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Abstract for an Invited Paper for the MAR13 Meeting of the American Physical Society

Non-Equilibrium Thermodynamic Relations in Driven Systems

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In this talk I will review some recent results on non-equilibrium thermodynamic relations, which follow from combining unitary dynamics with the Eigenstate thermalization hypothesis. In particular, I will mention fluctuation theorems, general properties of energy and entropy production in driven systems (both open and thermally isolated), and fundamental limitations on efficiency of non-equilibrium heat engines.