

FRIDAY, APRIL 8, 2022 | 11:30 AM | BLOCKER 150

Resampling Methods for Networks

With network data becoming ubiquitous in many applications, many models and algorithms for network analysis have been proposed, yet methods for providing uncertainty estimates are much less common. Bootstrap and other resampling procedures have been an effective general tool for estimating uncertainty from i.i.d. samples, but resampling network data is substantially more complicated, since we typically only observe one network. This talk will provide an overview of several recent resampling methods we have developed for networks.

Biography

Liza Levina is the Vijay Nair Collegiate Professor and Chair of Statistics at the University of Michigan, as well as affiliated faculty at the Michigan Institute for Data Science and the Center for the Study of Complex Systems. She received her Ph.D. in Statistics from UC Berkeley in 2002 and has been at the University of Michigan since. She is well known for her work on high-dimensional inference and statistical network analysis. She is a recipient of the ASA Noether Young Scholar Award, a fellow of the ASA and the IMS, and a Web of Science Highly Cited Researcher. She was an invited speaker at the 2018 International Congress of Mathematicians and a 2019 IMS Medallion lecturer.