Mohamed, A.; **Nourrigat, J.**

Encadrement du N(λ) pour un opérateur de Schrödinger avec un champ magnétique et un potentiel électrique. (Inclusion of N(λ) for a Schrödinger operator with magnetic field and electric potential). (French) Zbl 0725.35068

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The authors study the asymptotic behaviour at infinity of the number N(λ) of the eigenvalues in]-∞, λ] of the Schrödinger operator with magnetic field $H = \sum_{j=1}^{n}(-i\partial_{x_j} - a_j(x))^2 + V(x)$. Under regularity and increasing assumptions on V and the $a_j's$, they obtain upper and lower bounds for N(λ). These bounds are integrals of some quantities associated to V and the $a_j's$. Several examples are given where V and the $a_j's$ are polynomials.

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MSC:

35P20 Asymptotic distributions of eigenvalues in context of PDEs
35J10 Schrödinger operator, Schrödinger equation

Keywords:

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