ÇANKAYA UNIVERSITY
FACULTY OF ARTS AND SCIENCES
DEPARTMENT OF MATHEMATICS

# SEMINAR

## TITLE: **Stochastic Differential Equations: Theory, Examples and Applications to Finance**

**SPEAKER:** **Assoc. Prof. Dr. Yeliz Yolcu-Okur, METU**

**DATE** : **21 October, 2016**

**TIME** : **13:00**

**PLACE** : **Çankaya University (Central Campus), R-213**

### Abstract

The theory of stochastic analysis have been studied on for many years. However, it becomes more popular and attractive when Black and Scholes (1973) introduced pricing formula for European vanilla call and put options by assuming the stock prices follow geometric Brownian model.

In this talk, I will basically give fundamental concepts and features in stochastic differential theory. As an example of stochastic differential equations, we examine the Black and Scholes model in details. I will conclude my talk with the simulation of stochastic differential equations and applications in finance: interest rate theory and financial derivative pricing.

All interested are cordially invited.

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