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Title: Asymptotic number of scattering resonances for generic Schrödinger operators

Abstract: Let $-\Delta + V$ be the Schrodinger operator acting on $L^2(\mathbb{R}^d; \mathbb{C})$ with $d \geq 3$ odd. Here V is a bounded real or complex function vanishing outside the closed ball of center 0 and of radius a . Let $n_V(r)$ denote the number of resonances of $-\Delta + V$ with modulus less than r . We show that if the potential V is generic in a sense of pluripotential theory, then

$$n_V(r) = c_d a^d r^d + O(r^{d-3/16+\dots\delta})$$

as $r \rightarrow \infty$ for any $\delta > 0$, where c_d is a dimensional constant.