复旦大学数学科学学院
数学综合报告会

报告题目：**Shifting martingale measures and the birth of a bubble**

报告人：Professor Hans Foellmer

（Humboldt University，Berlin）

报告时间：10:30-11:30 10:30-11:30

报告地点：复旦大学第六教学楼 6408 室

摘要：We discuss some recent developments in the probabilistic analysis of asset price bubbles. Such a bubble is usually described as a local martingale appearing on top of the perceived fundamental value of a liquid asset, defined as the expected sum of future discounted dividends under a given equivalent martingale measure. In this view, either there is a bubble right at the beginning, or there is none at all. In order to capture the slow birth of a perceived bubble, we study a flow in the space of equivalent martingale measures and the corresponding shifting perception of the fundamental value. This allows us to describe the birth of a bubble as an initial submartingale which then turns into a supermartingale before it falls back to its initial value zero. The talk will be based on joint work with Francesca Biagini and Sorin Nedelcu.

非线性数学模型与方法教育部重点实验室

中法应用数学国际联合实验室

上海市现代应用数学重点实验室

复旦大学数学研究所