深圳北理莫斯科大学
УНИВЕРСИТЕТ МГУ-ППИ В ШЭНЬЧЖЭНЕ
SHENZHEN MSU-BIT UNIVERSITY

应用数学短课

报告人 / Докладчик / Speaker: 周晓文 教授 (Concordia University)

题目 / Название / Title: Brownian Motion and Stochastic Integral

时间 / Время / Time：9 May 2024, 19:00-21:00, 10 May 2024, 9:00-12:00

地点 / Место / Venue：1教 405

短课简介:

Stochastic calculus is the area of mathematics that deals with processes containing a stochastic component and thus allows the modeling of random systems. Many stochastic processes are based on functions which are continuous, but nowhere differentiable. This rules out differential equations that require the use of derivative terms, since they are unable to be defined on non-smooth functions. Instead, a theory of integration is required where integral equations do not need the direct definition of derivative terms. In quantitative finance, the theory is known as Ito Calculus. The purpose of this course is to present a concise treatment of stochastic calculus and its applications, including some examples and exercises. The students will study the properties of Brownian motion, Ito integral and Ito's formula.

周晓文 教授简介：

周晓文, 加拿大康考迪亚大学 (Concordia University) 数学与统计系终身教授，1999 年在美国加州大学伯克利分校获统计学博士学位。长期从事概率论与随机过程理论的研究，主要研究兴趣包括测度值随机过程，Levy 过程及其在种群遗传学和风险理论中的应用。先后在《Annals of Probability》《Probability Theory and Related Fields》《Journal of Differential Equations》《Canadian Journal of Mathematics》《Theoretical Population Biology》《Stochastic Processes and their Applications》《Journal of Theoretical Probability》等国际顶级概率刊物发表论文 80 余篇。

访问学者以及需要做报告的学者请联系 ***张晔*** *教授 / Всем желающим выступить с докладами на семинаре просьба обращаться к* ***Чжану Е*** ye.zhang@smbu.edu.cn