-series datasets, and obtaining resilience indicators. The last day of the summer school is reserved to work on your own data and present your findings to your fellow attendees and lecturers.

Target Audience

The summer school is intended for empirical researchers who wish to study networks in psychology, as well as for theoretical researchers interested in the foundations of the network perspective. Please note that in contrast to previous versions of the summer/winter school, basic knowledge of R is required (a video-lecture and materials to learn R are available at https://bit.ly/2OXia3e; you are expected to watch the video and practice the exercises in your own time, before the summer school).

Participant Page

http://psychosystems.org/pnass2018/

Travel & Venue

Amsterdam is well serviced by (international) trains and planes. From the airport there is a high frequency train to Amsterdam Central Station, and the journey takes approximately 15 minutes. From Amsterdam Central Station, there is a subway to the venue: Take subway lines 51, 53, or 54 and get off at Weesperplein. From Weesperplein it is a 5-minute walk to the venue.

The Psychological Networks Amsterdam Summer School is held at the Roeterseiland Campus of the University of Amsterdam, in the Psychology Department.

Address: Faculty of Social and Behavioral Sciences
(*G Building*), Room 2.01,
Nieuwe Achtergracht 129-B, Amsterdam

Public transport: Subway station Weesperplein (from Amsterdam Central train station),
Tram station Weesperplein, lines 7, 1 & 19 (for transport from and to for example Leidseplein and Museum quarter).

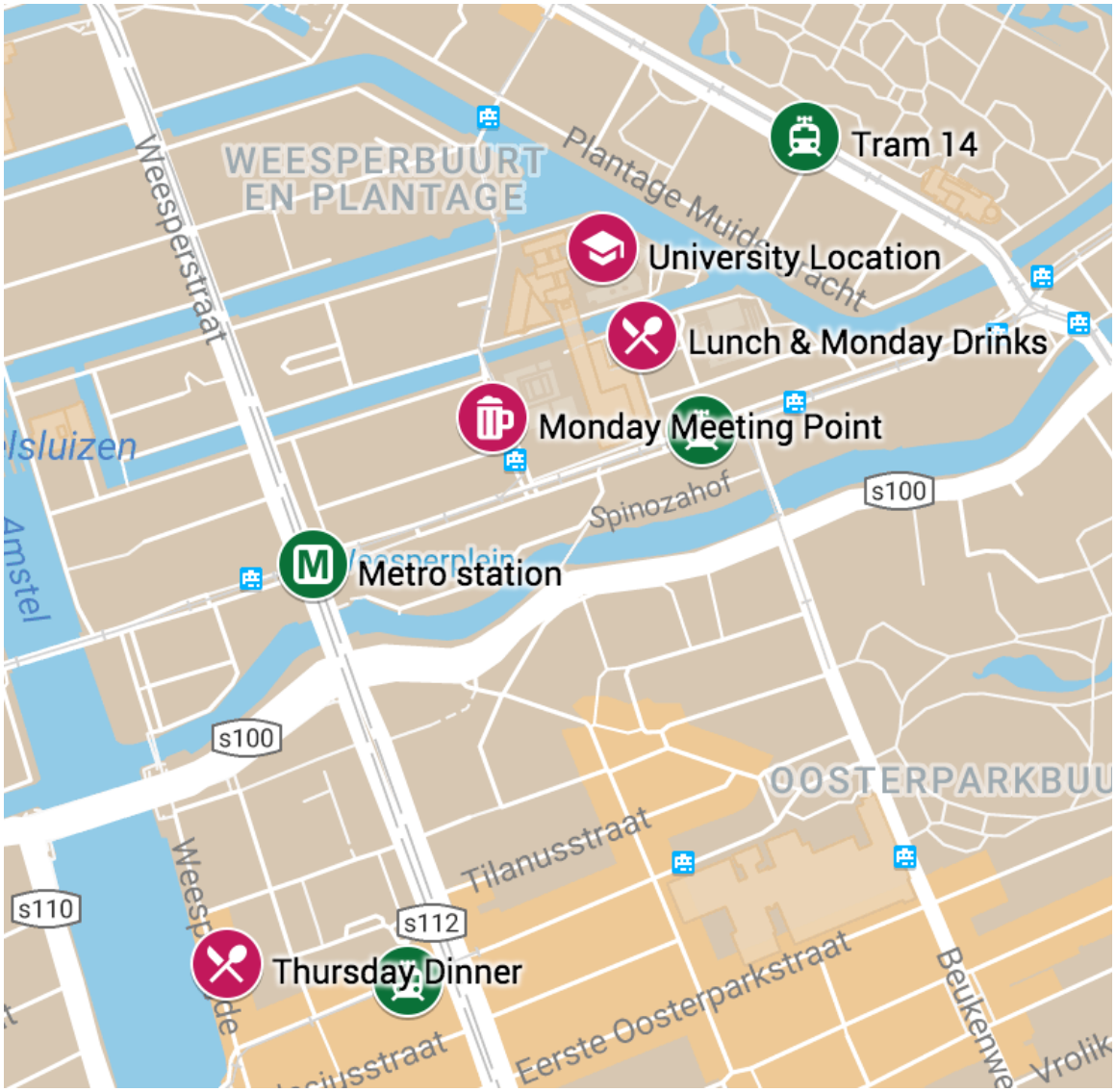
Since the G Building is not always easy to find, we arranged a meeting point at 8:45am on Monday at Café Kriterion, located at Roetersstraat 170, in order to show you the way to the lecture room (you can of course also come on your own directly at the location). In case you are late or have trouble finding the location you can contact Ria Hoekstra at +31623032613.

