



Modelling and prediction with uncertainty quantification in mathematical models

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entrada libre hasta completar el aforo

resumen:

In this talk we address to the treatment of uncertainty in different types of mathematical models: Continuous dynamical system, discrete mathematical model and stochastic model. First, we analyse uncertainty evolves in a continuous dynamical system modeled by differential equations. Then, we apply Bayesian techniques to processes of calibrating in discrete mathematical models. Finally, we quantify parameters uncertainty in stochastic models. Study cases will be presented and will be discussed for each modeling approach.

sobre Almudena Sánchez:

Almudena Sánchez Sánchez is a researcher in the Institute for Multidisciplinary Mathematics (IMM) at Universitat Politècnica de València (Valencia, Spain). She got her International Ph.D. in Mathematics at Universitat Politècnica de València (Valencia, Spain) in 2013. Her main areas of research are Mathematical Modelling and Uncertainty Quantification. More details about her curriculum and publications can be found here: <http://sites.google.com/site/alsncsnc>