Physics 595 – Spring 2023

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 3.