



Departamento de Matemática Aplicada

Seminario
Matemática Aplicada - UCM

Curso 2015-2016

Martes 3 de noviembre de 2015

Facultad de CC. Matemáticas
Sala 209. Seminario Alberto Dou

11:00. Nsoki Mavinga

Department of Mathematics and Statistics, Swarthmore College, PA,
“Steklov eigenproblem and elliptic equations with nonlinear boundary conditions”

Abstract:

We are concerned with the solvability of second order elliptic partial differential equations with nonlinear boundary conditions by imposing asymptotic nonresonance conditions of nonuniform type with respect to the Steklov spectrum on the boundary nonlinearity. We cast the problem in terms of nonlinear compact perturbations of the identity on appropriate trace spaces in order to prove the existence of strong solutions. We obtain a priori estimates for possible solutions to a homotopy on suitable trace spaces and use topological degree arguments.

Organiza:

Departamento de Matemática Aplicada. UCM.

Con la colaboración del Grupo de Investigación UCM “Comportamiento Asintótico y Dinámica de Ecuaciones Diferenciales” (CADEDIF).