

Mathematical Physics

A new dynamical reflection algebra and related quantum integrable systems

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We propose a new dynamical reflection algebra, distinct from the previous dynamical boundary algebra and semi-dynamical reflection algebra. The associated Yang-Baxter equations, coactions, fusions, and commuting traces are derived. Explicit examples are given and quantum integrable Hamiltonians are constructed. They exhibit features similar to the Ruijsenaars-Schneider Hamiltonians.

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