





High Dimensional Nonstationary Time Series IRTG 1792 Short Course Bryan Graham

An econometric model of network formation with degree heterogeneity

Relationships between economic agents are omnipresent. Firms source inputs from, and provide them to, other firms. Nations negotiate and ratify treaties with one another. Increasingly economists see social networks as important venues for human capital acquisition, information about employment opportunities, and valuable sources of informal insurance. Indeed, once one starts seeing networks, it becomes very hard not to see them everywhere. Although datasets with natural graph-theoretic or "network" structure are widely available, methods for analyzing them are not.

This short course provides a brief overview of recent research on the econometrics of networks. The emphasis will be on the formal development of econometric models of network formation which accommodate unobserved agent heterogeneity and/or strategic behavior on the part of agents. Contributions from the probability, statistics, and machine learning literatures, particularly those likely to be of special interest to econometricians, will also be discussed (e.g., subgraph frequencies, graph limits, and edge smoothing).

23.01.2018 | 14:30-18:00 24.01.2018 | 09:00-10:30 Haindorf Seminar



Bryan Graham was educated at Oxford University and Harvard University, where he received his PhD in 2005, the same year he joined Berkeley as an assistant professor.Professor Graham was awarded a Macarthur Network on Social and Interactions Inequality Economic Fellowship in 2004, a Harvard University Program on Justice, Welfare, and Economics Fellowship in 2003, and a National Science Foundation Graduate Fellowship in 2000. He also received a Rhodes Scholarship in 1997 and a Fulbright Scholarship in 1998.



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