

# Optimal Embedding of Generalized Bessel and Riesz Potentials

Goldman M. L.

*(Peoples Friendship University of Russia, Moscow)*

seulydia@yandex.ru

The space of potentials is determined by convolutions of functions from rearrangement invariant space (RIS) with generalized kernels of Bessel or Riesz type. The constructive criteria are obtained for embeddings into an RIS and optimal (the smallest) RISes are described for such embeddings. These results are based on sharp estimates for combined Hardy type operators on positive half axis.