SEMİNERİ

Celal Umut Yaran

İstanbul Teknik Üniversitesi

Title: Long-Time Behavior of Markov Additive Processes

Abstract: A Markov Additive Process (MAP) is a pair of stochastic processes such that the increments of the first process, called the ordinate, are governed by the second one, called the modulator, which is Markov. MAPs can be viewed as a natural extension of Lévy processes. Although MAPs were introduced in the 1970s with a general Markov process, most studies considered a discrete state space for the modulator until the late 2010s.

In this presentation, we assume that the modulator takes values in a Polish space This presentation will begin with an introductory overview of Markov Additive Processes, providing the necessary background and intuition. We will then present our findings on the long-time behavior of the ordinate. Finally, we discuss the applications of these processes in the representation of d-dimensional self-similar Markov processes via the Lamperti-Kiu transform.

Tarih: 9 Nisan 2025 Çarşamba

Saat: 14:30-15:30

Yer: Fen-Edebiyat Fakültesi B1-326

İletişim: curan@itu.edu.tr