$\mathbf{T}_{\text{EMPLE}} \; \mathbf{U}_{\text{NIVERSITY}} \; \mathbf{M}_{\text{ATHEMATICS}} \; \mathbf{C}_{\text{OLLOQUIUM}}$

Pablo Pedregal

Univers
dad de Castilla–La Mancha

will speak on

A variational approach to ODE and its numerical implementation

ABSTRACT: We will describe an optimization approach to the analysis of ODE based on minimizing an error functional. This minimization process requires some non-standard ingredients but its analysis is quite elementary. After showing existence and uniqueness, we will focus on a numerical implementation based on this approach, and test it with several typical examples. We will end up with a short discussion on the possibilities of the approach for PDE.

Monday, 23 February 2009 Lecture at 4:00 pm Coffee, tea, and refreshments from 3-5 pm Room 617, Wachman Building Department of Mathematics