# **PROJECT GUIDELINES**

#### CO 739, WINTER 2018

## 1. Overview and deadlines

As agreed in the first class, you will do a project. The exact form of the project remains up to you; I expect most of you will do a written project, or a presentation, or both, but please feel welcome to propose other ideas.

If you do a classic paper-type project it should be around 6-10 pages in length. If you do only a presentation it should be 50 minutes. If you would like to do a combination then they can each be shorter. I have in the past had projects which were historical essays or lesson plans for teaching related material to high school students; such things are also welcome in this case.

After reading week you should come discuss your project idea with me. Written projects are due Friday April 13 (this is during the exam period). Presentations will either be in the final classes or around the same time as the due date for the projects, to be decided depending on how many people opt for a presentation and when people are available.

### 2. Topic ideas

Here are a few ideas to get everyone started thinking about project topics.

- Expand on a concept mentioned briefly in class.
- Discuss the background and motivation to an open problem related to the class material.
- Do an interesting computation of some things discussed in class.
- Read a relevant research paper, explain the core idea and work out a detailed, insightful example.
- Give some history of a concept or construction or some of the people involved in it.

## 3. EVALUATION

The project should be at a level that your fellow classmates could understand and appreciate it.

The project will be graded on

- clarity, presentation, and language: Is it clear and understandable? Does it tell a story in a compelling way?
- mathematical content and correctness: Is the mathematics in the project correct? Is it relevant to class and to the project topic? Is the mathematics insightful and substantial?

There are many ways to do a good project, so there is no rigid grading scheme.

Cite your sources and don't copy. You can get a 0 or worse for academic dishonesty.