



The Almost Everywhere Convergence of Eigenfunction Expansions of Schrödinger Operator in L_p Classes.

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ABSTRACT

In this paper the eigenfunction expansions of the Schrödinger operator with the potential having singularity at one point are considered. The uniform estimations for the spectral function of the Schrödinger operator in closed domain are obtained. The almost everywhere convergence of the eigenfunction expansions by Riesz means in the classes L_p classes is proven by estimating the maximal operator in L_1 and L_2 and applying the interpolation theorem for the family of linear operators.

Keywords: Schrödinger operator, almost everywhere convergence and eigenfunction expansions.