ATENEO

Juan Carlos Cortés

Universitat Politècnica de València

Computational methods for random differential equations and their applications to modelling

Abstract: Differential equations play a central role in applications of mathematics to natural and engineering sciences. However, differential equations governing real processes always contain some elements (e.g., coefficients, inhomogeneous part, initial and/or boundary conditions) which characterize physical features of the phenomenon and environment and that are experimentally determined. Due to errors in the measurements and inherent complexity often met in real problems, it is more realistic to consider that input data is random rather than deterministic. Starting from this natural standpoint, this talk is addressed to present some computational techniques to deal with random differential equations in the context of mathematical modelling.

Sala de Grados I, Facultad de Ciencias
Jueves 22 de Marzo de 2018 (17:00)