SEMINARIO DE ANÁLISIS Y APLICACIONES

Viernes, 2 de febrero de 2018

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

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Asymptotically sharp Reverse Hölder Inequalities for flat weights

Resumen:

We present reverse Hölder inequalities for Muckenhoupt weights in $\mathbb{R}^n$ with an asymptotically sharp behavior for flat weights, namely A_∞ weights with Fujii-Wilson constant $(w)_{A_\infty} \to 1^+$. That is, the local integrability exponent in the reverse Hölder inequality blows up as the weight becomes nearly constant. This is expressed in a precise and explicit computation of the constants involved in the reverse Hölder inequality. The proofs avoid BMO methods and rely instead on precise covering arguments. We also prove sharp endpoint weak-type reverse Hölder inequalities and consider further extensions to general non-doubling measures and multiparameter weights. This is a joint work with Ioannis Parissis from Universidad del País Vasco UPV/EHU and Ikerbaske.

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