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Francisco Delgado-Vences* (delgadovences@gmail.com), Alameda de Leon 2, Centro, 68000 Oaxaca de Juarez, Oaxaca, Mexico, and **Franco Flandoli**. *A numerical method for Kolmogorov equations in Hilbert spaces.*

We introduce a numerical method for Kolmogorov (FPK) equations in a Hilbert space. The method is based on the spectral decomposition of the Ornstein-Uhlenbeck semigroup associated with the Kolmogorov equation. This allows us to write the solution of the Kolmogorov equation as a deterministic version of the Wiener-Chaos Expansion. With this expansion, we reformulate the Kolmogorov equation as an infinite system of ordinary differential equations, and by truncation it, we set a linear finite system of differential equations. The solution of such system allows us to build an approximation to the solution of the Kolmogorov equations in a separable Hilbert space. As an example, we present the solution of a stochastic Fisher-KPP equation. Moreover, we will discuss the Continuous Dependence on the Initial Condition of the solution. (Received September 12, 2019)