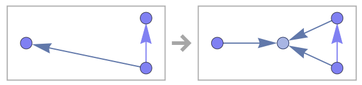
Wolfram Physics Project | Visual Summary

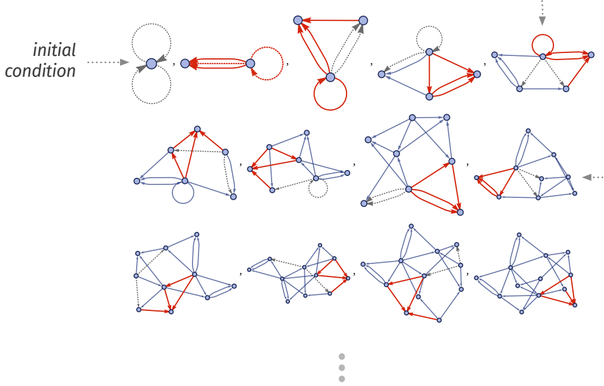
Rule (example)



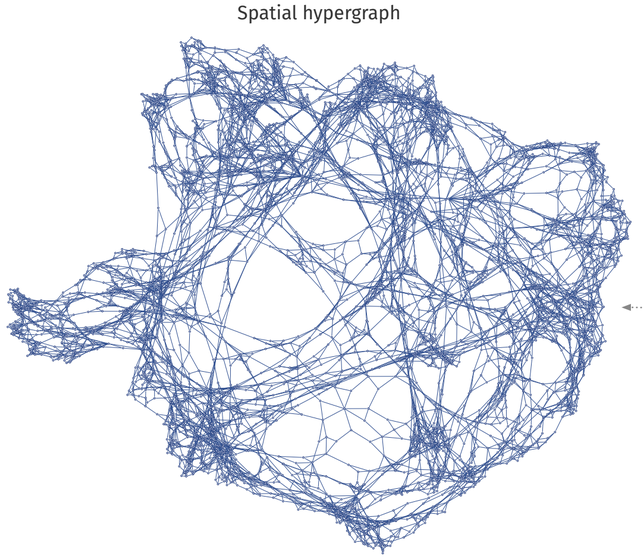
$\{\{x, y\}, \{x, z\}\} \to \{\{x, z\}, \{x, w\}, \{y, w\}, \{z, w\}\}$

