SEMINARIO DE ANÁLISIS Y APLICACIONES

Viernes, 19 de octubre de 2012

10:00 h., Módulo 17 (antiguo C-XV) - Aula 520 (Depto. Matemáticas UAM)

Peter Sjögren

Chalmers Tekniska Högskola - Göteborgs Universitet

Sharp estimates of the Jacobi heat kernel with applications

Resumen: *This is joint work with A. Nowak.*

The classical Jacobi polynomials have an associated heat semigroup, whose kernel is given by an oscillating sum.
This sum is useless for estimations, and there is no better explicit formula.
We determine the order of magnitude of the kernel, for most parameter values.

As an application, we prove the weak type $(1,1)$ estimate for the corresponding maximal operator in several dimensions.

ICMAT CSIC-UAM-UC3M-UCM
Departamento de Matemáticas. U.A.M.