Space-Time Discrete Integrable Systems with Periodic Boundary Condition

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Recently the author showed that several space-time discrete integrable systems, including Lotka-Volterra, KdV, Toda lattice etc., have determinant expressions for time development formulas when we require periodic boundary condition (JPSJ **75** 084001, 2006). Such explicit formulas enable us to perform numerical simulations simply and stably. Real time demonstrations will be given for some familiar models.