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Dylan R Poulsen* (dylan_poulsen@baylor.edu), **John M Davis** and **Ian A Gravagne**. *The Geometry of the Region of Uniform Exponential Stability on an Arbitrary Time Scale.*

We examine the regions of exponential stability and uniform exponential stability for first order, linear time invariant dynamic equations on an arbitrary time scale. While the region of exponential stability has been completely classified, a characterization of the theoretically important region of uniform exponential stability remains elusive. In this talk, we give a complete description of the best circular approximation at the origin to the region of exponential stability. We show that the circular region is not, in general, a subset of the region of uniform exponential stability. We provide, however, a mild condition on the time scale – *mean-stationarity* – which guarantees that this circular region is a subset of the region of uniform exponential stability. (Received September 10, 2014)