

Discrete elliptic Toda system, cubic closest packing, and Miwa's discrete BKP equation

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The Laplace transformation of the 2D quadrilateral lattice provides geometric interpretation of Hirota's discrete Toda system [1]. The Laplace transformation of the self-adjoint 7-point scheme on the triangular lattice has been introduced in [2]. The geometric meaning of such transformations, together with the corresponding novel integrable 3D discrete system (the discrete elliptic Toda system), have been given recently in [3]. I would like to present geometric explanation of integrability of this system and its connection with the theory of the 3D B-quadrilateral lattice [4].

References

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