Assignment 2: Experimental methods

The purpose of this assignment is to teach you to write in a style appropriate for an article in a scientific journal. The style is quite different from what is used in other kinds of writing, and takes some getting used to.

In an experimental paper, there is always a section in which you describe your experimental methods. The idea of this section is to enable someone else to understand how you got your results, and to enable someone in your field of research to reproduce your experimental results. It should NOT be simply a repeat of the instructions written in the lab manual.

This assignment you should turn in a description of your experimental apparatus and methods. You should have a title, 1-3 paragraphs of text, and, if you wish, a figure showing your apparatus with a caption.

Stylistic notes:

- 1. Avoid use of "I" or "we." The emphasis of a paper is the science, not who did it.
- 2. Describe things in a logical order. For example, if you are describing an optics experiment, follow the photons through the apparatus from source to detector.
- 3. Clarity is the most important thing in a scientific paper. You must make a special effort to translate what is clear in your mind to text that is clear to a reader. If something is not clear in your mind, of course, then your text will not be clear. Writing helps you understand what you understand.
- 4. It helps to keep sentences pretty short.
- 5. Use paragraphs appropriately. Each paragraph should cover one narrow topic, which is defined by the topic sentence. Transitions between paragraphs should be smooth.