Abstract Submitted
for the DNP15 Meeting of
The American Physical Society

Revival Times for a Generalized Coherent State[1] KATHERINE NEWTON, Reed College, MICHEAL BERGER, Indiana University — Revival times are studied for a generalized coherent state found using techniques from supersymmetric quantum mechanics. We prove that in general, exact revivals are quite rare: they only occur when the energy spectrum satisfies a certain condition, namely, that the difference between any two of the energy spectra must be related to the difference between any other two of the spectra by a rational number.. We then examine three examples of shape invariant potentials whose energy spectra satisfy the condition.

[1]This project was funded by the NSF IU REU program (grant number NSF PHY-1460882).

Katherine Newton
Reed College

Date submitted: 31 Jul 2015 Electronic form version 1.4