SEMINARIO

MODELAMIENTO ESTOCÁSTICO

EXPOSITOR

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TITULO

"A stochastic model for speculative bubbles".

Abstract :

"One commonly says that the creation of speculative bubbles is the consequence of two phenomenons: the self-reinforcing effect of the investors and the tendency of these investors to follow the forecasting rule which consists in deciding that the price will increase if it has (strongly) increased in the past. Following these two rules, we build a model for speculative bubbles which is a Gaussian two-dimensional "turning" diffusion.

Then, the main objective of the work is to obtain some sharp bounds for the time of return to a given price.

In our main results, we prove with both spectral and probabilistic methods that the rate of return is proportional to the rotation frequency of the deterministic model associated with the diffusion.

I will end the talk by some open questions on the quasi-stationary distribution related to the problem and on the statistical estimation of the parameters of the model. This talk is based on a joint work with Sebastien Gadat and Laurent Miclo."

Viernes 18 de Octubre del 2013 a las 17 : 30 hrs. Sala de Seminarios CMM, Sptimo piso.