Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

Jeffrey A. Ehme* (jehme@spelman.edu), 350 Spelman Lane SW, Dept of Math, Box 214, Spelman College, Atlanta, GA 30314. Uniqueness and existence for boundary value problems via variational equations.

We will establish existence and uniqueness for solutions to $y^{(n)} = f(x, y, y', ..., y^{(n-1)})$ subject to right focal or Lidstone boundary conditions. The key assumptions are that f is bounded and that there is uniqueness and existence for the linear variational problems. (Received October 05, 2004)