

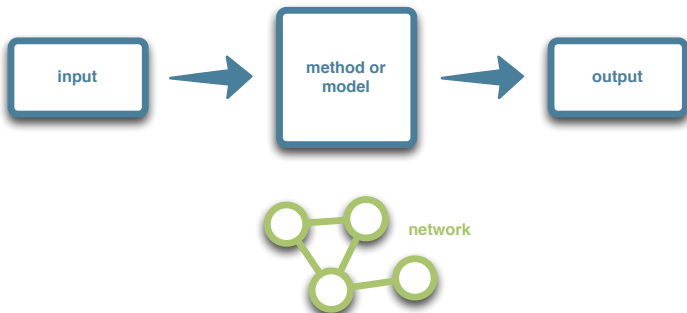
network *perspectives*

introduction to *network science in Python* (*NetPy*)

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18th Jan 2022

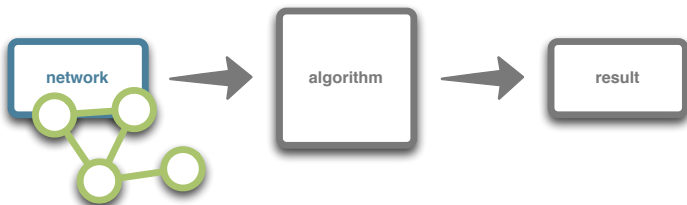
network analysis

where is *network in analysis*?



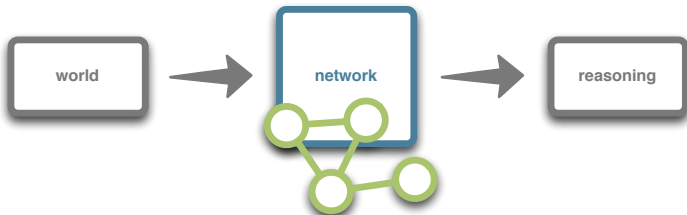
network *as input*

computer science
network is *input to analysis*



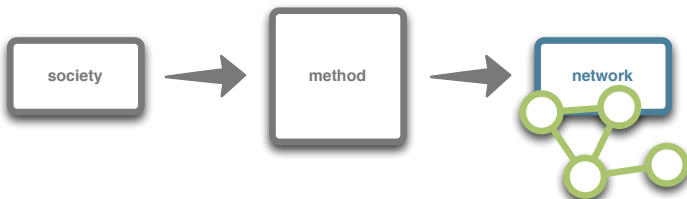
network *as model*

physics
network is *model of analysis*



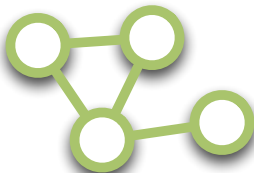
network *as output*

social sciences
network is *output of analysis*



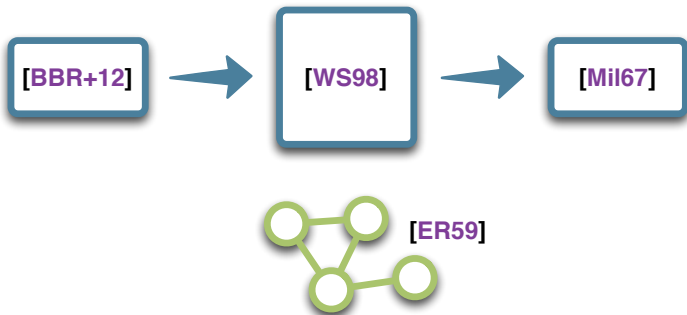
network *as graph*

graph theory
network is *just graph*



network science

collaboration among disciplines





Lars Backstrom, Paolo Boldi, Marco Rosa, Johan Ugander, and Sebastiano Vigna.

Four degrees of separation.

In *Proceedings of the ACM International Conference on Web Science*, pages 45–54, Evanston, IL, USA, 2012.



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On random graphs I.

Publ. Math. Debrecen, 6:290–297, 1959.



Stanley Milgram.

The small world problem.

Psychol. Today, 1(1):60–67, 1967.



D. J. Watts and S. H. Strogatz.

Collective dynamics of 'small-world' networks.

Nature, 393(6684):440–442, 1998.