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Jewgeni H. Dshalalow and Ali Hussein Mahmood Al-Obaidi*

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In this paper, we will introduce random measures on σ -compact Hausdorff spaces and define their stochastic integrals of functions of one and two variables. We further form a rigorous construction of a random measure perturbed by a stochastic process and target its stationary intensity often occurring in control theory. To obtain that intensity we modify and refine the classic Campbell's theorem for random measures. Examples of modulated Poisson measures are discussed. (Received July 11, 2017)