

Extra Credit EC1: Reaction-Diffusion

CS 4300
Fall 2015

Assigned: 25 August 2015

Due: 10 September 2015

For this problem, handin a lab report pdf (include name, date, assignment and class number in pdf) which studies the hypothesis that linear reaction diffusion patterns are the same for a closed cycle of cells (i.e., last and first cells connect) as for an open line of cells (first only connects to second and last only connects to next-to-last).

You should handin the report pdf as well as the Matlab code used in the study. The code should conform to the style requested in the class materials.

In addition, please turn in a hardcopy of the report in class before the start of class on September 10, 2015.

1. Use the Matlab functions given in the class sub-dir code/RD.
2. Include in the study how the number of cells impacts the hypothesis.

Write a lab report in the format (please do not deviate from this format!) described in the course materials.

Discuss the statistical framework to establish a confidence interval on the means, and the hypothesis test.