WEI SUN, Concordia University

Periodic solutions of hybrid jump diffusion processes

We investigate periodic solutions of regime-switching jump diffusions. Uniqueness of periodic solutions to the corresponding SDEs or SPDEs is obtained by the strong Feller property and irreducibility of the associated time-inhomogeneous semigroups. Concrete examples are presented to illustrate the results. This talk is based on joint work with Xiao-Xia Guo and Chun Ho Lau.