

1116-35-899

Peter Y Pang* (matpyh@nus.edu.sg). *Stochastic Partial Functional Differential Equations with Delay.*

We will present our recent results on the existence and uniqueness of strong solutions to stochastic partial functional differential equations (SPFDEs) with locally monotone coefficients, locally Lipschitz nonlinearity, and time delay. We note that, while SPFDEs have important applications, they are far less studied than SPDEs and SFDEs. Our results extend and widen the applicability of those of Liu-Röcker (2010), Caraballo et al (2000), and Taniguchi et al (2002). We illustrate the applicability of our results by applying them to a stochastic 2D Navier-Stokes equation with time delay, and a stochastic Nicholson's blowflies equation with time delay. (Received September 15, 2015)