

LARGE DEVIATION PRINCIPLE OF OCCUPATION MEASURES FOR MONOTONE SPDEs

Ren WANG *Wuhan University, China*, E-mail: whwangran@yahoo.com.cn

Abstract: Using the hyper-exponential recurrence criterion, a large deviation principle for the occupation measure is derived for a class of non-linear monotone stochastic partial differential equations. The main results are applied to many concrete SPDEs such as stochastic p -Laplace equation, stochastic porous medium equation, stochastic fast-diffusion equation, and even stochastic real Ginzburg-Landau equation driven by α -stable noises. Joint work with Jie XIONG and Lihu XU.