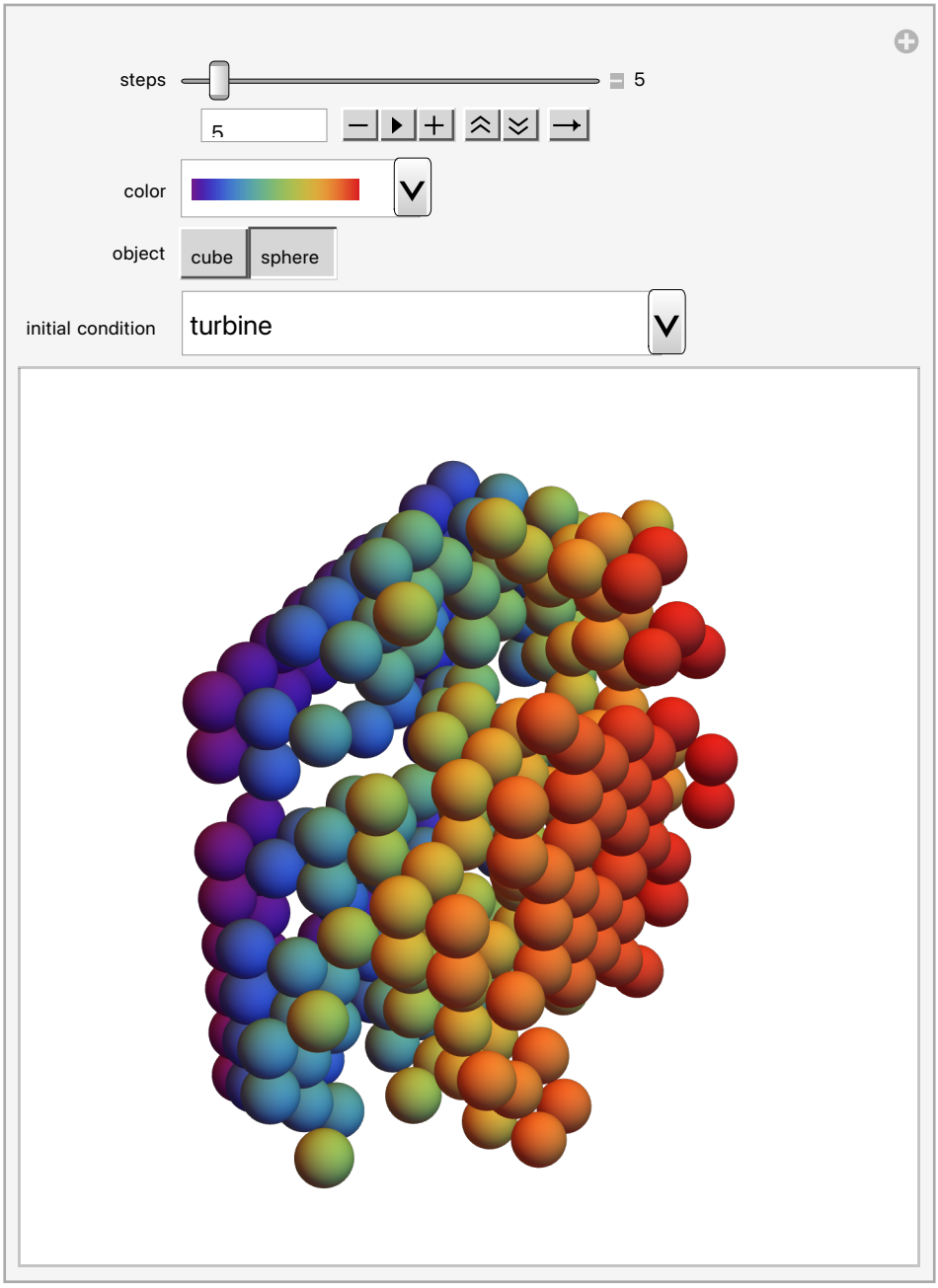
Game of Life in 3D Layers

Initialization Code (optional)

