



Research
Education
Outreach

CCA

Economics of Networks

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Instructor

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Programme

In economics, the importance of (social) interactions outside the market is now well recognized. Individuals share information, learn from each other's, and influence each other in many contexts. The course introduces the game-theoretical foundation of the social interactions model and focuses on how to identify and estimate the parameters of these models. Social interactions models are a particular case of simultaneous equations models, i.e., statistical models where the dependent variables are jointly determined by other dependent variables together with independent ones. Many economic models are simultaneous in nature as a consequence of the underlying equilibrium mechanism. A leading example is the estimation of the utility parameters of the equilibrium equation system in the economy under social interactions.

The course is articulated in four lectures:

1. Description of Networks: Centrality Measures
2. Social Interaction Models: Micro-foundation
3. Social Interaction Models: Identification
4. Network formation models

In each lecture, students will be exposed to various pieces of theoretical and empirical economics papers that use social interaction models. In addition, students will have hands-on experiences of using R to replicate actual pieces of the empirical research conducted with these models. At the end

of the course, students will have the ability to process social interaction data and model it to conduct their own research.

Slides are available at this link:

http://www.valerioleonesciabolazza.com/wp-content/uploads/2021/09/economics_networks.pdf

Suggested readings:

Blume, L. E., W. A. Brock, S. N. Durlauf, and Y. M. Ioannides (2011), Identification of Social Interactions, in Handbook of Social Economics, ed. by J. Benhabib, A. Bisin, and M. O. Jackson, vol. 1, pp. 853 – 964. North-Holland, Amsterdam.

Durlauf, S. N., and Y. M. Ioannides (2010): Social interactions, Annual Review of Economics, 2, 451–478.

Glaeser, E., and J. Scheinkman (2001): Measuring social interactions, in Social Dynamics, ed. by S. N. Durlauf, and H. P. Young, pp. 83–132. MIT Press, Cambridge, MA.

Jackson, M. O., Rogers, B., and Zenou Y. (2017), The economic consequences of social-network structure, Journal of Economic Literature, 55(1), 49-95.

Kline, B., Tamer, E., (2021). Econometric analysis of models with social interactions. In: Graham, B., De Paula, A. (Eds.), The Econometric Analysis of Network Data. Elsevier, Amsterdam.

Manski, C. F. (2000): Economic analysis of social interactions, The Journal of Economic Perspectives, 14(3), 115–136.

Scheinkman, J. A. (2008): Social interactions, in The New Palgrave Dictionary of Economics, ed. by S. N. Durlauf, and L. E. Blume, vol. 2. Palgrave Macmillan, London.