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## Symmetries of discrete dynamical systems in a two-dimensional lattice

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### **Abstract**

A class of nonlinear differential-difference equations in a two-dimensional hexagonal lattice is investigated under the Lie point symmetries that it allows.

The system can be interpreted as atomic displacements  $u_{nm}$  normal to the surface, where  $(n, m)$  locate the lattice point on the coordinate system.

**In collaboration with I. Ste-Marie.**