ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

INVITATION TO A GUEST LECTURE

An overview of numerical methods for infinite-dimensional dynamical systems from delay equations

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ABSTRACT

This talk aims at presenting the main research activities of the CDLab (http://cdlab.uniud.it/), which concern the development of numerical methods addressed to the stability and bifurcation analysis of infinite-dimensional dynamical systems mainly generated by functional equations such as, e.g., delay differential equations, renewal equations or PDEs of evolution type. Applications of interest range from population dynamics and epidemiology to control theory. The underlying basis is the pseudospectral collocation of infinite-dimensional operators and relevant discretization and convergence issues will be discussed.

We hope to see you there!