Solvability for a class of Hamiltonian systems derived from optimal control

LIANWEN WANG Central Missouri State University, USA

This talk deals with the solvability for a class of Hamiltonian systems derived from optimal control. It is well-known that Hamiltonian systems with mixed boundary conditions are derived when we solve optimal controls using maximum principle. There are not many solvability results for such Hamiltonian systems except some special cases such as systems of linear differential equations. We provide an existence and uniqueness result for those Hamiltonian systems under some natural assumptions.