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Continuity of the Solution with Respect to a Parameter in Stochastic Evolution Equations with Levy Noise

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Abstract

In this talk, we first introduce Levy Processes on Banach and Hilbert Spaces, then we will talk about stochastic integrations with respect to Levy processes and Ito formula for this integration on finite dimensions. Then we define the extension of this stochastic integration to Banach and Hilbert Spaces. We study conditions under which stochastic integration on Banach Spaces can be defined. We will also study Stochastic Evolution Equation with Levy noise on separable Hilbert Spaces. And finally, we talk about our recent research on the continuity of the solution in Semilinear Stochastic Evolution Equation of Monotone Type with Levy noise.

Keywords: Levy Processes, Continuity of the solution with respect to a parameter, stochastic evolution equations , Levy Processes on Banach spaces, Monotone nonlinearity:

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