

EXISTENCE OF ALMOST AUTOMORPHIC SOLUTION IN DISTRIBUTION FOR A CLASS OF STOCHASTIC INTEGRO-DIFFERENTIAL EQUATION DRIVEN BY LEVY NOISE

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Abstract

We investigate a new class of stochastic integro-differential equations driven by L'evy noise. Particularly, based on Schauder's fixed point theorem, the existence of square-mean almost automorphic mild solution in distribution is obtained by using some conditions which are weaker than Lipschitz conditions. Our result can be seen as a generalisation of the result of [17] and [28] based on the compactness of solution semigroup operators of our slightly different stochastic model. We provide an example to illustrate ours results.

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