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Thermodynamics of 1D N-Component Bariev Model Under Open Boundary Conditions WANG Chun,<sup>1</sup> KE San-Min,<sup>2</sup> and YUE Rui-Hong<sup>2,3</sup>

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Abstract: The thermodynamic Bethe ansatz equations and free energy for 1D N-component Bariev model under open boundary conditions are derived based on the string hypothesis for both, a repulsive and an attractive interaction. These equations are discussed in some limiting cases, such as the ground state, weak and strong couplings.

PACS: 05.50.+q, 75.10.Hk, 75.10.Jm Key words: thermodynamics, N-component Bariev model, open boundary

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