Nonlinear Sciences > Exactly Solvable and Integrable Systems

On non-multiaffine consistent-around-the-cube lattice equations

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We show that integrable involutive maps, due to the fact they admit three integrals in separated form, can give rise to equations, which are consistent around the cube and which are not in the multiaffine form assumed in papers [1, 2]. Lattice models, which are discussed here, are related to the lattice potential KdV equation by nonlocal transformations (discrete quadratures).

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