

Strong law of large numbers of some models related to branching processes

Yan-Xia Ren

Peking University, Beijing, P. R. China yxren@math.pku.edu.cn

Branching process is the basic model used to describe population growth in biological systems. Branching diffusion and super-diffusion are more complex models which root in diverse areas of pure and applied science, including population genetics models, interacting particle systems and stochastic partial differential equations. In this talk, I will mainly introduce recent developments on strong law of large numbers for branching processes, multitype branching processes, branching diffusions and super-diffusions.

Key Words: Multitype branching processes, branching diffusions, super-diffusions, LlogL conditions