

FROM Q-OPERATORS TO LOCAL CHARGES

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Recently, Baxter Q-operators were constructed for $gl(n)$ homogeneous spin-chains for a large class of representations in the quantum space. Employing certain degenerate solutions of the Yang-Baxter equation the complete hierarchy of commuting operators along with all functional relations was established. Curiously, Q-operators can be used to obtain local charges of the spin chain. This circumvents the paradigm of constructing the transfer matrix with equal representation in quantum and auxiliary space and underlines the strength of the Q-operator construction.