The Probability of Events for Parabolic Equations

Guangying Lv[1] and Jinlong Wei[2]

[1]Henan University
[2]Zhongnan University of Economics and Law

August 4, 2020

Abstract

In this short paper, we focus on the blowup phenomenon of stochastic parabolic equations. We first discuss the probability of the event that the solutions keep positive. Then, the blowup phenomenon in the whole space is considered. The probability of the event that the solutions blow up in finite time is given. Lastly, we obtain the probability of the event that blowup time of stochastic parabolic equations larger than or less than the deterministic case.

Hosted file

LvW-MMAS-2020.pdf available at https://authorea.com/users/348512/articles/473793-the-probability-of-events-for-parabolic-equations