Guidelines for Project Presentation

Adapted from Ytreberg's Guidelines for making and delivering a scientific presentation

Purpose of a Presentation

- Like a paper, the purpose of a presentation is to answer three fundamental questions: (1) *Why did you do what you did?* (2) *What did you do?* and (3) *What did you find when you did those things?*
- Unlike a paper, where the reader can skip over certain parts of the text or read some sections twice, the audience can only experience a presentation in a set order within a fixed time. **An effective presentation therefore provides these answers in a way the audience can immediately understand.**
- For many short science presentations, it is useful to think of them as an executive summary of your work. You simply cannot provide all the details of a derivation, analysis or experiment in the allotted time. Instead, you want to provide just enough information to answer the above questions, and if anyone wants more details, they can ask you later or read your paper.

Organizing your Presentation

- Assume roughly 1 minute per slide. Certain slides take longer and some might be a bit shorter, but this is a good baseline for any presentation.
- For this sort of talk, you can roughly expect to do the following:
  - Introduction/Title Slide
  - 2-3 slides illustrating the general phenomenon
  - 2-3 slides illustrating what case you looked at and why
  - 2-3 slides illustrating what you learned about that case
  - Summary slide
- A short talk should have a central point. In this situation, you are going to explain why a given electromagnetic phenomenon is interesting. Tell people this up front with your first slide, and say at the start something like "I'm going to talk about [fill in blank] and what happens when [fill in blank]".
- Next, you explain what the phenomenon is and why it's interesting.
- Next, you can describe what you did to explore that phenomena
- Next, you describe what you found, and highlight anything you thought was interesting about those findings.
- Finally, you can show your summary slide, where you can repeat your main point, saying something like "So, doing [fill in blank] showed that [fill in blank]...."

Practical Matters

- Be sure to practice your talk out loud before giving it. I'm happy to listen to you practice once if you have any concerns.
- Keep to your allotted time. Running over your time means that the audience cannot ask questions, and takes time from the next speaker. Practicing helps ensure that this will not happen. Also, having a clear central point should help you understand what you can skip or omit to ensure you stay within your allotted time.
- Try to talk to and face the audience as much as possible.
- It is okay to have notes to read from, but in general it is not a good idea to have long strings of text on screen, since the audience will read those rather than listen to what you say.
- Always ensure any text on your slides is readable from a distance.
- Make sure any graphics/plots are made as large as possible, and always explain the axes on any plot.
- I generally advise against having outline slides, since they are text-heavy and not very informative. If you want to use an outline, make sure it is informative. Do not just have generic headings like "Introduction" or "Methods". Have specific ones like "General theory of Normal Mode Excitation", "Application to Phenomena X..."
- It is often tempting to get into the technical details of things that were particularly challenging to you. This is usually not a good idea, since the audience does not have your experience to understand why they should care about those details.
- Sometimes you will see people have final slides with "Thanks" or "Questions?" Please do not do this. Just end on a summary slide, since the audience then sees your main point.