

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

1003-34-1525      **Kelli J. Hall\*** (hall1142@marshall.edu), Marshall University, Department of Mathematics, 1 John Marshall Dr., Huntington, WV 25755, **Elizabeth R. Duke** (duke6@marshall.edu), Marshall University, Department of Mathematics, 1 John Marshall Dr., Huntington, WV 25755, and **Ralph W. Oberste-Vorth** (oberstevorth@marshall.edu), Marshall University, Department of Mathematics, 1 John Marshall Dr., Huntington, WV 25755. *Changing Time Scales: Bifurcations in Second Degree Equations*. Preliminary report.

We introduce the idea of using time scales as a parameter to understand the changes in dynamics between difference and differential equations. In particular, we use the times scales  $\mathbb{R}_+$  and  $\mu\mathbb{Z}_+$  for  $0 < \mu \leq 1$ , where  $\mu = 1$  represents  $\mathbb{Z}_+$  and the difference equation, while “ $\mu = 0$ ” represents  $\mathbb{R}_+$  and the differential equation. (Received October 05, 2004)