

SEMINARIO DE ANÁLISIS Y APLICACIONES

Viernes, 3 de junio de 2011

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

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Calderon-Zygmund kernels and rectifiability in the plane

Resumen: *Joint work with J. Mateu, L. Prat and X. Tolsa.*

Let μ be a Borel measure with linear growth in the plane, by a theorem of David and Leger the $L^2(\mu)$ boundedness of the singular integral associated to the coordinate Cauchy kernel $x_1/|x|^2$ implies that μ is rectifiable. We generalize this result to any kernel of the form $x_1^{2n-1}/|x|^{2n}$, $n \in \mathbb{N}$. If time permits we will also discuss results related to capacities associated to these kernels.

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