

学术报告

Risk-Sensitive Optimality of Discounted
Continuous-Time Markov Decision Processes

廖仲威 副研究员

中山大学

报告时间： 2018 年 1 月 19 日（周五） 15:00--16:00

报告地点： 天津大学 6 号楼 112 教室

报告摘要： We will talk about some recent work on the risk-sensitive control problem with unconstrained discounted continuous-time Markov decision processes (CTMDPs) taking values in discrete state space. The controlled model associated with the CTMDPs is under the deterministic history-dependent policies. Under some conditions imposed on the primitives, allowing unbounded transition rates and unbounded cost rates, we develop the dynamic programming approach and then obtain the corresponding Hamilton-Jacobi-Bellman equation (HJB equation). Furthermore, compactness-continuity conditions are introduced to ensure the existence of a solution to the HJB equation. Finally, we show the existence of an optimal Markov policies and also verify that the value function of the risk-sensitive control problem is the solution of the HJB equation.

欢迎大家参加！