STOCHASTIC DELAY EQUATION WITH LÉVY NOISE

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We consider an abstract stochastic delay equation with Lévy noise and infinite or finite delay in infinite-dimensional Hilbert spaces. We perform our investigation not directly by working with the original equation, which depends on the history of the process. Instead we present a transformed problem, which is local in time, and show that this one is equivalent to the original problem. Since the transformed problem is an stochastic abstract Cauchy problem, criteria for existence and uniqueness of the solution are well known. Finally we briefly discuss advantages of the approach presented here.