

Physics 721: Final Exam**Due Wednesday December 9, 2009**website: <http://www.physics.umd.edu/courses/Phys721>

For this final exam we ask you to review a recently published scientific article.

Please do the following:

1. Find an article or report published in scientific journals like Physical Review Letters, Nature Physics, or a journal of similar impact that has been published in the last 10-15 years. The content of the article should be consistent with the things we have taught in this class.
2. While this exam is open-book, open-journal, and open-discussion, you are expected to each choose a different paper, i.e., not work in groups.
3. Send us an email (tiesinga@umd.edu) or (jmtaylor@umd.edu) with your choice as soon as possible, but no later than November 23, 2009. We will then decide whether the article is acceptable.
4. Once your choice has been accepted we want to receive before December 9, 2009 a review of 5 to 7 double-spaced typed pages. It can contain figures etc.
5. The review should contain
 - (a) a summary of the work presented (what are the physical principles involved? What is the best qualitative description of what the authors have done? Is there a simple model or framework within which to understand the work?);
 - (b) a discussion of the broader context (how does it compare to other work in the literature?) How much does it add? Cite the most relevant papers that provide this context and mention how the paper you chose relates to those that have come before it and the work that has since followed.
 - (c) do you have any criticism on the paper? What could the authors have made more clear, and how?
 - (d) Would you have accepted the paper for publication? Why or why not?