

The presented work contains a survey of the so far known results about the operator inequalities of the type “good  $\lambda$ ”, “better good  $\lambda$ ” and “rearranged good  $\lambda$ ” on the function spaces over the Euclidean space with the Lebesgue measure and their corollaries in the form of more complex operator inequalities and norm estimates. However, the main aim is to build similar theory for the Riesz potential operator on the function spaces over the quasi-metric space with the so-called “doubling” measure. Combining the corollaries of this theory with the known norm estimates we obtain the boundedness for the Riesz potential operator on the Lebesgue and Lorentz spaces.