

Equivalence of two sets of deformed Calogero–Moser Hamiltonians

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The equivalence of two complete sets of Poisson commuting Hamiltonians of the (super)integrable rational $BC(n)$ Ruijsenaars–Schneider–van Diejen system is established. Specifically, the commuting Hamiltonians constructed by van Diejen are shown to be linear combinations of the Hamiltonians generated by the characteristic polynomial of the Lax matrix obtained recently by Pusztai, and the explicit formula of this invertible linear transformation is found.