אוניברסיטת
בן-גוריון בנגב

The Department of Mathematics

2017–18–A term

Course Name Computer Procedures II

Course Number 201.1.2191

Course web page
`https://www.math.bgu.ac.il//en/teaching/fall2017/courses/computer-procedures-ii`

Office Hours `https://www.math.bgu.ac.il/en/teaching/hours`

Abstract

Requirements and grading[1]

Course topics

The process diffusion limited aggregation, or DLA, is a remarkable process stemming from physics. Although it is known for almost 40 years, it still is mysterious and difficult to mathematically understand. Classically it has been studied in the plane. For this project we will simulate the process in other geometries, Euclidean as well as non-Euclidean. The goal is to obtain large-scale simulations, which may lead to further understanding and new ideas. Further, we will use the simulations repeatedly to measure experimentally different quantities associated with DLA, such as growth rate, fractal dimension, etc.

[1] Information may change during the first two weeks of the term. Please consult the webpage for updates