

SEMINARIO DE ANÁLISIS Y APLICACIONES

Viernes, 28 de marzo de 2014

11:30 h., [Aula Naranja](#) (ICMat, Campus de Cantoblanco)

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ICMAT

The Dirichlet problem for elliptic systems
with data in function spaces

Resumen:

Take an arbitrary second-order, homogeneous, elliptic system, with constant complex coefficients (e.g., the Laplacian or the Lamé system of elasticity). Consider the associated Dirichlet problem in the upper-half space with non-smooth boundary data in some class of functions (e.g., Lebesgue spaces, variable exponent Lebesgue spaces, Lorentz spaces, Zygmund spaces, as well as their weighted versions). We present a general method, written in the framework of Köthe function spaces, establishing that the well-posedness of the corresponding boundary value problems is equivalent to the boundedness of the Hardy-Littlewood maximal function.

Joint work with D. Mitrea, I. Mitrea, and M. Mitrea.