

ERGODIC THEORY FOR SUPER-DIFFUSION OVER A STOCHASTIC FLOW

Mei ZHANG *Beijing Normal University, Beijing.* E-mail: meizhang@bnu.edu.cn

Abstract: In this talk we study the limit behavior of the occupation time of a superprocess over a stochastic flow. Two ergodic theorems are proved for $d = 2$ and $d \geq 3$. The proof is based on the conditional log-Laplace equation of the occupation time process. These results can be seen as counterparts of those for the classical superprocess. This is the joint work with Profs. Zenghu Li and Jie Xiong.