WEIGHTED INEQUALITY FOR SOME CLASSICAL INTEGRAL OPERATORS: 0 < p < 1

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Abstract. Suppose 0 < p < 1 and 0 < q < ∞. In this note, we prove that the weighted \((p, q)\) inequality
\[
\left( \int_0^\infty (Tf(x))^q w(x) \, dx \right)^{1/q} \leq C \left( \int_0^\infty (f(x))^p v(x) \, dx \right)^{1/p}
\]
has no nontrivial solution if \(T\) is a Hardy type operator, the Hardy-Littlewood maximal operator or an one-sided maximal operator.


Keywords and phrases: Weighted inequality, Hardy type operator, Hardy-Littlewood maximal operator, one-sided maximal operator.

REFERENCES

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