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TWO-WEIGHTED INEQUALITIES FOR RIESZ POTENTIALS, GENERATED BY BESSEL DIFFERENTIAL OPERATORS

Abstract

In this we prove two-weight inequalities for the Riesz potentials, generated by Bessel differential operators $B = \dfrac{d^2}{dx^2} + \dfrac{\gamma}{x}\dfrac{d}{dx}$ (B-Riesz potentials). In some special case we have found the necessary and sufficient conditions for pairs of weights ensuring the validity of strong type inequalities for the B-Riesz potentials.