

概率论系列报告

报告题目 (Title): **Stability of heat kernel estimates and parabolic Harnack inequalities for symmetric Dirichlet forms**

报告人 (Speaker): 陈振庆 (University of Washington)

时间 (Time): 5 月 15 日 (周三) 下午 2:00-3:00

地点 (Venue): 北京大学理科一号楼 1418

摘要 (Abstract): In this talk, I will present recent progress in the study of heat kernels and parabolic Harnack inequalities for symmetric Markov processes that have both diffusive and jumping parts on general metric measure spaces. Under general volume doubling condition and some mild assumptions on the scaling functions, we establish stability results for two-sided estimates for heat kernels in terms of the jumping kernels, the generalized capacity inequalities, and Poincare inequalities. Stable characterizations of the associated parabolic Harnack inequalities will also be given. Our results hold on spaces even when the underlying spaces have walk dimensions are larger than 2.

欢迎参加