1056-39-1540   **Heidi A Berger*** (`heidi.berger@simpson.edu`), Simpson College, Department of Math, 701 N. C Street, Indianola, IA 50125. *The Existence of Multiple Nontrivial Solutions of Boundary Value Problems of Second-Order Dynamic Equations on a Time Scale.* Preliminary report.

I will use Clark's Theorem to show the existence of multiple solutions to a self-adjoint second-order dynamic boundary value problem that generalizes a Sturm-Liouville problem on a time scale. This work generalizes that done by Rabinowitz for PDEs in 1986 and work done by Bai and Xu for difference equations in 2007. Examples of the main results will be presented. (Received September 22, 2009)