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HÖLDER WEIGHT ESTIMATES OF SINGULAR INTEGRALS GENERATED BY GENERALIZED SHIFT OPERATOR

Abstract

Systematic investigations of multidimensional singular integrals generated by generalized shift operator begin from the papers [1,2], where for these integrals, Privalov type theorems were proved. In the given paper these integrals are studied in Hölder weight spaces $H_{\alpha\beta}^{\gamma}$ ([3]). Sufficient conditions for α, β, γ providing their invariance, were found.

Note that these conditions are terminal in the operators with characteristics satisfying the Hölder condition with index $\delta > \gamma$ ([4]).