

Weighted inequalities for sublinear integral operators on the semiaxis and applications to Lorentz analysis

D. V. Prokhorov^a, V. D. Stepanov^{b,c}

^a*Computer Centre Far-Eastern Branch of Russian Academy of Sciences*

^b*Steklov Institute of Mathematics of Russian Academy of Sciences*

^c*Peoples' Friendship University of Russia*

Weighted L^p – L^r inequalities with arbitrary measurable non-negative weights for positive quasilinear integral operators with Oinarov's kernel on the semiaxis are characterized. Application to the boundedness of maximal operator in the Lorentz Γ -spaces is given.