

Timberlake, Todd K., Frank Petruzielo, and Linda E. Reichl. "Localization of Floquet States along a Continuous Line of Periodic Orbits." *Physical Review E* (2005) 72: 016208- 1-7.

Abstract. A periodically driven particle in an infinite square well is shown to exhibit quantum localization due to a continuous line of periodic orbits in the classical system. Individual Floquet eigenstates localized along this line of periodic orbits are identified. The enhanced localization persists for field strengths beyond that at which the continuous line of orbits is destroyed in the classical dynamics. These results may be relevant to experiments involving trapping potentials with flat regions.