

# A constructive approach to the soliton solutions of integrable quadrilateral lattice equations

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Scalar multidimensionally consistent quadrilateral lattice equations are studied. We explore a confluence between the superposition principle for solutions related by the Backlund transformation, and the method of solving a Riccati map by exploiting two known particular solutions. This leads to an expression for the N-soliton-type solutions of a generic equation within this class. As a particular instance we give an explicit N-soliton solution for the primary model, which is Adler's lattice equation (or Q4).

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