Public transport information:
http://maps.gvb.nl/en

Interactive Map

For an interactive map including summer school locations and social events, recommended restaurants, cafes and hotels, neighbourhood and travel, as well as touristic sites please follow the link: https://goo.gl/cR1TJ4

The map below includes all the locations relevant for the summer school, as well as the metro and tram stops close to the venue(s).



Summer School Dinner at DE YSBREEKER.

The summer school dinner will take place on Thursday August 31st at **De Ysbreeker,** located at Weesperzijde 23, 1091 EC, Amsterdam (see location on interactive map as *Thursday Dinner*). On the day, you will be able to choose you dinner options from the menu below.

*** **Starter** ***

Grey shrimp soup. with tomato concasse, cognac and dill

Terrine pied de cochon. van 'diny schouten', sauce gribiche

Fattoush salad. eggplant, zucchini, pomegranate, argula, crispy tortilla, fresh mint, cherry tomato and spring onion

Gravad lax of 'arCtic salmon'. with ponzu mayonnaise and dashi

*** **Main Course** ***

Grilled aberdeen angus rib-eye. with béarnaise, fries & green salad

Atlantic Cod. with quinoa, green peas, italian endive and a sauce of red grapefruit

Tagliatelle. with wild mushrooms, parmesan and sweet sjalot sauce

Steak tartare préparé. poached egg, green salad, toast or fries

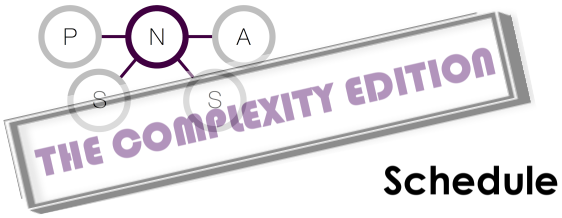
*** **Dessert** ***

Choice of coffee

Crème brûlée. of orange and cinnamon

Raspberry cheesecake. from 'holtkamp' with a scoop of vanilla icecream

Chocolate truffle terrine. with sugered redcurrent & Baileys sauce



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Schedule Psychological Networks Amsterdam Summer School 2018