Manipulate

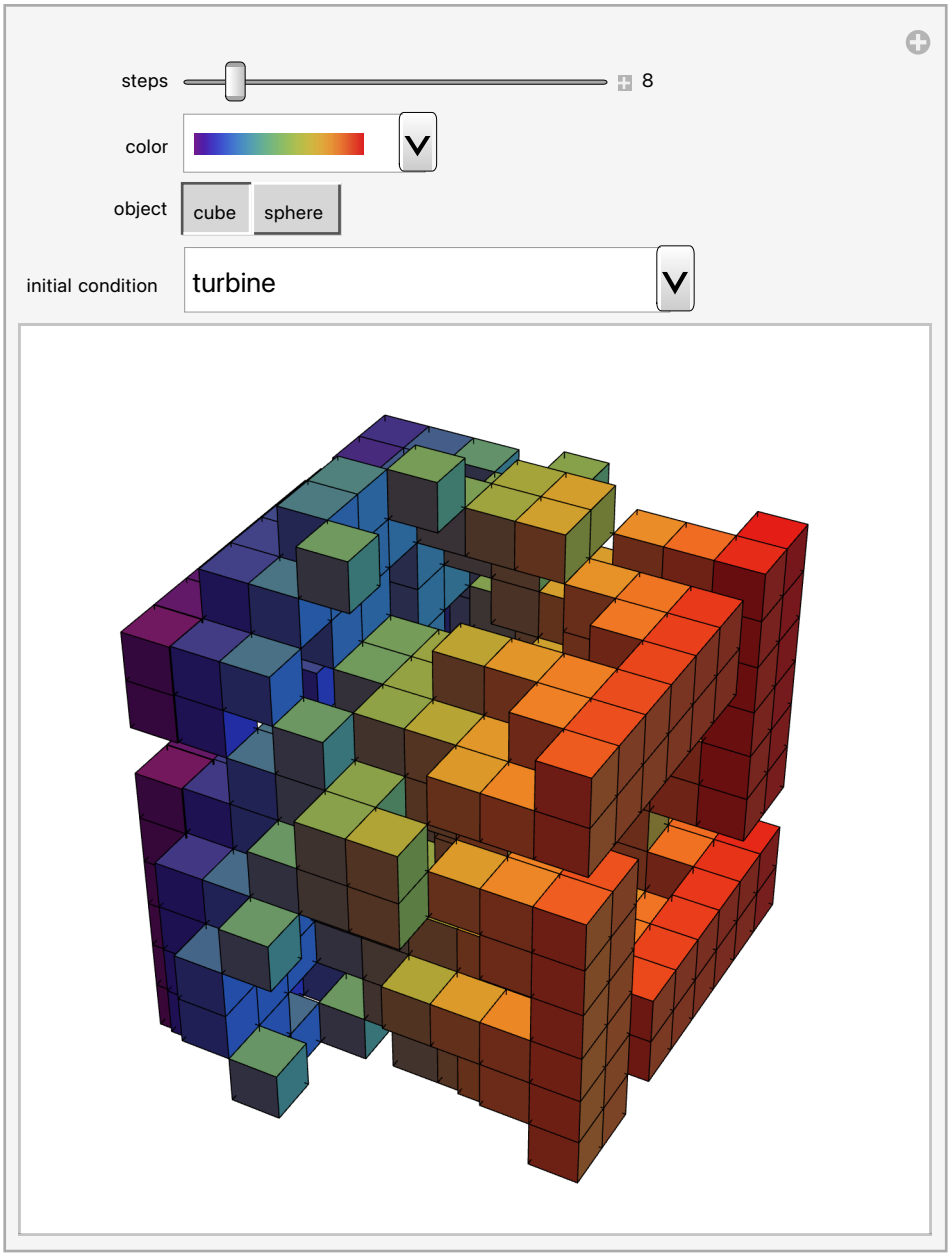


Caption

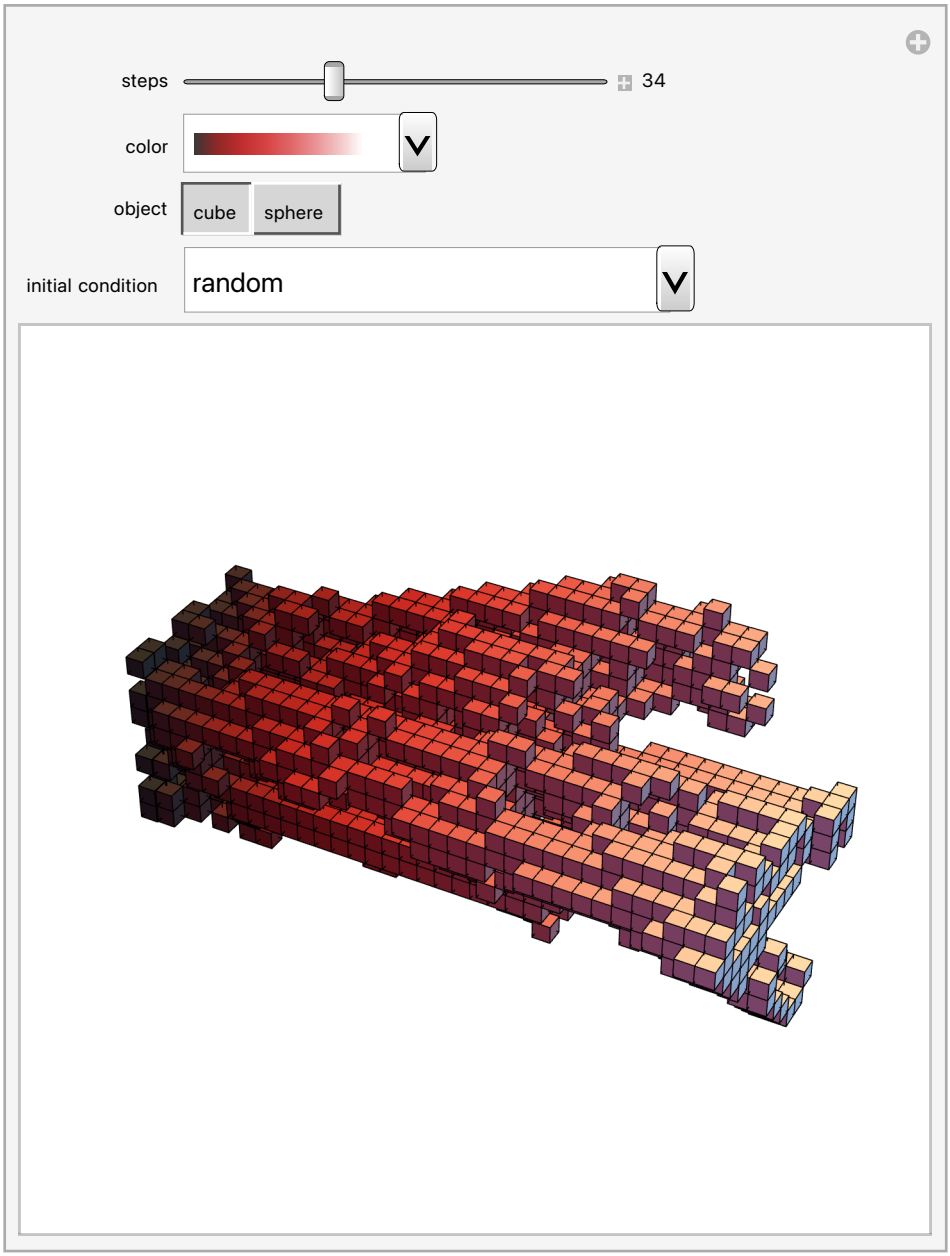
This Demonstration shows the Game of Life in 3D layers. Each step is plotted as a distinct layer and each cube or sphere has a unique color as a gradient.

