962-34-1300    **Bonita A. Lawrence\*** (`balawren@gwm.sc.edu`), Mathematics Department, University of South Carolina Beaufort, 801 Carteret Street, Beaufort, SC 29935, and **Denise T. Reid**, Dept. of Mathematics and Computer Science, Valdosta State University, Valdosta, GA 31698. *A Comparison of Eigenvalues for a Sturm-Liouville Boundary Value Problem on a Measure Chain.*

Under consideration is a class of even ordered linear differential equations with Sturm-Liouville boundary conditions. The differential equation is, in fact, a general dynamic equation containing delta-derivatives whose solution is defined on a measure chain. For a pair of eigenvalue problems for this dynamic equation, we first verify the existence of a smallest positive eigenvalue and then establish a comparison between the smallest positive eigenvalues of the two eigenvalue problems. (Received October 03, 2000)