



DEPARTMENT OF APPLIED MATHEMATICS

應 用 數 學 系

**The Hong Kong Polytechnic University
Department of Applied Mathematics**

Seminar

**Well-posedness and Optimal Regularity of Stochastic Evolution
Equations with Multiplicative Noises**

by

Dr. Zhihui Liu

**Academy of Mathematics and Systems Science,
Chinese Academy of Sciences, Beijing, China**

Abstract

In this talk, we prove the well-posedness and optimal trajectory regularity for the solution of stochastic evolution equations with Lipschitz-type coefficients driven by general multiplicative noises. To consider the well-posedness of the problem, the linear operator of the equations is only need to be a generator of a C_0 -semigroup and the proposed noises are quite general, which include space-time white noise and rougher noises. We derive the optimal trajectory regularity of the solution under minimum conditions on the data through a generalized criterion by factorization method.

Date : 3 August, 2017 (Thursday)

Time : 11:00a.m. – 12:00noon

Venue : TU801, The Hong Kong Polytechnic University

***** ALL ARE WELCOME *****