

Meeting: 1004, Bowling Green, Kentucky, SS 3A, Special Session on Dynamic Equations on Time Scales and Applications

1004-34-49 **Ferhan Merdivenci Atici** and **Daniel C. Biles*** (daniel.biles@wku.edu), Department of Mathematics, Western Kentucky University, Bowling Green, KY 42101, and **Alex Lebedinsky**.
An Application of Time Scales to Economics.

Economics is a discipline in which there appears to be many opportunities for applications of time scales. The time scales approach will not only unify the standard discrete and continuous models in economics, but also, for example, allows for payments which arrive at unequally spaced points in time. We present a dynamic optimization problem from economics, construct a time scales model and apply calculus of variations to derive a solution. (Received January 11, 2005)