

Leibniz Institute for the Social Sciences



SocioPatterns Study

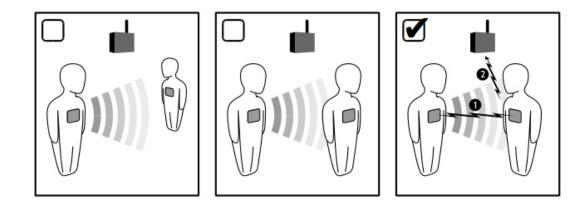
GESIS CSS Winter Symposium Dr. Mathieu Génois





The SocioPatterns setup

- RFID sensors
- Close range detection (1,5 m)
- High time resolution (20 s)



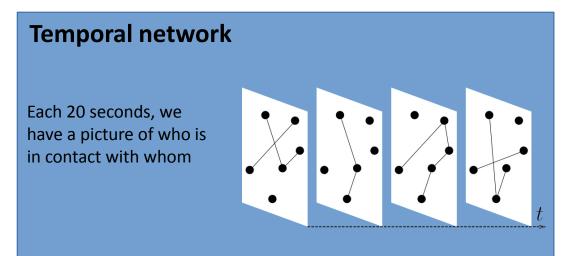
www.sociopatterns.org







Uses of the setup





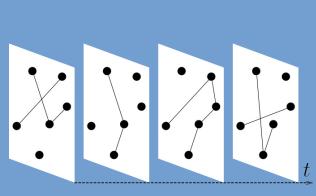


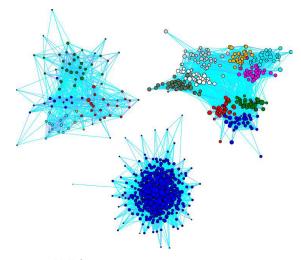


Uses of the setup

Temporal network

Each 20 seconds, we have a picture of who is in contact with whom





Znibn

2BIO1	0.614	0.111	0.095	0.009	0.007	0.023	0.01	0.015	0.01
2BIO2	. 0.111	0.64	0.121	0.018	0.008	0.023	0.011	0.03	0.017
2BIO3	. 0.095	0.121	0.76	0.027	0.008	0.031	0.019	0.016	0.014
MP	0.009	0.018	0.027	0.684	0.09	0.098	0.023	0.017	0.032 _
MPst1	0.007	0.008	0.008	0.09	0.52	0.117	0.021	0.009	0.027 _
MPst2	0.023	0.023	0.031	0.098	0.117	0.686	0.035	0.015	0.046
PC	0.01	0.011	0.019	0.023	0.021	0.035	0.717	0.093	0.045 _
PCst	0.015	0.03	0.016	0.017	0.009	0.015	0.093	0.651	0.041 _
PSIst	0.01	0.017	0.014	0.032	0.027	0.046	0.045	0.041	0.611
	2BI01	2BIO2	2BIO3	MP	MPst1	MPst2	PC	PCst	PSIst





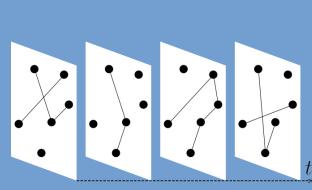


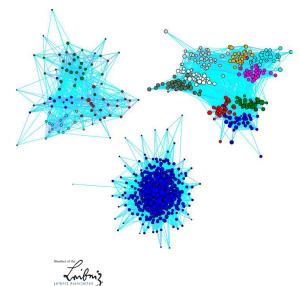


Leibniz Institute for the Social Sciences

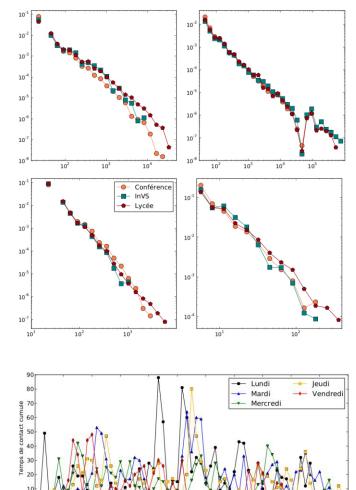
gesis

Each 20 seconds, we have a picture of who is in contact with whom





2BIO1 0.61	4 0.111	0.095	0.009	0.007	0.023	0.01	0.015	0.01
2BIO2 0.11	1 0.64	0.121	0.018	0.008	0.023	0.011	0.03	0.017 .
2BIO3 - 0.09	5 0.121	0.76	0.027	0.008	0.031	0.019	0.016	0.014
MP - 0.00	9 0.018	0.027	0.684	0.09	0.098	0.023	0.017	0.032 _
MPst1 0.00	7 0.008	0.008	0.09	0.52	0.117	0.021	0.009	0.027
MPst2 0.02	3 0.023	0.031	0.098	0.117	0.686	0.035	0.015	0.046
PC 0.01	0.011	0.019	0.023	0.021	0.035	0.717	0.093	0.045 _
PCst 0.01	5 0.03	0.016	0.017	0.009	0.015	0.093	0.651	0.041 _
PSIst 0.01	0.017	0.014	0.032	0.027	0.046	0.045	0.041	0.611
2BIO	1 2BIO2	2BIO3	MP	MPst1	MPst2	PC	PCst	PSIst







Previous studies

Location	Year	Ν	Reference
French Health Observatory	2013	92	<i>Génois, Vestergaard, Fournet et al, Network Science 3:326–347, 9 2015</i>
French Health Observatory	2015	232	
Hospital	2010	81	Vanhems, Barrat, Cattuto et al, PLoS ONE 8(9):e73970, 09 2013
Primary school	2009	242	Stehlé, Voirin, Barrat et al, PLoS ONE 6(8):e23176, 08 2011.
Conference	2009	403	Isella, Stehlé, Barrat et al, J. Th. Biol. 271(1):166–180, 2011
High School	2013	326	Mastrandrea, Fournet, Barrat, PLoS ONE 10(9):1–26, 09 2015
Rural household	2016	75	Kiti, Tizzoni, Kinyanjui et al EPJ Data Science 5:21, 2016

www.sociopatterns.org







The study

Data

Contact data

Temporal contact network

Survey data

- Sociodemographic information
- Personality test

Problematics

- What are the mechanism of social interactions in a scientifc conference?
- How do personality traits correlate with social behaviour?
- How do personality traits correlate with each other?

In collaboration with:

- The Survey Design & Methodology Dept. at GESIS
- The Centre de Physique Théorique in Marseille
- The ISI Foundation in Turin







Anonymity

Participation is voluntary

• Everyone is free to join or to opt out

Data is anonymous

- One 4-digit ID number for both the contact data and the survey data
- No record of the real identities
- No record of any other signal (GPS, sound, etc)

Opt out is possible at any moment

- Opt out at any time by coming at the registration desk
- After the Symposium, opting out is possible with your anonymous ID







Join in!



Don't forget to return your sensor at the end of the Symposium

