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Seminario

Optimización y Equilibrio

Expositor
Dr. Cristopher Hermosilla
Department of Mathematics - Louisiana State University

Título
Optimal control and Hamilton-Jacobi-Bellman equations.
Some extensions to problems on networks

Abstract:

The first aim of this talk is to show that, using Variational Analysis tools, it is possible to provide a characterization of the Value Function of an optimal control problem in terms of the Hamilton-Jacobi-Bellman (HJB) equation, meaning that the Value Function is the unique (not necessarily continuous) viscosity solution of the HJB equation.

The second goal is to present some new results concerning applications of the techniques mentioned above to optimal control problems whose state is constrained to remain on a network, and whose dynamical system is (possibly) discontinuous at the junctions. In this case, the HJB equation need to be complemented with appropriate junction conditions in order to get the characterization of the Value Function.

Miércoles 22 de Junio del 2016 a las 16:30 hrs, Sala John Von Neumann CMM, séptimo piso, torre norte, Beauchef 851.