On the Essential Spectrum of Schrödinger Operators on Trees

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It is known that the essential spectrum of a Schrödinger operator $H$ on $\ell^2(N)$ is equal to the union of the spectra of right limits of $H$. The natural generalization of this relation to $\mathbb{Z}^n$ is known to hold as well. In this talk we study the possibility of generalizing this characterization of $\sigma_{\text{ess}}(H)$ to trees. We give indications for the failure of the general statement in this case, while presenting a natural family of models where it still holds. This is a joint work with Jonathan Breuer.