Physics 325 — Scientific Computing — Fall 2016 — Lab 11

November 4, 2016

Exercise 1. Diffusion Limited Aggregation

Create a program for a 2D DLA calculation. As discussed in class, carefully describe how the random walkers are being initially placed. I suggest either a random empty cell, or randomly started from a large circle of radius greater than the furthest distance of the cluster from the center.

Make the grid at least 256x256 and the cluster contain at least 256 points. Describe how you are stopping an unpromising walker in comments.

Also, have the program create and save a properly labeled color image of the resulting cluster. (20 points)