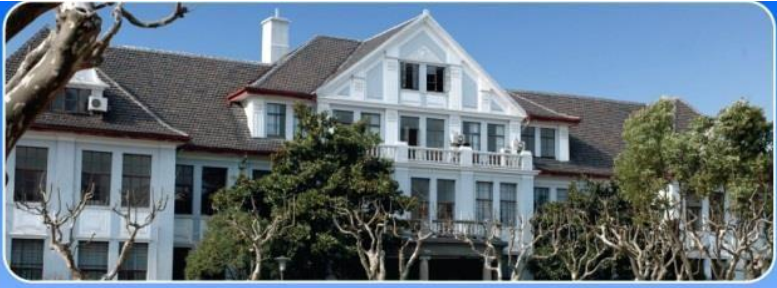


复旦大学数学科学学院

数学综合报告会

报告题目：Itô's formula for flows of measures on semimartingales

报告人：魏晓利 (Tsinghua Shenzhen International Graduate School)

时间：2023-06-05 星期一 10:00-11:00

地点：光华东主楼1601室

报告摘要：

We establish Itô's formula along flows of probability measures associated with general semimartingales; this generalizes existing results for flows of measures on Itô processes. Our approach is to first establish Itô's formula for cylindrical functions and then extend it to the general case via function approximation and localization techniques. This general form of Itô's formula enables the derivation of dynamic programming equations and verification theorems for McKean-Vlasov controls with jump diffusions and for McKean--Vlasov mixed regular-singular control problems. This is a joint work with Xin Guo and Huyên Pham.

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