Mathematics, Statistics, and Computer Science   **@ UIC**

Statistics and Data Science Seminar

Sampling for Conditional Inference on Network Data

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Abstract: Random graphs with given vertex degrees have been widely used as a model for many real-world complex networks. We describe a sequential sampling method for sampling networks with a given degree sequence. These samples can be used to approximate closely the null distributions of a number of test statistics involved in such networks, and provide an accurate estimate of the total number of networks with given vertex degrees. We apply our method to a range of examples to demonstrate its efficiency in real problems.

Wednesday, March 21 at 4:00 PM in SEO 636