Hardy-type inequalities with power and logarithmic weights in domains of the euclidean space

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Abstract

We consider Hardy-type inequalities in domains of the Euclidean space for the case when the weight depends on the distance function to the domain boundary and has power and logarithmic singularities. We prove several new inequalities with sharp constants. Original Russian Text © N.I. Manina and A.Ya. Sultanov, 2011.

Keywords

Distance function to the boundary, Hardy-type inequalities, Iterations of logarithms