Homework Assignment #1, Getting Familiar with arXiv and Evaluating Titles

This assignment consists of the four components enumerated below; make sure you submit something for each component.

To begin, go to http://arxiv.org and read the “General Information” page (find the link near the bottom of the screen in the “About arXiv” section). Poke around a bit on the website and get familiar with it if you’ve not used it before. Because of the delay in getting papers published in the peer-reviewed literature, physicists often post a “preprint” on arXiv to get results out to the community sooner.

Caveat lector! The papers posted to arXiv have not been peer reviewed or vetted in any way; anybody can post anything to arXiv. For example, look up 0909.3189 and note the arXiv administrator’s comments:

As an experiment, type <substantial text overlap without attribution> (without the brackets) in the “Search or Article ID” box in the upper right corner of the screen and see what happens.

(Hint: Look for the comments line immediately below the authors’ names in the results.) In particular, note the commentary for arXiv:1608.00277, “Fuzzy thresholding in wavelet domain for speckle reduction in Synthetic Aperture Radar images.” Make a mental note of this feature of arXiv for our discussions later in the semester on plagiarism and the proper referencing of others’ work.

Next, go to the Physics section on the main page, select a subfield that you’re interested in, and click on the recent link (in parentheses to the right of the section name). Scan down the list of titles that appear on the next screen.

1. Select one paper that you think has a particularly good title, and one that you think has a
particularly bad title, based on our class discussions. In making your selections, glance over each paper and read at a minimum the abstract and the conclusions section to see how well (or poorly) the title reflects the contents of the paper. Write down the full bibliographic citation for each paper (author names, title, arXiv ID number, date submitted). Be sure you clearly identify which is the “good” title and which is the “bad” title.

2. Write a \( \approx 200 \)-word evaluation of each title (\( \approx 400 \) words total for the assignment). Justify why you assigned the “good title” and “bad title” designations to your two choices. (200 words = \( \approx 0.5 \) page of single-spaced typewritten text.)

3. Suggest a revised title for the paper whose title you found inadequate and explain why you think your title is better.

4. Upload your completed assignment to the my.physics upload portal by Friday, September 2, 9 p.m. Assignments submitted after the deadline will be downgraded and will be ineligible for rewrite points. You may submit a late assignment through the portal until 8:59 p.m. Sunday, September 4. If you must submit an assignment after the late deadline, email it to Celia.

Total—50 points

†Technical writing lesson of the day: The \( \sim \) symbol does not mean “approximately equal to”; it means “asymptotically equal to” or “of the order of magnitude of.” If you really mean “approximately equal to,” use \( \approx \).