

Title: Q-Operators and functional relations for $U_q(\widehat{sl}(n))$

I explain the construction of the Q-Operators and transfermatrices in their universal form for the affine quantum group $U_q(\widehat{sl}_2)$ and its higher rank generalizations. I show how to derive functional relations involving T and Q. These functional relations are a starting point for studying integrable models connected with the respective quantum group.

Literature:

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Title: The algebraic Bethe ansatz approach to thermal correlation functions of integrable models

I explain how to calculate static temperature correlation functions of the XXZ quantum spin chain combining the quantum transfer matrix approach to thermodynamics of integrable models with algebraic Bethe ansatz methods. This includes the derivation of multiple integral representations of correlation functions and their factorization, the general description of the so-called physical part of the factorized correlation functions and the derivation of efficient formulae for so-called thermal form factors as well as the analysis of the corresponding form factor expansions of two-point functions.

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