November 18, 2024 2:00pm-3:00pm KAP 414

Prof. Xihao He (University of Michigan)

A singular mean field optimal stopping problem

Abstract: The work considers a mean field optimal stopping problem with a singular coefficient in objective function. The corresponding large population problem is deeply related with quickest detection problem, which aims to study efficient detection of abrupt changes in the statistical behavior of streaming data, and it is a fundamental problem arising in many fields of engineering, in finance, in the natural and social sciences, and even in the humanities. The goal is to establish the regularity of the value function, dynamic programming principle, limit theory, and derive the corresponding obstacle PDE problem (a variant of HJB equation).

Zoom Link: USC Math Finance Colloquium

Join Zoom Meeting https://usc.zoom.us/j/94973619069?pwd=VnU5bVIMc1pzVTIEYUVaZUYyNSt6UT09

Meeting ID: 949 7361 9069 Passcode: 925028