University of California, Irvine
Statistics Seminar

Learning Latent Graphs from Stationary Signals

Jie Peng
Professor
UC Davis

4 p.m., Thursday, May 23, 2024
6011 DBH

Graphs and networks are widely used to represent complex systems such as genetic regulatory networks, brain connectivity networks, etc. Learning underlying graphs from high-dimensional multivariate data has been an active research field in recent years.
Graphical models are often employed for this purpose where edges are defined via conditional independence relationships among the nodes. In this talk, we consider an alternative perspective, where we aim to infer graphs such that the observed multivariate data can be viewed as stationary signals on the resulting graphs. We will discuss various aspects including model fitting and theory under this framework.