

Algebraic Bethe Ansatz Solution to C_N Vertex Model with Open Boundary Conditions

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Abstract: We present three diagonal reflecting matrices for the C_N vertex model with open boundary conditions and exactly solve the model by using the algebraic Bethe ansatz. The eigenvector is constructed and the eigenvalue and the associated Bethe equations are achieved. All the unwanted terms are cancelled out by three kinds of identities.

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Key words: C_N vertex model, algebraic Bethe ansatz

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