# **Geography of Science**



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The aim of this research is to assess spatial and non-spatial proximity effects on the development of scientific knowledge. Increasingly, scientific research takes place in teams. The way different group members relate to each other and the outside world is said to have an impact on i) the status of produced scientific knowledge and ii) the development path of scientific knowledge.

Main research question: what is the impact of spatial and non-spatial proximity on the development of science?

"Science is a conversation with nature, but it is also a conversation with other scientists."

David L. Hull (1988, p. 7)

# Scientific quality versus social, cognitive and spatial ties in science

- 1. Does recognition in science solely depend on the quality of a scientists' work?
- 2. Does geography matter in making friends in science?
- 3. How do quality norms and social ties interact in the production of scientific knowledge?
- 4.Can we explain and predict the location of scientific breakthroughs?



## Relations among economic geographers

- Cognitive relation 1 (both actors did a Ph.D. in human geography)
- **Cognitive relation 2** (both actors did a Ph.D. in economics)
- Spatial relation 1 (Europe)
- Spatial relation 2 (United States)
- Organizational relation (workin the same organization)



#### Citation pattern in economic geography

Scientist	Α	В	С	D	Ε	F
Α	-	3	1	0	0	0
В	5	-	3	0	0	0
C	5	4	-	0	0	0
D	6	0	0	-	0	0
Ε	4	3	0	1	-	0
F	3	0	0	0	0	-
Times cited	23	10	5	1	0	0

### Time

## **Data & methodology**

Data will be extracted from sources such as ISI web of knowledge, Scopus, Medline and EconHist. From these sources, both the characteristics of knowledge agents themselves and the characteristics of the relations among knowledge agents can be constructed. The data is assessed through a combination of network, regression, and scientometric analysis.

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