	Monday 27/8 Rec-G, Room 2.01	Tuesday 28/8 Rec-G, Room 2.01	Wednesday 29/8 Rec-G, Room 2.01	Thursday 30/8 Rec-G, Room 2.01	Friday 31/8 Rec-G, Room 2.01
08:45 - 09:00	**COFFEE**				
09:00 - 11:00 (2h)	**Introduction 1: Complexity Science** *Han van der Maas*	**Theory 1: Causality & Philosophy of Science** *Riet van Bork*	**Estimation 1: Markov Random Fields & Directed Acyclic Graphs** *Sacha Epskamp*	**Estimation 3: Accuracy, Stability & Replicabillity** *Eiko Fried*	**Work on own data**
11:00 - 12:30 (1h30)	Practical	Practical	Practical	Practical	
12:30 - 13:30	**LUNCH BREAK at CREA**				
13:30 - 15:30 (2h)	**Introduction 2: Network Science & Social Networks** *Adela Isvoranu*	**Theory 2: The Ising Model & Statistical Mechanics** *Jonas Dalege*	**Estimation 2: Time Series Modeling** *Sacha Epskamp*	**Theory 3: Resilience** *Gaby Lunansky*	**Work on own data & Presentations**
15:30 - 17:00 (1h30)	Practical	Practical	Practical	Practical	
17:00	**Drinks at Crea**	-	-	**Dinner at De Ysbreeker**	-

Day 1: Monday, August 27

Morning session: Introduction 1: Complexity Science
Lecturer: Han van der Maas
Location: Room 2.01

N.B.: Please install the most recent versions of R and R-studio before arriving at the summer school.

- Van Der Maas, H. L., Dolan, C. V., Grasman, R. P., Wicherts, J. M., Huizenga, H. M., & Raijmakers, M. E. (2006). A dynamical model of general intelligence: the positive manifold of intelligence by mutualism. *Psychological review, 113*(4), 842.
- Borsboom, D. (2017). A network theory of mental disorders. *World Psychiatry, 16*, 5–13.

- A (very) short introduction to R: http://bit.ly/1YzHlYt
- Beginners guide to R: http://bit.ly/1HZlWie

Practice:
- Datacamp: https://www.datacamp.com/
- Try R: http://tryr.codeschool.com/

Afternoon session: Introduction 2: Network Science & Social Networks
Lecturer: Adela Isvoranu
Location: Room 2.01

- Opsahl, T., Agneessens, F., & Skvoretz, J. (2010). Node centrality in weighted networks: Generalizing degree and shortest paths. *Social networks, 32*(3), 245-251.

Introduction drinks
After the first day of the workshop, we will have introduction drinks at Crea.

Day 2: Tuesday, January 30

Morning session: Theory 1: Causality & Philosophy of Science
Lecturer: Riet van Bork
Location: Room 2.01

- Judea Pearl – Causality: http://bit.ly/2vV13Zk
- Pearl introduction: http://bit.ly/2vaju9t
- Pearl Epilogue: http://bit.ly/2vlnljj
- D-separation: http://bit.ly/2v2kKj4

Afternoon session: Theory 2: The Ising Model and Statistical Mechanics
Lecturer: Jonas Dalege
Location: Room 2.01

- Dalege, J., Borsboom, D., van Harreveld, F., & van der Maas, H. L. J. (in press). The Attitudinal Entropy (AE) framework as a general theory of individual attitudes. *Psychological Inquiry*.
- Dalege, J., Borsboom, D., van Harreveld, F., & van der Maas, H. L. J. (2017). Network analysis on attitudes: A brief tutorial. *Social Psychological and Personality Science*, 8, 528-537.
- Epskamp, S., Maris, G. K., Waldorp, L. J., & Borsboom, D. (2016). Network psychometrics. *arXiv preprint arXiv:1609.02818*.

Day 3: Wednesday, January 31

Morning session: Estimation 1: Markov Random Fields & Directed Acyclic Graphs
Lecturer: Sacha Epskamp
Location: Room 2.01

- Epskamp, S., & Fried, E. I. (2018). A tutorial on regularized partial correlation networks. *Psychological methods*.
- Epskamp, S., Maris, G. K., Waldorp, L. J., & Borsboom, D. (2016). Network psychometrics. *arXiv preprint arXiv:1609.02818*.
- Epskamp, S., Waldorp, L. J., Mõttus, R., & Borsboom, D. (2018). The Gaussian Graphical Model in Cross-Sectional and Time-Series Data. *Multivariate behavioral research*, 1-28.

