

Susceptibility of the Mattis model

Rössler, Jaime

Kiwi, Miguel

Ramírez, Ricardo

We have investigated the susceptibility of the Mattis Hamiltonian by means of Green's-function techniques and using a functional-integral formulation. It turns out that it is not possible to obtain an exact solution for the susceptibility of the model, but we find that, just as the Anderson Hamiltonian, for strong Coulomb interaction U , a Curie-law susceptibility holds, while for weak U a Pauli-like susceptibility is obeyed. © 1973 The American Physical Society.