

On Study of Solutions of Kac-van Moerbeke Lattice and Self-dual Network Equations

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Abstract: The closed form of solutions of Kac-van Moerbeke lattice and self-dual network equations are considered by proposing transformations based on Riccati equation, using symbolic computation. In contrast to the numerical computation of travelling wave solutions for differential difference equations, our method obtains exact solutions which have physical relevance.

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Key words: Kac-van Moerbeke lattice, self-dual network equation, Riccati equation, closed form solution

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