Rule defines transformations for collections of abstract elements

Sequence of updating events



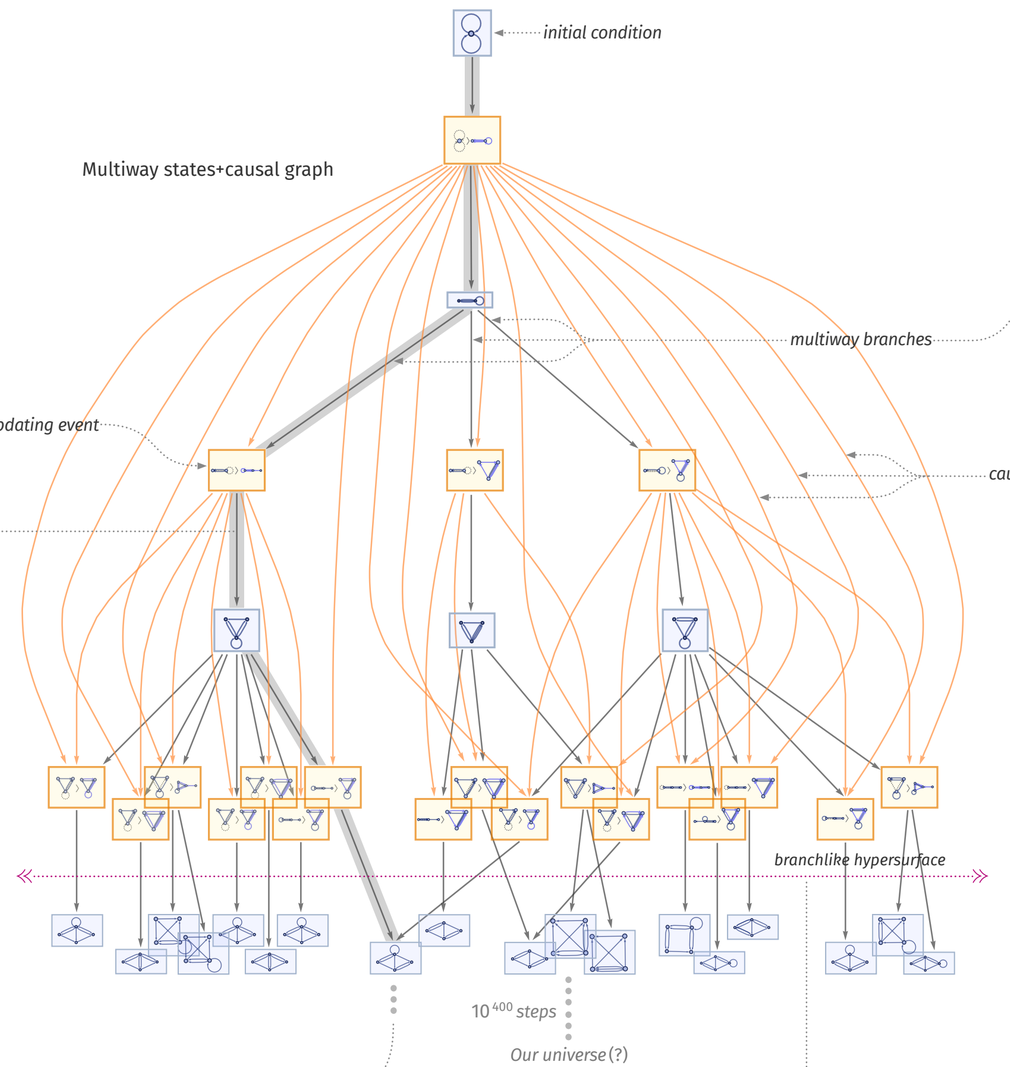
Spatial hypergraph



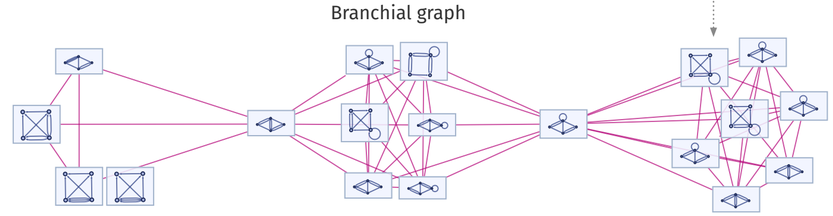
Space and matter are emergent features of the hypergraph

Elementary particles are localized persistent structures in the hypergraph

Multiway states+causal graph



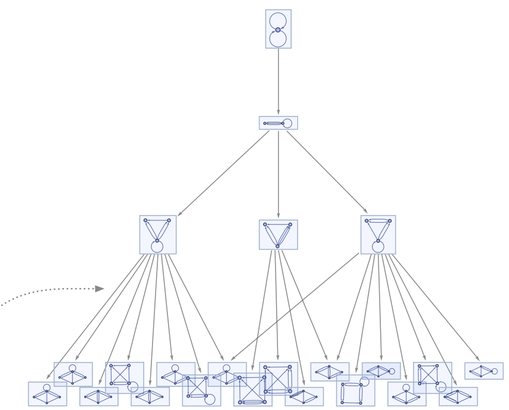
Branchial graph



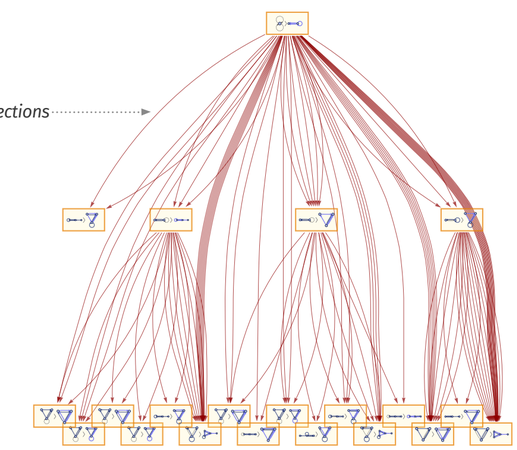
Connections are entanglements between quantum states

Branchial graphs define quantum superpositions

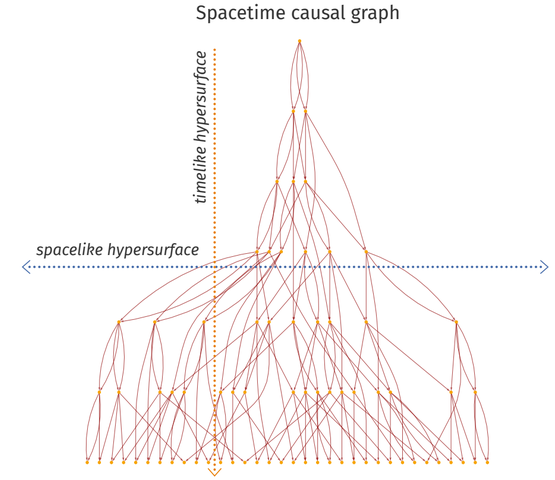
Multiway states graph



Multiway causal graph



Spacetime causal graph



Energy is flux of causal edges through spacelike hypersurfaces

Momentum is flux of causal edges through timelike hypersurfaces