	Sun., August 10	$10:00 \sim 10:25$	Rose	25min talk
--	-----------------	--------------------	------	------------

## Derivative Formula, Coupling Property and Strong Feller for S(P)DEs Driven by Lévy Processes

Zhao Dong (dzhao@amt.ac.cn)
Institute of Applied Mathematics, CAS, China

By using Malliavin calculus for jump processes, we established Bismut type formula, gradient estimates and coupling property for the semigroups associated to semilinear SDEs driven by Lévy processes whose Lévy measures have absolutely continuous part w.r.t Lebesgue measure on  $\mathbb{R}^n$ . Meanwhile, employing the quasi-invariant property of Gaussian measure on Hilbert spaces, we also investigated a conditional derivative formula for a class of semilinear SPDEs driven by jump processes. As applications of this conditional formula, the exponential convergence of the transition semigroup was also discussed.