

1079-34-397

**Milivoje Lukic\*** ([milivoje.lukic@rice.edu](mailto:milivoje.lukic@rice.edu)), Rice University, Mathematics MS 136, 6100 Main Street, Houston, TX 77030. *Schrödinger operators with decaying oscillatory potentials.*

We consider a class of Schrödinger operators with oscillatory potentials obeying an  $L^p$  decay condition. This class of potentials includes slowly decaying Wigner–von Neumann type potentials  $\sin(ax)/x^b$  with  $b > 0$ . We prove absence of singular continuous spectrum and show that embedded eigenvalues in the continuous spectrum can only take values from an explicit finite set. Conversely, we construct examples where such embedded eigenvalues are present. (Received January 18, 2012)