

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

1003-34-193 **Allan C Peterson** (apeterso@math.unl.edu), Department of Mathematics, Lincoln, NE 68588-0323, and **Youssef Naim Raffoul*** (youssef.raffoul@notes.udayton.edu), Department of Mathematics, Dayton, OH 45469-2316. *Exponential Stability of Dynamic Equations on Time Scales.*

In this work we investigate the exponential stability of the zero solution to a system of dynamic equations on time scales. We do this by defining appropriate Lyapunov-type functions and then formulate certain inequalities on these functions. Several examples are given. (Received August 24, 2004)