Afternoon session: Estimation 2: Time Series Modeling
Lecturer: Sacha Epskamp
Location: Room 2.01

- Epskamp, S., Waldorp, L. J., Mõttus, R., & Borsboom, D. (2017). Discovering Psychological Dynamics: The Gaussian Graphical Model in Cross-sectional and Time-series Data.
- Bringmann, L. F., Vissers, N., Wichers, M., Geschwind, N., Kuppens, P., Peeters, F., Borsboom, D., & Tuerlinckx, F. (2013). A network approach to psychopathology: New insights into clinical longitudinal data. *PLoS ONE, 8*, e60188.

Day 4: Thursday, February 1

Morning session: Estimation 3: Accuracy, Stability & Replicability
Lecturer: Eiko Fried
Location: Room 2.01

• Epskamp, S., Borsboom, D. & Fried, E.I. (2017). Estimating psychological networks and their accuracy: a tutorial paper. *Behavior Research Methods*. doi:10.3758/s13428-017-0862-1
• Fried, E. I. & Cramer, A. O. J. (2017). Moving forward: challenges and directions for psychopathological network theory and methodology. P*erspectives on Psychological Science*.

Afternoon session: Theory 3: Resilience
Lecturer: Gaby Lunansky
Location: Room 2.01

- Folke, C., Carpenter, S. R., Walker, B., Scheffer, M., Chapin, T., & Rockström, J. (2010). Resilience thinking: integrating resilience, adaptability and transformability. *Ecology and society, 15*(4).
- van de Leemput, I. A., Wichers, M., Cramer, A. O., Borsboom, D., Tuerlinckx, F., Kuppens, P., ... & Derom, C. (2014). Critical slowing down as early warning for the onset and termination of depression. *Proceedings of the National Academy of Sciences, 111(1)*, 87-92.
- Cramer, A. O., van Borkulo, C. D., Giltay, E. J., van der Maas, H. L., Kendler, K. S., Scheffer, M., & Borsboom, D. (2016). Major depression as a complex dynamic system. *PLoS One, 11*(12), e0167490.

Dinner
There will be a dinner at De Ysbreker at 18:00. **Guests can be invited to the dinner for an extra cost of 55 euro per person**. Please contact us if you would like to bring along a guest.

Day 5: Friday, February 2

Morning session: Work on own data
Location: Room 2.01

Afternoon session: Work on own data & Presentations
Location: Room 2.01

Accommodation

The following hotels have special rates for the PNASS 2018, see details at each hotel. Please note all prices are for one night.

Hotel Allure

Close to the venue

Special rate: 10% discount on the online rates of the hotel (including breakfast).
Bookings can be made on the hotel website http://www.hotelallure.com/ using the discount code UVA10Summer.

Amstel Corner

15 minute walking to the venue

Special rate: 10% discount on the online rates of the hotel.
Small studios. Bookings can be made on the hotel website: http://www.amstelcorner.nl/en/index.html using the discount code Discount2017.

Other hotels located within walking distance to the venue:

Volks Hotel

Bookings can be made on the hotel website:
https://www.volkshotel.nl/en/

Hotel Arena

Bookings can be made on the hotel website
http://www.hotelarena.nl/.

Hotel Hyatt Regency

Very close to the venue

Bookings can be made on the hotel website
http://amsterdam.regency.hyatt.com.

Eating and Dining in Amsterdam

For a detailed map of these locations, please see the interactive map at https://goo.gl/cR1TJ4.

Groceries

The cheapest way of eating is to cook your own food. Amsterdam is packed with medium sized supermarkets supplying you with any groceries you might need. The most popular chain is called **Albert Heijn**, of which one is located right next to the university on Sarphatistraat 141K. Note, like in most shops in the Netherlands, you cannot pay by credit-card here!

