

## Homework Assignment #12

(as email due: **Thursday, March 27, 8:30 am** )

### Course Schedule:

- March 27: Project II presentations: Austin, Ze, Beau // Main Project Talk: Cragin
- March 24 - April 1: Individual Meetings
- April 3: Running Program
- April 10: Results

On Thursday we will start a new class topic: Fractal Growth. We will use the DLA model to simulate fractal growth (see James' talk). Part of this model is a random walk. To familiarize yourself with the topic(s), look up the topics of random walk (1.) and the DLA model (2.). We will gather your findings in seminar form. Main task of this assignment, however, should be that you work on your programs for your main project (3.). To guarantee that you get my help, come to my office for the time you have signed-up for ([http://www.eg.bucknell.edu/cgi-bin/cgiwrap/kvollmay/caps\\_march2008.pl](http://www.eg.bucknell.edu/cgi-bin/cgiwrap/kvollmay/caps_march2008.pl)). I am meeting with each one of you and also have 13 advisees, I will be meeting with, which makes rescheduling extremely difficult.

**1. Random Walk:** Look up what a random walk is and what its applications are. As answer to this assignment, keywords are fine. You will also present what you found in class in seminar form.

**2. DLA (diffusion limited aggregation):** Read papers and/or find webpages and/or books about DLA. As answer to this assignment, keywords are fine. You will also present what you found in class in seminar form.

**3. Programming:** On April 3 (one week and a half) will be due a finished version of your program for your main project. Since this will take many hours (I hope with fun of programming your project's model), this assignment is mainly that you work on your program. I do not need an answer to this question for Thursday, March 27, but your program will be due April 3.

**4. Comments** As always, any comments about the course and/or assignment are welcome! Thank you for all your feedback!