STANFORD UNIVERSITY
PROBABILITY SEMINAR

4:15pm, Monday, November 3, 2008
Sequoia Hall Room 200
(Refreshments at 4:00pm in 1st Floor Lounge)

Oana Mocioalca
Department of Mathematics
Stanford University

Title: Trading the line strategy under fractional and other irregular noise

Abstract: Unlike Brownian motion fractional Brownian motion (fBm) exhibits long-range dependence. It has been argued, that phenomena like financial asset prices show long range dependence, and thus fBm has been proposed as a better model than Brownian motion for describing stock prices. Using the tools of Malliavin calculus we describe a method for finding the distribution of the exit times in a trading the line strategy, a strategy where the trader will close his position when the stock price would reach a certain level, This is done under the assumption that the stock prices are driven by fractional Brownian motion or other irregular Gaussian processes.