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36849. *Completeness for Sparse Potential Scattering.*

In this talk, we present some recent results about the scattering theory of a class of continuum Schrödinger operators with deterministic sparse potentials. We first establish the limiting absorption principle for both modified free resolvents and modified perturbed resolvents. This actually is a weak form of the classical limiting absorption principle. We then prove the existence and completeness of wave operators by means of Kato's smooth method. For more general models, we obtain the existence and completeness of local wave operators. (Received October 03, 2013)