

**University of Macau**

**Faculty of Science and Technology**

**Department of Mathematics**

**Gradient Estimates and Applications for SDEs in Hilbert Space  
with Multiplicative Noise and Dini Continuous Drift**

*By*

Prof. Feng-Yu Wang, professor of Beijing Normal University and  
Swansea University

**Date: 19 November 2015 (Thursday)**

**Time: 10:00 a.m. - 11:00 a.m.**

**Venue: E11- 1039**

**Abstract**

Consider the stochastic evolution equation in a separable Hilbert space with a nice multiplicative noise and a locally Dini continuous drift. We prove that for any initial data the equation has a unique (possibly explosive) mild solution. Under a reasonable condition ensuring the non-explosion of the solution, the strong Feller property of the associated Markov semigroup is proved. Gradient estimates and log-Harnack inequalities are derived for the associated semigroup under certain global conditions, which are new even in finite-dimensions.

**Biography**

Prof. Feng-Yu Wang is a full professor at Beijing Normal University and Swansea University. He has published more than 150 papers on international leading journals including Advance in Mathematics, Annals of Probability, Communication in PDEs, Functional Analysis and so on.

**All are Welcome!**

**FST Seminar - MAT - " Gradient Estimates and Applications for SDEs in Hilbert Space with Multiplicative Noise and Dini Continuous Drift " at 10:00am on 19 November 2015 (Thursday), E11-1039**