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

1003-39-1225 **Jennifer L Langdon*** (jlangdon@math.unl.edu), Math. Department, University of Nebraska-Lincoln, Lincoln, NE 68588. *Asymptotic Behavior of a Perturbed Linear Dynamic Equation on a Time Scale.* Preliminary report.

We are concerned with the asymptotic behavior of a perturbed second-order formally self-adjoint dynamic equation on a time scale. In particular our equation of interest is the perturbation of a nonoscillatory second-order formally self-adjoint equation. Our method of proof will use the contraction mapping theorem. Our results generalize Theorem 9.1 in Hartman's book, Ordinary Differential Equations, to the dynamic equation case. (Received October 04, 2004)