

Zeros of the spectral density of periodic Schrodinger operator with Wigner-von Neumann potential

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We consider ordinary Schrodinger operator with periodic background potential and Wigner-von Neumann potential. Every zone of the absolutely continuous spectrum has two resonance points where the asymptotics of the generalized eigenvectors change. This may lead to the existence of two eigenvalues in each zone. We study the behavior of the spectral density near these critical points and prove that under certain conditions it has a zero of the power type.

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