

Meeting: 1003, Atlanta, Georgia, SS 26A, AMS-SIAM Special Session on Dynamic Equations on Time Scales; Integer Sequences and Rational Maps, I

1003-34-172 **Johnny Henderson*** (Johnny_Henderson@baylor.edu), Department of Mathematics, Baylor University, Waco, TX 76798-7328. *Nonlocal Boundary Value Problems for Second Order Dynamic Equations.*

Shooting methods are used to obtain solutions of the three-point boundary value problem for the second order dynamic equation, $y^{\Delta\Delta} = f(x, y, y^\Delta)$, $y(x_1) = y_1$, $y(x_3) - y(x_2) = y_2$, where $f : (a, b)_T \times R^2 \rightarrow R$ is continuous, $x_1 < x_2 < x_3$ in $(a, b)_T$, $y_1, y_2 \in R$, and T is a time scale. Conditions are imposed implying that solutions of such problems are unique, when they exist. (Received August 17, 2004)