## 1158-37-11 Gangaram S. Ladde\* (gladde@usf.edu), 108 N. Greenfield Avenue, Temple Terrace, FL 33617. An Innovative Dynamic Modeling of Binary State Processes. Preliminary report.

By introducing the concepts of binary state potential energy and activation processes, we initiate a study of network systems in a coherent manner. A dynamic algorithm for investigating binary digital state dynamic processes in a systematic and unified way. The modeling dynamic approach is based on historical development of classical models of McCulloch-Pitts, biological and social processes coupled with feedback process in neural network. This provides an alternate approach for studying binary state digital dynamic processes in neural network systems.Furthermore, the development of the work is initiated and guided by well-known illustration artificial neural network literature. The role and scope the approach exhibited (Received December 10, 2019)