1067-60-1328 **Daniel Siu*** (danielpaulsiu@gmail.com), Department of Mathematics and Statistics, 4202 East Fowler Avenue, PHY 114, Tampa, FL 33620-5700, and **Gangaram S Ladde** (gladde@usf.edu), Department of Mathematics and Statistics, 4202 East Fowler Avenue, PHY 114, Tampa, FL 33620-5700. *Stochastic Hybrid Dynamic Model for Risk Process.* Preliminary report.

A study of a class of multidimensional stochastic hybrid dynamic model is investigated. The model consists of continuous and discrete dynamics. The parameters of the continuous dynamic switch according the discrete dynamic. The discrete dynamic is governed by a non-homogeneous Poisson process. Under certain conditions, the solution to the multidimensional model can be obtained. For the one-dimensional case some probabilistic properties are derived. Applications to the risk theory are discussed. (Received September 20, 2010)