1056-60-1167 **Suman Sanyal*** (sanyal@marshall.edu), Smith Hall 743C, Department of Mathematics, Marshall University, Huntington, WV 25755. *Global Stability of Complex-Valued Neural Networks* on Time Scales.

In this talk, we will analyze the activation dynamics of complex-valued neural networks on general time scales. Besides presenting conditions guaranteeing the existence of a unique equilibrium pattern, its global exponential stability is discussed. Some numerical examples for different time scales are given in order to highlight the results. (Received September 21, 2009)