Physics 596 - Fall 2011

Assignment #2: Popular Web-Based Research Highlight

Your team should identify a research topic on which to write a research highlight for a non-expert audience, e.g., similar to what you might find on the web page of a standard Physics Department Web site or for an article in a popular science journal. This research topic can be based upon a specific scientific paper or a closely related set of papers. Your scientific paper *may* be based on the same paper you're using for your Journal Club assignment, or it can be based upon a completely different paper. For examples, see:

http://www.physics.uiuc.edu/research/highlights.htm (UIUC Physics Dept.)
http://focus.aps.org/focus_archive (links here point to appropriate articles)
http://www.engr.uiuc.edu/research/news/ (UIUC new archive)
http://www.nytimes.com/pages/science/index.html (New York Times Science)

Your highlight should contain (at least briefly) all components of a good scientific presentation (and *most* components of a good scientific paper), including: a title; an introduction/motivation/background section; a methods section; a results/discussion section; and a summary/conclusions section. Your highlight should also feature several images that may include equipment used, author pictures, results, schematic diagrams illustrating relevant physical processes, etc. Don't forget to include figure captions and credit for any borrowed images with any figures. You should include useful hyperlinks so readers can learn more about the various topics raised in your highlight.

Your group should identify a "leader" for this project (someone who didn't lead for Assignment #1) who will organize the group, help decide assignments of different members of the group, and help put the different parts of the project together.

There are several goals of this assignment: One is to get practice explaining the science associated with your research topic at a level appropriate for non-expert readers, which is something you'll need to do often when writing proposals and giving general talks (e.g., colloquia). A second goal is to gain practice using the special attributes of the web (e.g., links to other sites, special graphics, movies, etc.) to convey scientific material...this is becoming increasingly common and important. Your webbased highlights will be posted on the Phys. 596 homepage when they are complete. A final goal is to practice developing the different components of a scientific presentation/paper.

You will be evaluated on the esthetics, content, and completeness of your work. The length will be typically 2-3 pages in Word at 12 point font. I can provide suggestions if you can't come up with a topic.

Deadlines: Friday, Nov. 4: Draft of your highlight to Prof. Cooper

Friday, Nov. 18: Final highlight (web ready) is due