

Department of Applied and Computational Mathematics and Statistics Colloquium



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Sampling bipartite degree sequence realizations – the Markov chain approach

It is difficult to analyse real-life networks as there are myriads of them and oftentimes experiments cannot be performed directly. Instead, researchers define models, fix parameters and follow the dynamics of evolution, in-silico. To predict properties of real-life networks based on these models, they need to sample network realizations. However, there are far too many such network realizations. Therefore, typically, some probabilistic method is used for sampling. We will survey one such approach, the Markov Chain Monte Carlo method, to sample realizations of given degree sequences and discuss the mixing time problem. Some recent results on the latter will be presented.

Monday, October 22, 2018
4:15 PM – 5:15 PM
127 Hayes-Healy Center

Colloquium Tea 3:45 PM to 4:15 PM 101 Crowley Commons Room