

## **Stochastic Integration and Stochastic PDEs Driven by Jumps on the Dual of a Nuclear Space**

Christian Fonseca-Mora, Universidad de Costa Rica

In the first part of this talk, I will introduce a novel theory of stochastic integration for operator-valued processes with respect to cylindrical martingale-valued measures on the dual of a nuclear space. Latter, I will explain how this theory of stochastic integration can be applied to the study of existence and uniqueness of solutions to stochastic evolution equations with rather general coefficients. We will finalize with the study of stochastic evolution equations driven by general Lévy processes in this context.