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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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