

Boundary Effects for One-Dimensional Bariev Model with Hard-Core Repulsion

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Abstract: For the Bariev model for correlated hopping in one dimension under open boundary conditions, the Bethe ansatz equations are analyzed for both a repulsive and an attractive interaction in several limiting cases, i.e., the ground state, the weak and strong coupling limits. The contributions of the boundary fields to both the magnetic susceptibility and the specific heat are obtained.

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Key words: Bariev model, Bethe ansatz, open boundary

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