1135-VT-783 **Tiffany Nicole Kolba*** (tiffany.kolba@valpo.edu). *Minimal Noise-Induced Stabilization of One-Dimensional Stochastic Differential Equations.*

The phenomenon of noise-induced stabilization occurs when an unstable deterministic system is stabilized by the addition of randomness into the system. In this talk, we investigate under what conditions one-dimensional, autonomous ordinary differential equations can be stabilized by noise, where we take the notion of stability to be that of global stochastic boundedness. Specifically, we prove the minimum amount of noise necessary for noise-induced stabilization to occur when the drift and noise coefficients are power, polynomial, exponential, or logarithmic functions. (Received September 14, 2017)