ASYMPTOTICALLY MINIMAL UNCERTAINTY STATES FOR TIME-DEPENDENT OSCILLATORS

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ABSTRACT. We consider the time-dependent Schrödinger equation in one spatial dimension with a time-dependent quadratic Hamiltonian and, under appropriate assumptions on the coefficient functions in the Hamiltonian, construct solutions that approach minimal uncertainty states for large times. A key part of this analysis is the classical study of the asymptotic behavior of the solutions of Sturm-Liouville equations.

This is a joint work with Sam L. Robinson.