1040-60-148 **Andrzej Korzeniowski*** (korzeniowski@uta.edu), Box 19408, Arlington, TX 76019. *Interactive Dynamics under Random Perturbations.* Preliminary report.

We study a class of random processes that undergo state changes subject to internal and external perturbations. The underlying Markov flow is a hybrid system whose continuous time component (Ito-type stochastic differential equation) is altered by transitions of finite state Markov chain at times of renewal-type impulses. Long time behavior and stability results are provided and illustrated by examples. (Received January 30, 2008)