Brittney N Hinds* (bxc77740@ucmo.edu), Dept. Mathematics and Computer Science, University of Central Missouri, Warrensburg, MO 64093. Continuability and Boundedness of Solutions of Differential Equations Without Bounded Assumption on Nonlinear Functions.

In this talk the continuability and boundedness of solutions for a class of second order nonlinear differential equations \[ p(t)f(x'(t)))' = q(t)g(x(t)) \] are discussed. Some results of continuability and boundedness of solutions have been obtained in some papers under the boundedness assumption of the function \( g(x) \). We consider the continuability and boundedness of solutions without the boundedness requirement of \( g(x) \). Therefore, our results have improved some known results. (Received September 16, 2008)