September 11th, 2017
KAP 414
2:00 P.M. – 3:00 P.M.

Professor Chenchen Mou

(University of California, Los Angeles)

"Stochastic Representations for Solutions to Nonlocal Bellman Equations"

Abstract: The talk is about a stochastic representation formula for the viscosity solution of Dirichlet terminal-boundary value problem for a degenerate Hamilton-Jacobi-Bellman integro-partial differential equation in a bounded domain. We show that the unique viscosity solution is the value function of the associated stochastic optimal control problem. We also obtain the dynamic programming principle for the associated stochastic optimal control problem in a bounded domain.