

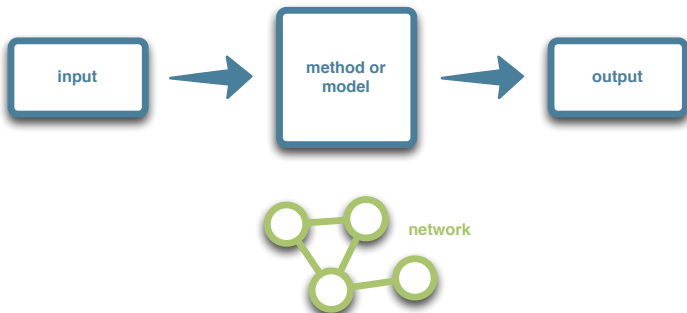
# network *perspectives*

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

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3rd Dec 2022

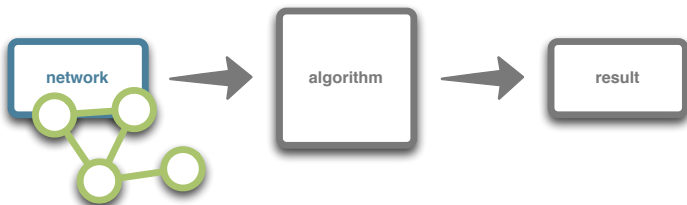
# network analysis

where is *network in analysis*?



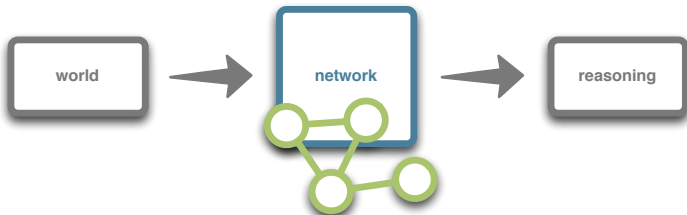
network *as input*

computer science  
*network* is *input to analysis*



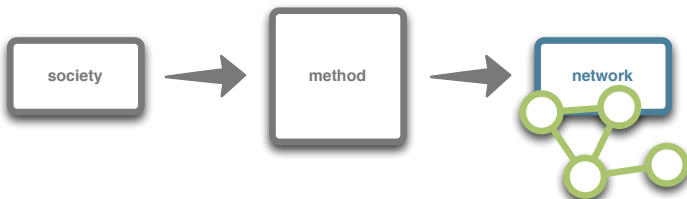
network *as model*

physics  
*network* is *model of analysis*



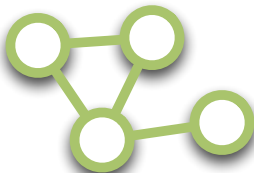
network *as output*

social sciences  
*network* is *output of analysis*



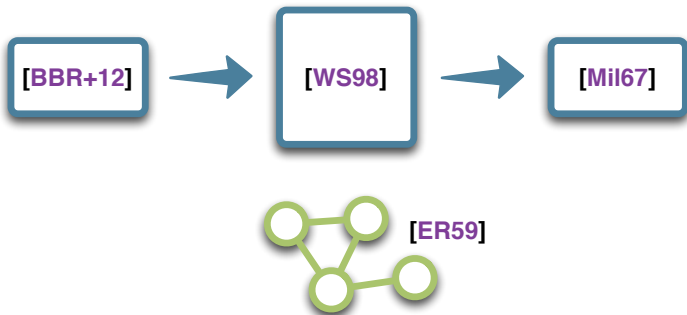
network *as graph*

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.



P. Erdős and A. Rényi.

On random graphs I.

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



Stanley Milgram.

The small world problem.

*Psychol. Today*, 1(1):60–67, 1967.



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Collective dynamics of 'small-world' networks.

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