On the negative eigenvalues of two-dimensional Schro¨dinger operators with singular potentials

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Abstract

In this paper quantitative upper estimates for the number of negative eigenvalues of a two dimensional Schro¨dinger operator with potential supported by an unbounded Lipschitz curve are presented. The estimates are given in terms of the weighted L1 and L log L type Orlicz norms of the potential.

Keywords: Negative eigenvalues; Schro¨dinger operators; Singular potentials.