

SPEAKER:

Speaker: Carlos Pérez, University of the Basque Country and Ikerbasque

TITLE: Optimality of the exponents in weighted estimates without examples

ABSTRACT:

We present a general approach for proving the optimality of the exponents on weighted estimates. We show that if an operator T satisfies a bound like

$$\|T\|_{L^p(w)} \leq c[w]_{A_p}^\beta, \quad w \in A_p,$$

then the optimal lower bound for β is closely related to the asymptotic behaviour of the unweighted L^p -norm $\|T\|_{L^p(\mathbb{R}^n)}$ as p goes to 1 and ∞ .