

Large Deviation Principle for Some Measure-Valued Processes

Jie XIONG *University of Macau, China and University of Tennessee, USA.* E-mail: jxiong@math.utk.edu

KEY WORDS: Large deviation principle, stochastic partial differential equation, Fleming-Viot process, super-Brownian motion.

MATHEMATICAL SUBJECT CLASSIFICATION: Primary 60F10; Secondary: 60H15, 60J68.

Abstract: We establish a large deviation principle for the solutions of a class of stochastic partial differential equations with non-Lipschitz continuous coefficients. As an application, the large deviation principle is derived for super-Brownian motion and Fleming-Viot process. This talk is based on a paper joint with Fatheddin.