

Boğaziçi
MATH GRAD SEMINAR

A Brief Introduction to Stochastic Calculus

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Abstract:

The aim of this talk is to provide a gentle introduction to stochastic calculus. We will first discuss Brownian motion and its basic properties. Then we will explore the Itô integral and Itô's lemma. A brief discussion of stochastic differential equations, with an emphasis on the physical motivation of different types of noise, will also be included.

This talk also serves as a preliminary talk for next week's seminar by Oğuz Yılmaz on the long-time behavior of the Stochastic Nonlinear Schrödinger Equation with additive noise.

Date : Monday, December 16, 2024

Time: 13:30

Place: TB130, South Campus, Boğaziçi University