



北京理工大学

数学与统计学院学术报告

Cauchy Problem of Stochastic Kinetic Equations

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时间: 2023年10月30日（周一）下午3:15-4:00

地点: 文翠楼M233

摘要: In this talk we establish the optimal regularity estimates for the Cauchy problem of stochastic kinetic equations with random coefficients in anisotropic Besov spaces. As applications, we study the nonlinear filtering problem for a degenerate diffusion process, and obtain the existence and regularity of conditional probability densities under a few assumptions. Moreover, we also show the well-posedness for a class of super-linear growth stochastic kinetic equations driven by velocity-time white noises.

个人简介: 张晓龙，北京理工大学数学与统计博士后，博士后导师朱蓉禅教授。2023年6月博士毕业于武汉大学。研究方向随机偏微分方程；随机动理学方程；大偏差；滤波问题；Malliavin分析；Euler-Maruyama 算法；随机微分方程的遍历性。博导是张希承教授。