

Modern data analysis makes great use of non-parametric smoothing for estimation and of resampling to assess uncertainty. In this talk, I will describe two methods for non-parametric estimation of stochastic network models, one based on density estimation in negatively curved spaces, the other based on treating adjacency matrices as spatial data and smoothing them. Both techniques will work as model-based bootstraps, and both can be used to assess the statistical significance of differences between networks.