Abstract Submitted
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Canonical Universality ANATOLY DYMARSKY[1], University of Kentucky — Isolated quantum system in a pure state may be perceived as thermal if only substantially small fraction of all degrees of freedom is probed. We propose that in a chaotic quantum many-body system all states with sufficiently small energy fluctuations are approximately thermal. We refer to this hypothesis as Canonical Universality (CU). This hypothesis generalizes the Eigenstate Thermalization Hypothesis (ETH) which proposes that for such systems individual energy eigenstates are thermal. Integrable and BML systems do not satisfy CU. We provide theoretical and numerical evidence supporting the CU hypothesis.

[1]Membership Pending

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