

## Technical Report Peer Review

Author: \_\_\_\_\_ Reviewed by: \_\_\_\_\_

1. **Introduction** — Does the introduction provide sufficient context for the experiment? Does it answer the “so what?” question? Does it motivate you to read further? Can you tell by the end of the introduction what question the experiment seeks to answer?

2. **Theory** — The theory section should relate the relevant theory. It need not (indeed should not) show all the algebraic steps, but any derivations should be set up well enough that someone competent in algebra could make it to the final reported result. Does the paper concisely describe the relevant theory? Is the geometry clear? Have all symbols been defined? Have any simplifying assumptions been stated and justified?

3. **Experimental Methods** — Is there enough detail to permit an interested reader with access to the appropriate equipment to reproduce the experiment? Are any subtleties of the apparatus or data taking noted? Does it read too much like a recipe? (The author shouldn’t issue commands to the reader, but should describe what was done.)

4. **Results / Discussion** — Are the important data presented in one or more figures with appropriate captions, before the results are “spun” with an interpretation? Have they been carefully analyzed? Has the author claimed that something follows from the data without thoroughly justifying that claim? Are the results as quantitative as the data allow? Is it clear how uncertainties were estimated and what limits the precision of the results?

5. **Conclusion** — Has the author accomplished the investigation described in the introduction? Are limitations with the experiment discussed, along with possible extensions or lines of follow-up research?

6. **Abstract** — Does the abstract concisely summarize the whole paper? Is it as quantitative as possible?

7. **Mechanics** — Is the prose easy to read; does it follow logically? Are terms defined adequately? Are citations used correctly? Are there spelling, punctuation, or usage errors? Is there a pattern to these errors? Have variables been italicized, units typeset properly, etc.

8. **Strengths** — What are at least two things you think are particularly strong in the paper?

9. **To Work On** — What are at least two **specific** suggestions for changes you'd like to see in a revision? Please focus on substance over mechanics.