

Physics 595 – Spring 2024

Assignment #3: Write a Scientific Referee Report

In this assignment, you will prepare a ~1-page referee report that critically evaluates—using the *Physical Review Letters* review criteria—a research paper from your field.

First, you should select a short (≤ 5 PRL-style pages) journal article either from the arXiv (<http://arxiv.org/>) or from a recent general science journal such as *Science*, *Nature*, *Physical Review Letters*, *Physics Today*, etc. This paper should be in an area related to your research, but should not be from you or anyone in your research group. If you've already selected a journal club paper for a journal club paper, it is recommended that you use the same paper, but you may choose a different paper.

Second, you should prepare a ~ 1 page “referee report” that critically evaluates your journal club paper. Your report must specifically evaluate the paper based upon the following 3 (*Physical Review Letter*-type) criteria, providing examples and support for your assessment of these criteria:

- (i) “Scientific validity” – Are the methods used valid, and are the logical arguments given to support the conclusions valid and persuasive?
- (ii) “Importance” - Does the paper report substantial research that will likely have a significant impact on future research?
- (iii) “Broad interest and accessibility” – Do the results reported have significant implications to various subfields, and is the paper written in such a way that it can be understood by a general (i.e., non-expert) audience?

This assignment is worth 100 points.

The due date for your referee report is **March 1**.