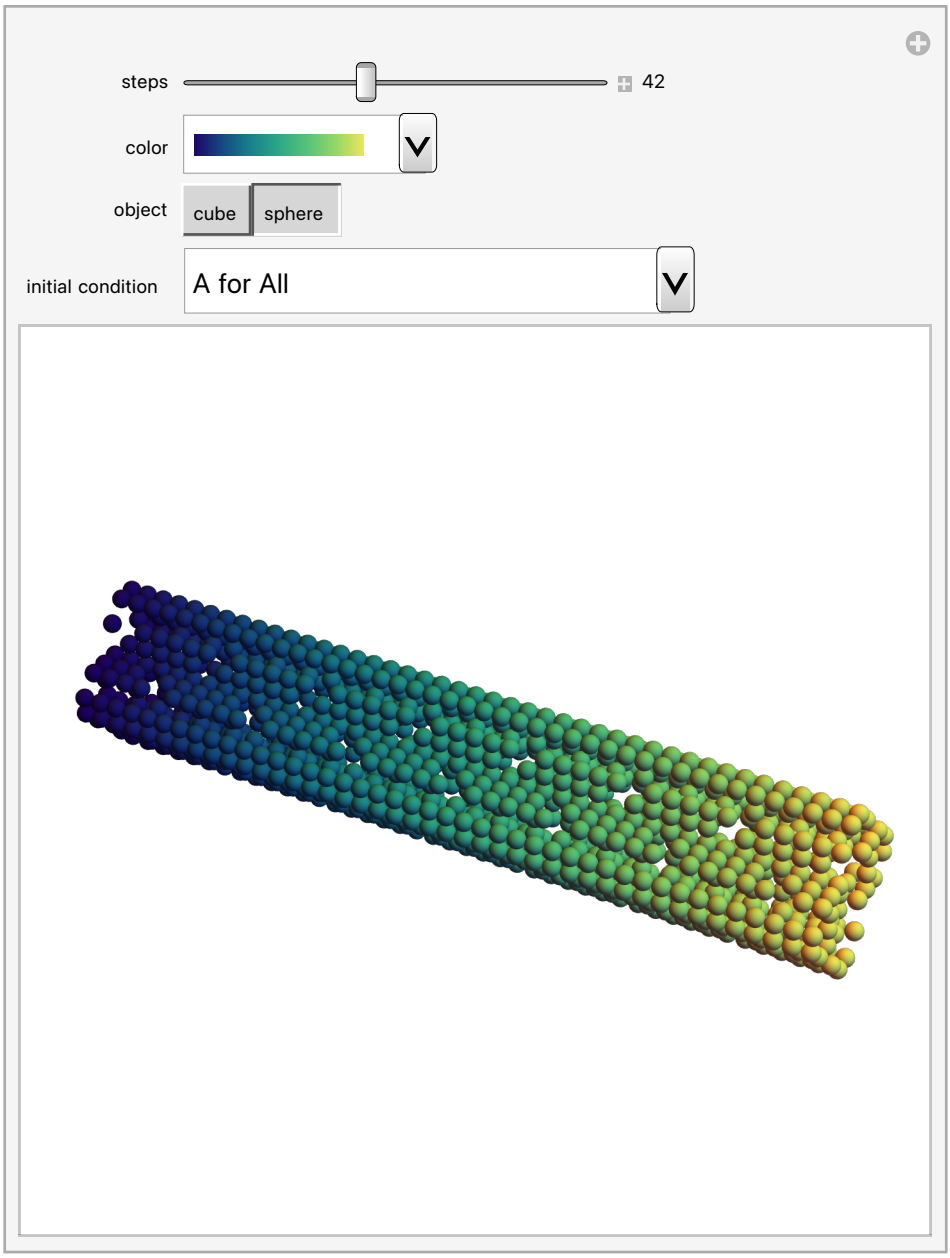
The Game of Life is a two-dimensional totalistic cellular automaton with Moore neighborhood, discovered by John H. Conway in 1970. The rules are applied to the initial condition (configuration) and to each subsequent result, like a discrete dynamical system. Some initial conditions produce repetitive results, while others can produce complex patterns.

