

1096-47-979

Zhongwei Shen* (zzs0004@auburn.edu), Auburn University, 221 Parker Hall, Auburn, AL 36849. *Scattering theory of a class of Schrödinger operators with sparse potentials*. Preliminary report.

We present recent results about the scattering theory of a class of continuum Schrödinger operators with sparse potentials. First, we 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. Then, we prove the existence and completeness of wave operators. In particular, the absolutely continuous spectrum coincides with $[0, \infty)$ (Received September 11, 2013)