

Abstract Submitted
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Thermalization in a closed many-body quantum system¹
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Guardia Comm Coll — A new high-performance algorithm was recently proposed
for calculating level density in interacting many-body systems. It was applied to
spin- and parity-dependent shell-model nuclear level densities using methods of sta-
tistical spectroscopy. Using this algorithm we analyze the intrinsic thermalization
effect in isolated systems of interacting particles. We show examples of the approach
and discuss the dependence of the level density on the interaction parameters.

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