

论文

齐型空间上带非光滑核的奇异积分算子的双权不等式

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摘要:

该文在齐型空间 (X, d, μ) 上建立带非光滑核的奇异积分算子的双权、弱型不等式, 即对于 $1 < p \leq q < \infty$, 此算子是 $L^p(X, \nu)$ 到 $L^{q, \infty}(X, u)$ 有界的, 只要权函数对 (u, ν) 满足在权 u 上增加一个 "Orlicz-bump" 的 A_p 型条件.

关键词: 齐型空间 加权不等式 奇异积分算子 非光滑核

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42B20; 42B25

A Two-weight Norm Inequality for Singular Integral Operators with Non-smooth Kernel on Spaces of Homogeneous Type

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Abstract:

In this paper, a two-weight weak type norm inequality for singular integral operators with non-smooth kernel is established on spaces of homogeneous type. The authors prove that the operators in question are bounded from $L^p(X, \nu)$ to $L^{q, \infty}(X, u)$ with $1 < p \leq q < \infty$, provided that the pair of weights (u, ν) verifies an A_p -type condition with an "Orlicz-bump" on the weight u .

Keywords: Spaces of homogeneous type Norm inequality Singular integral operator Non-smooth kernel

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