

Talk: The stochastic fractional power dissipative equations in any dimension and applications

Speaker: Prof. Gao Hongjun

Date: 11 November 2014 (Tuesday)

Time: 11:00 a.m. - 11:40 a.m.

Abstract:

This talk is concerned with stochastic fractional power dissipative equations with multiplicative noise in  $N$ -dimension ( $N \geq 1$ ) space.

The well-posedness for the subcritical nonlinearities is proved in appropriate space-time space by the contraction mapping principle and Strichartz estimates.

The main result can be applied to various types of SPDEs such as stochastic reaction-diffusion equations, stochastic fractional Burgers equation and stochastic fractional Navier-Stokes equation.