1079-60-405 **Jean C Pedjeu*** (jpedjeu@mail.usf.edu) and **Gangaran S Ladde**. *Approximate solution process of multi-time scale stochastic differential equation.*

In this work, we investigate numerical approximations of multi-time scale stochastic differential equation. In particular, we analyze the approximation scheme of solutions of three time-scale stochastic differential equations, namely stochastic fractional differential equations of Ito-Doob type. Example are given to illustrate the approximation procedure. In addition, simulation results are also presented. (Received January 18, 2012)