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in cooperation with the
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Room 3.04 bs

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Sklyanin elliptic algebras and associated integrable systems

Abstract

We construct new integrable systems, both classical and quantum, associated with Sklyanin elliptic algebras. Our constructions are based both on a construction of commuting families in skew fields and on properties of the elliptic algebras and their representations. We give some examples showing how these integrable systems are related to previously studied systems.