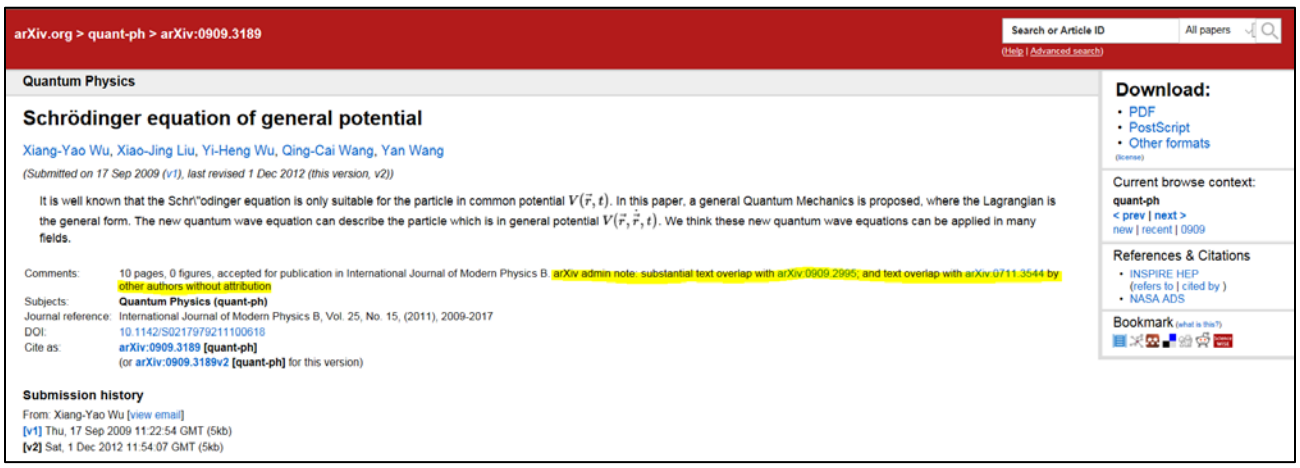
PHYS 496—Spring 2018

Homework Assignment #1, Evaluating Titles

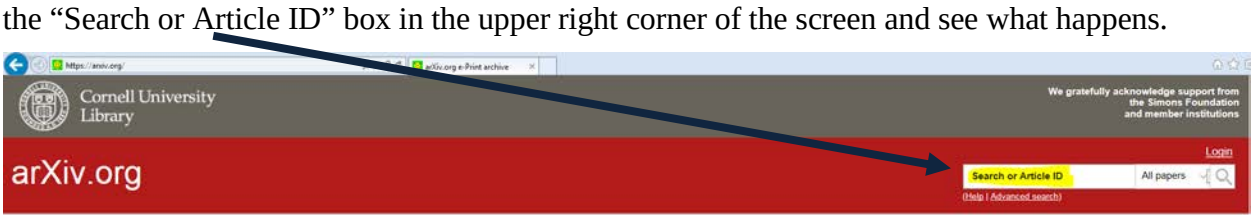
This assignment consists of the ***four*** components enumerated below; make sure you submit something for each component.

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 The papers posted to arXiv have not been peer reviewed or vetted in any way; *anybody* can post *anything* to arXiv.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:1406:3922, "Personalized Medical Treatments Using Novel Reinforcement Learning Algorithms." Make a mental note of this feature of arXiv for our discussion 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 the papers 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 ≈[†]300-word evaluation of ***each*** title (≈600 words total for the assignment). Justify why you assigned the "good title" and "bad title" designations to your two choices. (300 words = ≈2–3 paragraphs)

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

4. Email your completed assignment to `phys496@physics.illinois.edu` by **Friday, January 26, 9 p.m**. Assignments submitted after the deadline will be downgraded and will be ineligible for rewrite points.

Total—50 points

[†]Technical writing lesson of the day: The ~ 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 ≈.