

Norma Ortiz (ortiz@math.lsu.edu), Department of Mathematics, Louisiana State University, Baton Rouge, LA 70803-4918, *Existence of Solutions and a Decoupling Method for a Neutral Problem of Bolza*

In this talk we present results that argue the existence of solutions to the problem of Bolza with delays in both the state and velocity variables. We use a decoupling technique, developed by Clarke for the case without delays, and introduce briefly how it can be used to develop necessary conditions for our problem. This work has been done under the supervision of the presenter's advisor, Peter Wolenski.