北京师范大学随机数学中心

学术报告

报告题目：Poisson's Equations and Truncation Approximations for Markov Chains

报告人： 刘源远 教授

（中南大学）

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摘要

Poisson's equation is widely applied in various areas. In this talk, we will mention one application to deriving truncation bounds on the invariant probability vectors. We then focus on truncation approximations of the solution of Poisson's equation for discrete-time or continuous-time Markov chains. We will show that the censored chains and the linear augmentation are effective truncation approximation schemes. The results are applied to single death and single birth processes. This talk is based on joint research with Wendi Li and Jinpeng Liu.