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Laura Villafuerte Altuzar* (lva5@hotmail.com), 909 S Whitney Way Apt 3, Madison, WI 53711, and **Juan Carlos Cortes**, Instituto de Matematica Multidisciplinar, 46022 Valencia, Valencia, Spain. *Mean square power series solutions and its applications in solving linear second order random differential equations.*

In this talk we construct, by means of random power series, a solution of second order linear differential equations containing uncertainty through its coefficients and initial conditions. By assuming appropriate hypotheses on the data, we prove that the constructed random power series solution is mean square convergent.

Several examples that illustrate the theoretical results, are included. (Received September 16, 2016)