

Stochastic Analysis Seminar (SAS)  
Monday March 24, 2008 12:30pm - 1:20pm  
Bendheim Center Classroom

Speaker  
Jerome Busca, Knight Equity Markets

Title  
Asymptotic Methods in Option Pricing Theory

Abstract  
There has been a lot of interest in the recent years for asymptotic methods in option pricing theory. This is driven by a demand from practitioners for closed-form pricing of options as well as the need to calibrate models to data in a robust way. Interestingly, some of these methods are related to large deviation theory, geometric optics and WKB approximation, which provide the key to understanding the link between option model parameters and the so-called implied volatility. The talk will be based on joint research with Henri Berestycki (EHESS, Paris) and Igor Florent (HSBC). I will also review more recent work and discuss directions for future research.