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Integrability versus Thermalizability in Isolated Quantum Systems¹ MAXIM OLSHANII, University of Massachusetts Boston — The purpose of this presentation is to propose a rigorous measure of the degree of quantum thermalizability, consistent with the expected empirical manifestations of it. As a practical application of this measure, we devise a unified recipe for choosing an optimal set of conserved quantities to govern the after-relaxation values of observables, in both integrable quantum systems and in quantum systems in between integrable and thermalizable.

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