Poster Guidelines

I am asking that you do Homework C, or that you present a poster in the Math Department Poster Session, or that you do some other project in place of a poster. Only one!

I will make Homework C available before Thanksgiving break, and it will be due on Wed, Dec 7 (if you choose to do it).

The poster session is 9:00am-11:00am on the morning of Thursday, Dec 8, in a to-bedetermined location. If you present a poster, you do not need to be there for the entire time. Your poster should fit in a 4 foot \times 4 foot space. Push pins will be available. Put your name(s) and course number(s) on your poster. Multiple people can present a single poster.

Students (like you) taking classes in the College of Natural Sciences can print posters without charge in the CNS computer lab. See https://cnsit.colostate.edu/kb/cns-computer-lab/. and scroll down to the "Poster Printing" section. There may be a sign up sheet in the CNS computer lab. They may prefer (require?) posters of size 4 feet × 3 feet (or 3 feet × 4 feet), and you should bring them a PDF file.

How do you create a poster? Here are several possible ways:

- Overleaf has poster templates: https://www.overleaf.com/gallery/tagged/poster.
- PowerPoint has poster templates. For example, see http://www.posterpresentations.com/html/free_poster_templates.html.

Here are some guidelines for making posters.

Visuals. Graphics and images are often the featured item on a poster; spend time on them! These are what many viewers look at first. Often you'll want to add captions to explain what's going on in an illustration — it's easier to find the explanation of a figure in a caption than in the text body of the poster.

Text. Write enough text so that somebody could get the main idea of your poster even if you weren't there to explain it in person. Do include a few detailed items that highlight some of the more complex or subtle points. Beyond that, I often choose to write as little text as possible—I carefully select text that I want people to read, since if there is too much text then some viewers won't read any of it; this is a stylistic choice. Including a main equation (with the notation defined) can sometimes help in reducing the amount of text.

Topic. Your poster can be on any topic of your choosing related to topology. For example, you could make a poster explaining

- why the "linked" 2-holed torus on the cover of our textbook can actually be unlinked
- the main idea of the fundamental group
- why the fundamental group of the circle is the integers
- why the fundamental group of the torus is abelian
- what it means for two spaces to be homeomorphic
- what it means for two maps to be homotopy equivalent
- what it means for a set to be a topological space
- what is the difference between a topological space and a metric space
- what it means for a function between topological spaces to be continuous

- an example of how topology can be applied
- $\bullet\,$ any homework problem
- the basics of knot theory
- how the "cork trick" illustrates the difference between two linked vs two unlinked circles
- the main idea of higher homotopy groups.
- etc, any topic of your choosing!

Drafts. I am happy to look over a draft of your poster and suggest possible improvements.

Tone. Maintain a positive tone while discussing both the pros and cons of your project.