Thumbnail



Snapshots



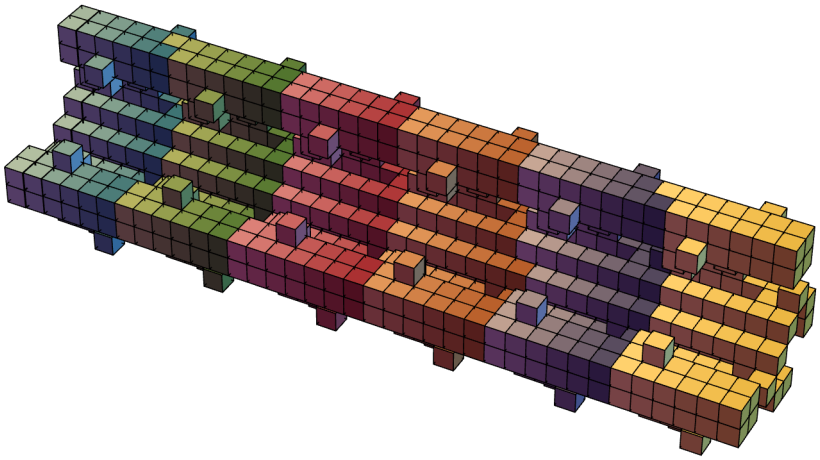


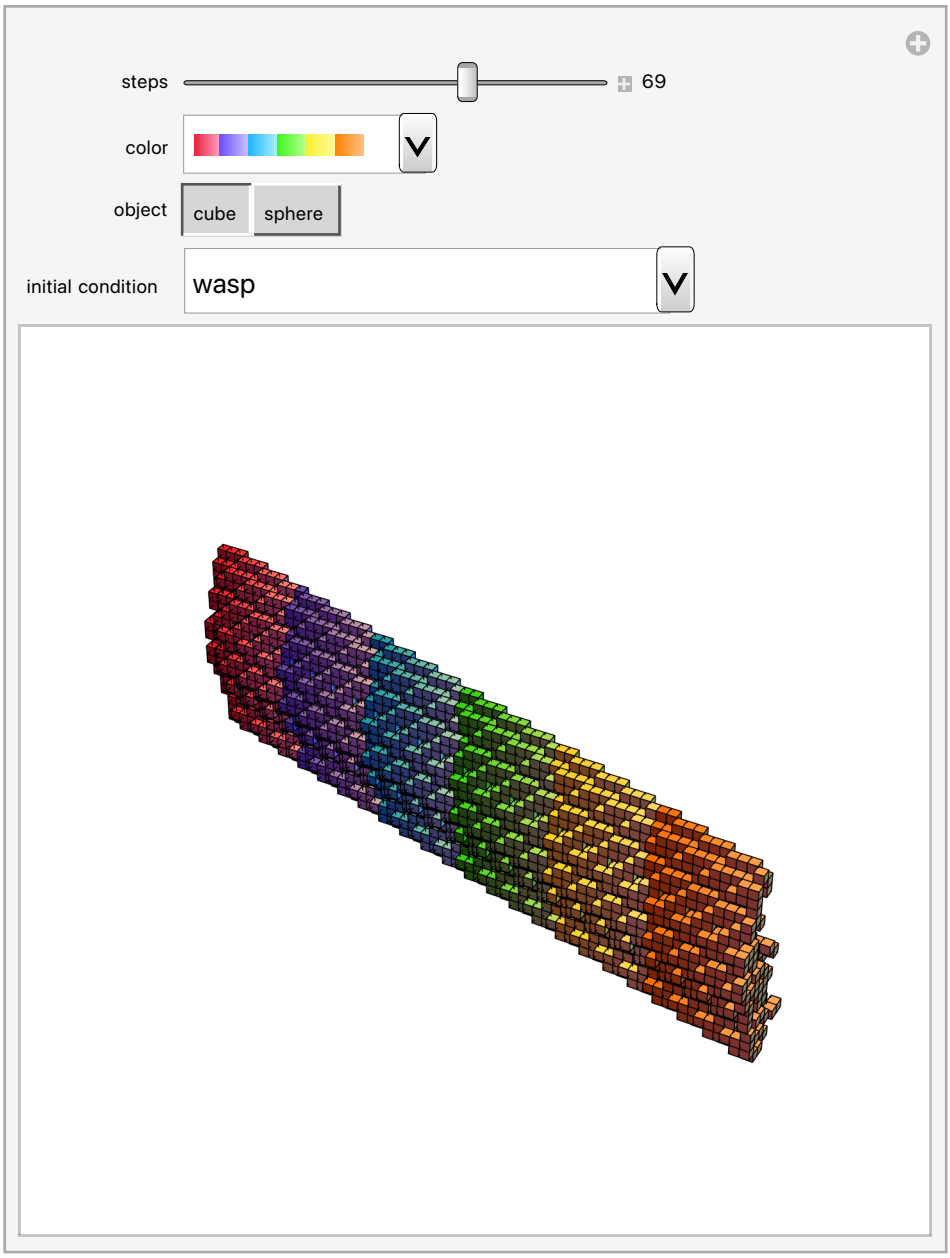
steps 36

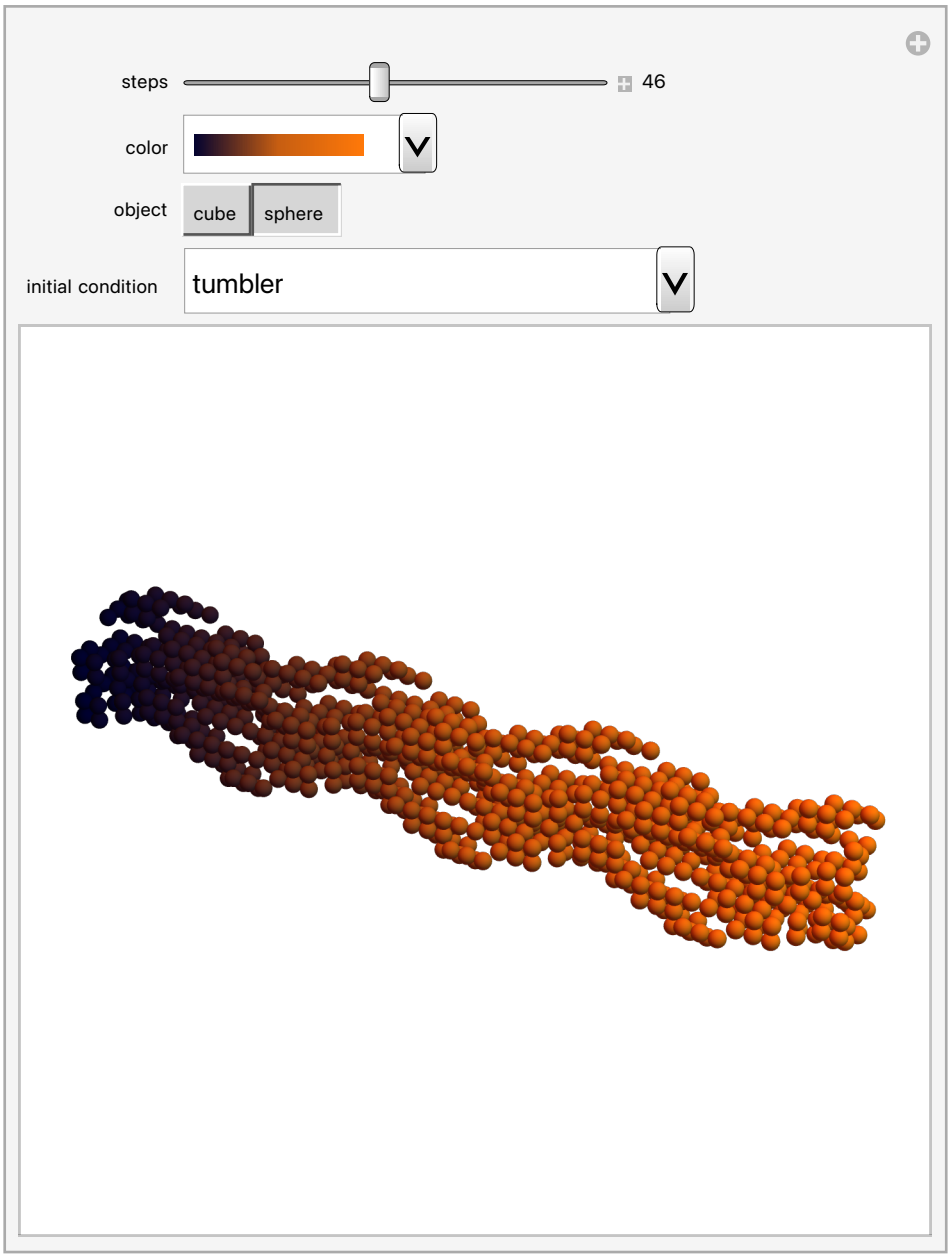
color

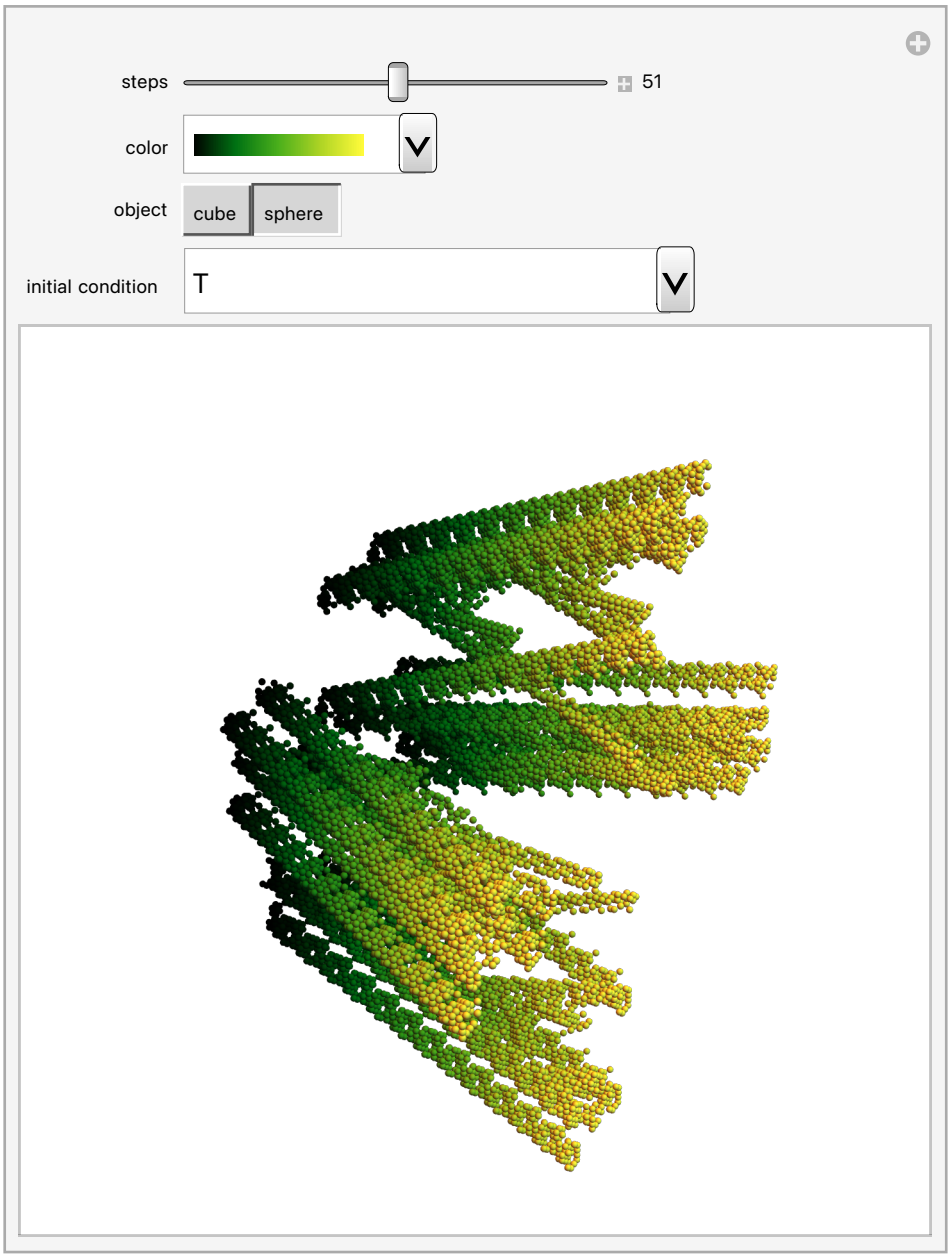
object cube sphere

initial condition unix









Details (optional)

Inspired by object-e architecture/research: growth (CA + voronoi).

This Demonstration extends Game of Life Configurations and 3D Layers Evolution of Five-Neighbor Outer Totalistic 2D Cellular Automaton.

Control Suggestions (optional)

- [x] Resize Images
- [x] Rotate and Zoom in 3D
- [ ] Drag Locators
- [ ] Create and Delete Locators

- ☐ Slider Zoom
- ☐ Gamepad Controls
- ☑ Automatic Animation
- ☐ Bookmark Animation

Search Terms (optional)

NKS
Game of Life
Cellular Automata

Related Links (optional)

The Turbine Pattern in the Game of Life
Game of Life Configurations
Game of Life
Totalistic Cellular Automaton

Authoring Information

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