Threshold dynamics is an elegant algorithm for simulating the motion by mean curvature of interfaces in any dimension. It reduces the computation of this evolution to alternating the two simple steps of convolution and thresholding, and can therefore be implemented very efficiently.

In its standard form, threshold dynamics is at most first order accurate in time. Various extensions of it have been proposed that improve this order of accuracy. I will present the first such extension that comes with a stability guarantee. (Received September 17, 2019)