HIGHER DIMENSIONAL COMPACTNESS OF HARDY OPERATORS INVOLVING OINAROV–TYPE KERNELS

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Abstract. The compactness of the higher dimensional generalized Hardy operator \((Kf)(x) = \int_{S_x} k(x,y)f(y)dy\) and its conjugate operator \(K^*\) has been characterized for the case \(1 < p, q < \infty\). This is done by reducing the problem to the corresponding one dimensional situation.

Key words and phrases: Hardy operator, Oinarov kernel, boundedness, compactness.

REFERENCES