

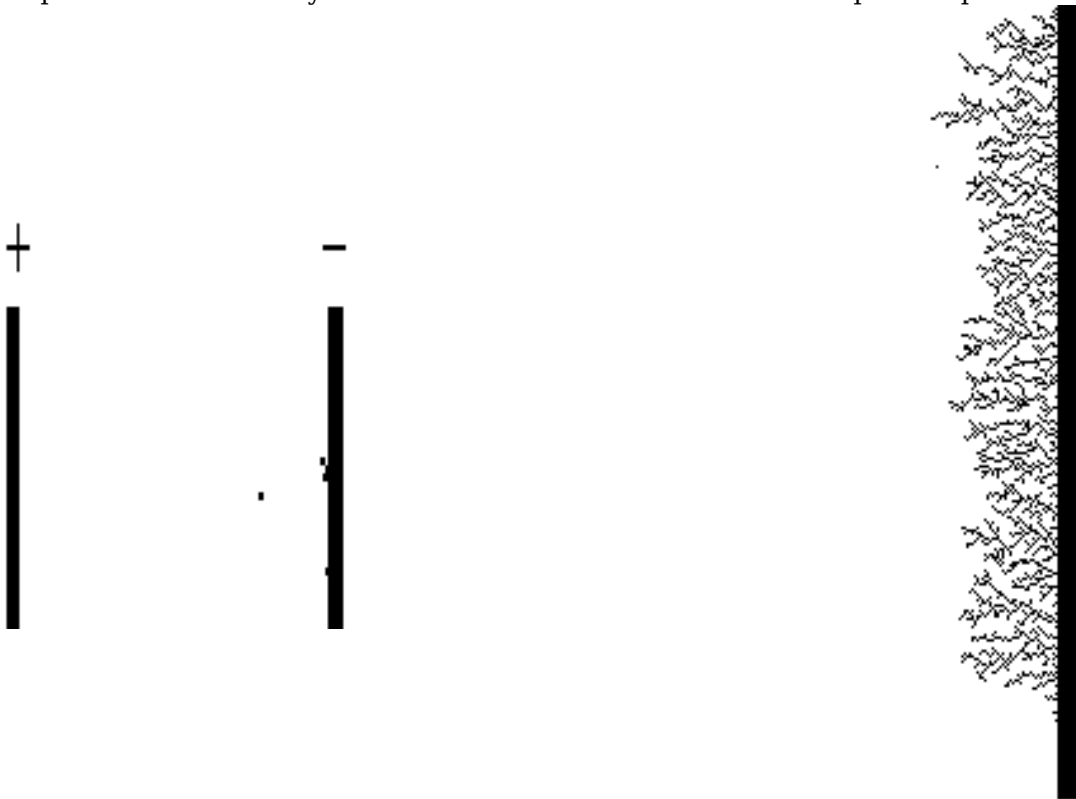
DLAF
DIFFUSION LIMITED AGGREGATION FRATALS
Harold Brochmann
(604) 926-6716
Internet: brochmann@sfu.ca

Run the program.

A metallic ion in solution subjected to an an electric field moves in random directions - Brownina motion - but at the same time drifts towards the cathode. This is a model of for example copper plating.

When the ion comes in contact with the cathode or with a previously deposited particle it sticks.

When you don't want to look at this simulation any more, press <l>. Here is a greatly speeded up version of what you saw before. The particles, instead of starting at the far left are given a random start position immediately to the left of the cathode or the last deposited particle.



When you are tired of looking pess <s>. This is a one-pixel version of the same thing.

The aggregate formed has self-similarity and other fractal properties.

The fractal properties of the aggregate are determined by the strength of the (electric field) and also by the probability that a particle will stick (as opposed to bounce off) when it encounters the cathode or a previously deposited particle.