

北京师范大学 随机数学研究中心

学术报告

报告人: 苏中根 (浙江大学)

题目: Approximations of sums of local dependence structure random variables

时间: 2022 年 9 月 23 日 (周五) 下午 15:00-16:00

地点: 腾讯会议号 968 858 720

摘要: Consider the sum W of a sequence of locally dependent integer-valued random variables. We aim to approximate the distribution of W by a three parametric family of distributions like $B(n, p) * \mathcal{P}(\lambda)$ and $NB(r, \bar{p}) * \mathcal{P}(\lambda)$ via Stein's methods. As applications, we take a close look at the runs of independent Bernoulli random variables, and so obtain a better upper error bound of approximation, which a significant improvement of earlier results in literature.