Counting negative eigenvalues of one-dimensional Schroedinger operators with singular potentials

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In this paper, we extend the well-known upper estimates of the Cwikel-Lieb-Rozenblum type for the number of negative eigenvalues of one-dimensional schroedinger operators with regular potentials to the case of strongly singular potentials. In particular, we consider the case when the potential is allowed to be a measure that is not necessarily absolutely continuous with respect to the Lebesgue measure.

Keywords: Negative eigenvalues; Schroedinger operators; Singular potentials.