1128-35-87 **Alexis Drouot*** (alexis.drouot@gmail.com), Department of Mathematics, Evans Hall, Berkeley, CA 94720. *Eigenvalues for Schrödinger operators modelling high disorder.*

We study Schrödinger operators of the form $-\Delta_{\mathbb{R}^3} + q(x)$, $x \in \mathbb{R}^3$, where the potential q is the sum of a deterministic part q_0, and a random part q_1 that varies on a scale of order $N^{-1} \ll 1$. Such operators provide models for the diffusion of waves inside chaotic systems with small scale of heterogeneity. We prove that the eigenvalues (and the resonances) of $-\Delta + q$ converge to the eigenvalues (and the resonances) of $-\Delta + q_0$ in the limit $N \to \infty$. In the case of simple eigenvalues, we give a formula for the remainder term, which can be either deterministic or random, depending on the behavior of $\hat{q}_1(\xi)$ near $\xi = 0$. (Received February 15, 2017)