

# Colloquium

Thursday, October 30, 2014

4:00-4:50 pm in Hume 331

## Suppressed dispersion for a randomly kicked quantum particle in a Dirac comb

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I will discuss the long-term spatial behavior of a model for a quantum particle moving in one dimension. The particle's movement is influenced by a periodic force and random momentum kicks that simulate the effect of the particle colliding with members of a background gas. The results that I will present amount to central limit theorems that contrast the spatial behavior of the particle between the cases in which the periodic force is smooth or has singular peaks.