

# Colloquium Notice

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**BUAP, Mexico and Michigan State University**

### *The temperature of a single chaotic eigenstate*

The onset of thermalization in a closed system of randomly interacting bosons, at the level of a single eigenstate, is discussed. We focus on the emergence of Bose-Einstein distribution of single-particle occupation numbers and give a local criterion for thermalization. We show how to define the temperature of an eigenstate, provided that it has a chaotic structure in the basis defined by single-particle states. The analytical expression for the eigenstate temperature as a function of the inter-particle interaction and energy is complemented by numerical data. The relation of thermalization to the many-body localization transition is discussed.

Monday

**May 1, 2017**

Starts at 12:15 PM

Coffee at 12:00 PM

Physics Conference Room, SB B326