

Daily Assignment #14

(due: Tuesday, March 29, 9:30 am)

Announcement:

- No classes Tue, March 22 and R, March 24 (I will be at a conference.)
- time and day of make up class will be announced.
- **Have a great break!**

1. Main Project:

After spring break you will dive into the programming and analysis for your main project. Upcoming deadlines:

- **March 29: Flow Chart**
- April 5: Working Program
- April 14: Results

So for our next class (Tue, March 29), please hand in a flow chart of your program. This flow chart should consist of a course grained version (e.g. for fractal growth: initialization, loop over particles, loop over random walk steps , stick) and of a more detailed version (e.g. for fractal growth: how to start particle on circle, measure d , how and when to stop random walk, how and when to stick)

2. Ising Model:

After spring break we will start a new section on a Monte Carlo Simulation of the Ising model. As preparation:

Read: handout⁷ and §16.6 (not pages 553 ff), §17.1 & §17.2

Optional: In case you would like to learn more about Monte Carlo simulations in general and about importance sampling then the §11.2, 11.3, 11.7 & 11.8 are interesting to read. I plan to give you in class a mini lecture on phase transitions in general, but not on the Monte Carlo method in general.

3. What of the last classes and this assignment did you find most interesting and/or most difficult?

⁷This handout has been written by Ben for junior lab