武汉大学

随机分析系列报告（一）

Effect of noise on front propagation in reaction-diffusion equations

报告人： 孙振尧 博士（武汉大学，Israel Institute of Technology）

时间： 2021 年 03 月 12 日（周五），下午 15:00 - 16:00

地点： 腾讯会议室 ID: 376 203 305

摘要： We will survey some results about the propagation speed of the wavefront of stochastic reaction-diffusion equations of the form:

$$\partial_t u = \frac{1}{2}\partial_x^2 u + f(x) + \varepsilon\sqrt{u(1-u)}\,\dot{W}.$$

The effect of the noise on the speed is quite different depending on whether the drift f is Lipshitz or non-Lipshitz; and also depends on whether the noise coefficient is large or small. We will also report a new result, based on ongoing work with Clayton Barnes and Leonid Mytnik, in the case that f is non-Lipshitz.

主办单位： 武汉大学数学与统计学院
School of Mathematics and Statistics, Wuhan University