ON BOUNDEDNESS OF A CERTAIN CLASS OF HARDY–STEKLOV TYPE OPERATORS IN LEBESGUE SPACES

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Dedicated to Professor Lars-Erik Persson on the occasion of his 65th birthday

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ABSTRACT. $L_p - L_q$–boundedness of the map $f \to w(x) \int_{a(x)}^{b(x)} k(x,y) f(y) v(y) dy$ is described by different types of criteria expressed in terms of given parameters $0 < p, q < \infty$, strictly increasing boundaries $a(x)$ and $b(x)$, locally integrable weight functions v, w and a positive continuous kernel $k(x,y)$ satisfying some growth conditions.

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