

# 学术报告

## Mean-field stochastic differential equations and associated PDEs

**Prof. Juan LI (李娟 教授)**

Shandong University (山东大学)

**Time:** 16:00-17:00, November 5 (Monday) 2018

**Venue:** Room 112, Center for Applied Mathematics

**Abstract:** We consider a mean-field stochastic differential equation (with or without jumps), also called McKean-Vlasov equation. We characterize its related value function  $V(t, x, \mu)$  under appropriate regularity conditions on the coefficients as the unique classical solution of a non-local PDE of mean-field type (with or without jumps), involving the first and second order derivatives of  $V$  with respect to its space variable and the probability law.

The talk is based on joint works with Rainer Buckdahn (UBO, Brest, France), Tao Hao (SUFU, Jinan, P.R. China), Shige Peng (SDU, Jinan, P.R. China) and Catherine Rainer (UBO, Brest, France).

欢迎大家参加!