5. Peer Review of Lab #4

Please prepare two copies of the lab report for Lab #4. The first copy of the lab report will be turned in to your instructor for regular grading. This copy should have your name printed on it as well as your pseudonym. The second copy should only have your pseudonym printed on it. This copy of your lab report will be given for a peer review to the person who performed a different version of the experiment from Lab #4 and is not familiar with all details of your work. As you write your report, keep in mind that it should be written in such a way that not only your instructor, who is already familiar with all of the experiments, but also the person who never did this experiment before should be able to understand what is going on based on your writing.

Experiment-based scientific research is considered valid only if it can be confirmed by independent observers. In order for this to happen, the results of this research should be published in a scientific journal with wide circulation. Publication in such a journal is often subject to peer review, which prevents the distribution of faulty results. Imagine that your instructor is an editor in the “McMurry Student Research Journal” and just received the article submitted for publication. The editor decides to ask you to be a referee to review the proposed manuscript (lab report). You should grade this article using our lab report grading rubric. In addition the editor asks you to write a one page summery assessing the quality of the submitted work. In this summery you should comment on what you think were the strongest and the weakest points of the manuscript and whether or not it is acceptable for publication. You should also indicate what changes have to be made to this manuscript if you think that changes are necessary.

The following is the real American Institute of Physics (AIP) referee form, which is used by all AIP journals when they send articles for peer review. This form should guide you in the writing of your summary.
1. Please summarize your assessment of the paper:

Does the paper contain enough significant new physics
to warrant publication in the *McMurry Student Research Journal*? ( ) ( ) ( )
Is the paper scientifically sound and not misleading? ( ) ( ) ( )
Is the paper well organized and clearly written? ( ) ( ) ( )
Are the subject matter and style of presentation
appropriate for the *McMurry Student Research Journal*? ( ) ( ) ( )
Is the length appropriate? ( ) ( ) ( )

2. Please evaluate quality of Research and Presentation:

( ) Excellent ( )
( ) Good ( )
( ) Average ( )
( ) Marginal ( )
( ) Poor ( )

3. Recommendation:

( ) Publish without change (please give reasons in report).
( ) Publish after authors have considered the optional revisions mentioned
  in the report.
( ) Publish after authors have made the revisions mentioned in the report.
  (I do not need to see the manuscript again.)
( ) Revisions are necessary. Return to me on resubmittal.
( ) Revisions are necessary. On resubmittal, send to:

  (Use as much space as needed to list
  names of alternative reviewers.)

( ) Manuscript is more appropriate for another
  ( ) journal (specify):
  or ( ) section (specify):

( ) Do not publish; see report.
( ) Other; see report.