Joint Annual Meeting of the Swiss and Austrian Physical Society 2023



Contribution ID: 312

Type: Poster

[187] Critical line of the triangular Ising antiferromagnet in a field from a C3-symmetric corner transfer matrix algorithm

Tuesday 5 September 2023 19:00 (1 minute)

We propose a variant of the corner transfer matrix renormalisation group algorithm that contracts infinite tensor networks on the honeycomb lattice. We then apply the algorithm to the conceptually simple yet numerically challenging problem of the triangular lattice Ising antiferromagnet in a field at low temperatures and magnetic fields. We study how the finite temperature three-state Potts critical line in this model approaches the ground-state Kosterlitz-Thouless transition driven by a reduced field (h/T).

Theoretical Work

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Session Classification: Poster Session

Track Classification: Condensed Matter Physics (KOND)