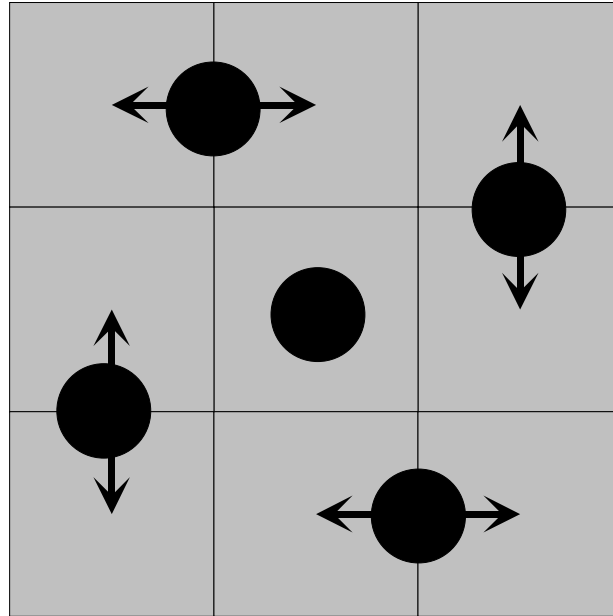


Texture Filtering



The modeling of a differential equation is needed here. The second derivative can be approximated by a formula which includes sums over the neighboring cells. Bilinear filtering can be used therefore to speed up computation since it calculates the weighted average of two pixel color values (encoded cell states) in one step which involves a weighted sum over the values.

By varying the position of the sampling coordinates the weights of the sums can be varied. This changes the shape of propagation of information in the CA, e. g. diamond, ellipse (circle) or rectangle.