ABSTRACT

Two–weight criteria of various type for one–sided maximal functions and one–sided potentials are established in variable exponent Lebesgue spaces. Among other results we derive the Hardy–Littlewood, Fefferman–Stein and trace inequalities in these spaces. Weighted estimates for Hardy–type, maximal, potential and singular operators defined by means of a quasi–metric and a doubling measure are derived in $L^{p(x)}$ spaces. In some cases examples of weights guaranteeing the appropriate weighted estimates are given.