WEI SUN, Concordia University Periodic solutions of some SDEs and SPDEs

We investigate periodic solutions of stochastic dynamical systems induced by some SDEs and SPDEs. We start with different definitions of periodic solutions. Then, we explain how to use the strong Feller property and irreducibility of time-inhomogeneous semigroups to study uniqueness of periodic solutions. Concrete examples are presented to illustrate the results. This talk is based on joint papers with Zuo-Huan Zheng, Xiao-Xia Guo and Chun Ho Lau.