Around the university

The campus is located in a central location of the city, right next to the touristic zoo. In the surrounding area there are several restaurants. The **Roeterstraat**, on which the campus is located, is a common stop for students to drink and eat. For dinner, you can find the cosy bar **De Roeter**, which has great burgers (but also other dishes), a wide selection of pizza at **Torino's**, and cheese-fondue at **Aguada**. Furthermore, the movie theater **Kriterion** offers a good selection of beers and movies, and the chain **Bagels and Beans** offers good coffee and breakfast/lunch. Heading down to the Zoo leads you to the **Plantage Kerklaan**, another area where you can find several restaurants. Right on the corner you will find **Pizzabakkers**, with great pizzas. Further down the street you will find good Japanese food in **Tempura** and great burgers in **Burgermeester**. You will also find a bakery (**Rooth**) here and a good cup of coffee in the **Coffee Company**.

Further into the City

The campus is conveniently located near **Weesperplein**, which connects metro to tram lines. Take tram 7 or 10 in the Western direction to get to **LeidsePlein**. Here you will find plenty of bars, nightlife and restaurants. Both the **Korte Leidsedwarsstraat** and **Lange Leidsedwarsstraat** are packed with (a bit touristic and overpriced) restaurants. The closest area we have to a Chinatown in Amsterdam is the area between Nieuwmarkt and Central Station. Take the metro to Nieuwmarkt, and head down **Zeedijk** for plenty of restaurants from all over the world.

Dutch Food

There is little that classifies as "traditional Dutch food", and even less restaurants dedicated to such food. For traditional food, we can recommend **Hap-Hmm** on the Eerste Helmersstraat (close to Leidseplein). Furthermore, a must-have are Dutch pancakes or poffertjes (often, erroneously, called small pancakes). These can be found in **De Carrousel**. Both these restaurants close around 20:00 so be early! For other typical Dutch experiences, head into a snackbar (e.g., **Cantarell** at Weesperplein) and order a "patatje oorlog" or a "kroket", or order a "bittergarnituur" (or "bitterballen") with any beer you drink in almost any bar (highly recommended in **De Roeter**). Additionaly, you can eat some Kebab (Try Leeman Döner on the Van Woustraat).

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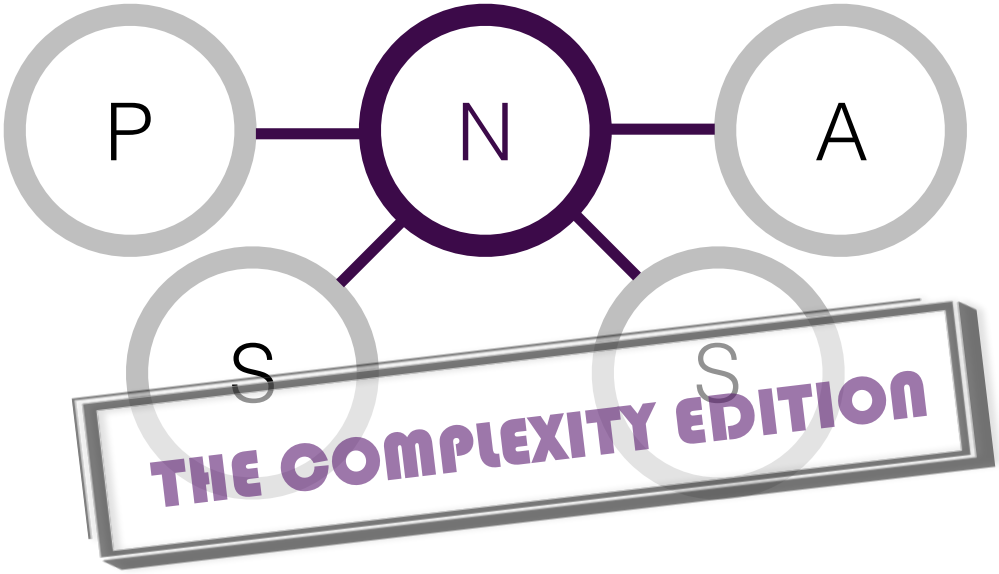

University of Amsterdam
Nieuwe Achtergracht 129-B
1018 WS Amsterdam, The Netherlands
email: psynetsummerschool@gmail.com

Organizer: Adela Isvoranu
Host: Sacha Epskamp
on behalf of the Psychosystems Lab Group