

SEMINARIO DE ANÁLISIS Y APLICACIONES XXIV MEMORIAL RUBIO DE FRANCIA

Viernes, 18 de mayo de 2012

11:30 h., Módulo 17 (antiguo C-XV) - Aula 520 (Depto. Matemáticas UAM)

Kari Astala

Helsingin Yliopisto / University of Helsinki

Vectorial Calculus of Variations and Interpolation with Complex Exponents

Resumen: *The presentation is based on joint works with T. Iwaniec, I. Prause and E. Saksman.*

The classical interpolation methods are fundamental tools in harmonic analysis, with interpolation of L^p -spaces being a prime example.

It turns out that in special circumstances one can introduce interpolation on L^p -spaces with complex exponents p . With such tools available we then e.g. obtain optimal integral estimates for nonlinear differential expressions, or describe the multifractal spectra of quasiconformal mappings.