

Riesz potentials around L^1 and L^∞

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Abstract

The spaces L^1 and L^∞ do not behave like other L^p spaces in relation to the Riesz potential, a fact which was observed from the very beginning. These anomalies have made life interesting over the last almost century, where the progressive study of this topic has led to the discovery of a number of results. In this talk the speaker will review the literature that he is aware of and share his perspective of the present state of the art. Open problems will be mentioned.