Graduate

Probability Seminar

Stochastic Control and Differential Games with Path-Dependent Controls

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Time: 14:15 pm

ZOOM link
https://us02web.zoom.us/j/86343893713?pwd=QjE3SFhrUjVCY3FYL01UUHJEYWl0Zz09

Abstract. In this talk we consider the functional Itô calculus framework to find a path-dependent version of the Hamilton-Jacobi-Bellman equation for stochastic control problems with path-dependence in the controls. We also prove a Dynamic Programming Principle for such problems. We apply our results to path-dependence of the delay type. We further study Stochastic Differential Games in this context.