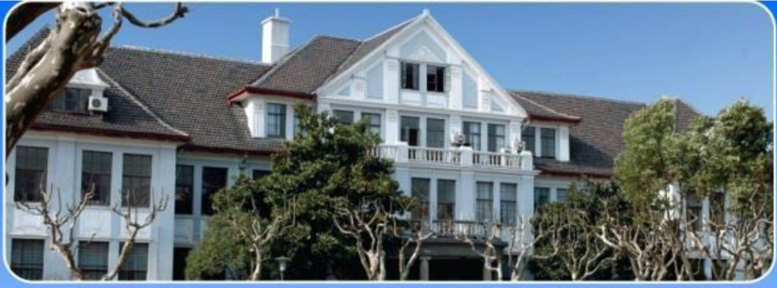

复旦大学数学科学学院

数学综合报告会

报告题目：Stochastic differential equations with local growth singular drifts

报告人：叶文杰 博士（中国科学院数学与系统科学研究院）

时间：2023-03-22 星期三 16:00 - 17:00

地点：光华东主楼1513室

报告摘要：

We study the weak differentiability of global strong solution of stochastic differential equations, the strong Feller property of the associated diffusion semigroups and the global stochastic flow property in which the singular drift term and the weak gradient of Sobolev diffusion term are supposed to satisfy local growth conditions respectively. The main tools for these results are the decomposition of global two-point motions, Krylov's estimate, Khasminskii's estimate, Zvonkin's transformation and the characterization for Sobolev differentiability of random fields.

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