

Abstract Submitted  
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**Random matrices, symmetries, and many-body states**<sup>1</sup> CALVIN JOHNSON, San Diego State University — All nuclei with even numbers of protons and of neutrons have ground states with zero angular momentum. This is ascribed to the pairing force between nucleons, but simulations with random interactions suggest a much broader many-body phenomenon. I discuss how to project out random Hermitian matrices that have good quantum numbers and, computing the width of the Hamiltonian in subspaces, find ground states dominated by low quantum numbers, e.g.  $J = 0$ .

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