
SEMINARIO DE ANÁLISIS NUMÉRICO Y MODELACIÓN MATEMÁTICA

GIMNAP-Departamento de Matemática, UBB
Centro de Investigación en Ingeniería Matemática (CI²MA), UDEC

Expositor:

Aissa Guesmia

Universidad de Lorraine, Metz, Francia

Título de la Charla:

***Neumann-boundary stabilization of the wave
equation with damping control and applications***

Fecha y Hora:

Martes 14 de Agosto de 2018, 15:30 Horas.

Lugar:

Sala Seminario, Facultad de Ciencias

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Resumen

This work is devoted to the boundary stabilization of a non-homogeneous n -dimensional wave equation subject to static or dynamic Neumann boundary conditions. Using a linear feedback law involving only a damping term, we provide a simple method and obtain an asymptotic convergence result for the solutions of the considered systems. The method consists in proposing a new energy norm. Then, a similar result is derived for the case of dynamic Neumann boundary conditions with nonlinear damping feedback laws. Finally, the method presented in this work is also applied to several distributed parameter systems such as the Petrovsky system, coupled wave-wave equations and elasticity systems.