1051-93-216   **John E Miller*** (`John_Miller1@baylor.edu`) and **Ian Gravagne**. *Lyapunov Stability of Non-diagonalizable Switched Linear Systems on Time Scales.*

We apply Lyapunov stability theory to switched linear systems on time scales. Switched linear systems consist of continuous dynamics coupled with instantaneous switching events. This coupling can be difficult to model on standard time domains ($\mathbb{R}$ and $\mathbb{Z}$), especially if the switching events are non-uniformly spaced. We first present the most general case, stability of non-diagonalizable systems with arbitrary switching. A constrained switching case follows. Several examples are given for both. (Received August 25, 2009)