

Abstract Submitted
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Thermometry for Laughlin States of Ultracold Atoms PETER RAUM, VITO SCAROLA, Virginia Tech — Cooling atomic gases into strongly correlated quantum phases requires estimates of the entropy to perform thermometry and establish viability. We construct an ansatz partition function for models of Laughlin states of atomic gases by combining high temperature series expansions with exact diagonalization. Using the ansatz we find that entropies required to observe low energy quasiparticles with bosonic gases are near current cooling capabilities.

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