March 4, 2024 2:00pm-3:00pm KAP 414

Prof. Qingshuo Song (Worcester Polytechnic Institute)

From the cell problem to the turnpike property in LQG control

Abstract: The turnpike property in control theory refers to the tendency of optimal control strategies to converge over a sufficiently long time horizon, closely following a fixed or "turnpike" path. A recent work by Jiongmin Yong and his collaborators characterized the turnpike as a static optimization problem through the Ricatti system. In this talk, we establish the connection between the turnpike property and the cell problem from Weak KAM Theory, further provides an alternative approach to identifying the turnpike in control problems.

Zoom Link: USC Math Finance Colloquium

Join Zoom Meeting

https://usc.zoom.us/j/94973619069?pwd=VnU5bVlMc1pzVTlEYUVaZUYyNSt6UT09

Meeting ID: 949 7361 9069

Passcode: 925028