

BOUNDS IN SPACES OF MORREY UNDER CHICCO TYPE CONDITIONS

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Abstract. In the present paper we consider Morrey spaces in unbounded domains and study elliptic equations in nondivergence form with discontinuous coefficients when the class of discontinuities is of Chicco type. In particular we state some local and non local a priori bounds for solutions of Dirichlet problem and study the dependence of the constants in the estimates. The idea is to approximate the principal coefficients by functions with derivatives which belong locally to the space L^s , $2 < s \leq n$, while the coefficients of lower terms in the differential operator belong to Morrey spaces. Our results are based on embedding theorems which allow us to require a summability lower than n for the coefficients of the operator L .

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