



DEPARTMENT OF APPLIED MATHEMATICS

應 用 數 學 系

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

**Seminar**

**The Obstacle Problem for Quasilinear Stochastic PDEs: Analytical  
Approach**

by

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Fudan University

**Abstract**

We prove the existence and uniqueness of solution of quasilinear Stochastic PDEs with obstacle (OSPDE in short). Our method is based on analytical technics coming from the parabolic potential theory. The solution is expressed as a pair  $(u, \nu)$  where  $u$  is a predictable continuous process which takes values in a proper Sobolev space and  $\nu$  is a random regular measure satisfying minimal Skorohod condition.

**Date : 25 January, 2018 (Thursday)**

**Time : 3:00p.m. – 4:00p.m.**

**Venue : Y404, Core Y, The Hong Kong Polytechnic University**

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