

## Homework Assignment #11, Journal Club Presentation

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This assignment is a *team* project; each person on the team will receive the same number of points for the assignment. Each team is responsible for fairly allocating the work among its members. If you believe a member of your team has not contributed proportionate effort, consult Professor Shelton.

**Note that the assignment consists of multiple parts, each of which has its own deadline.**

1. Collaboratively, as a team, select a paper to present to the class. We recommend papers that have been published in *Physical Review Letters*, as they are shorter and have been selected by the editors as being accessible to all physicists. Submit the title and bibliographic citation information about the paper to [phys496@physics.illinois.edu](mailto:phys496@physics.illinois.edu) no later than **Friday, March 15**. You will receive feedback on the suitability of your choice.
2. Prepare an oral presentation, to be delivered jointly by all members of the team, that describes and critiques your article. Use the template that was presented in class to model your presentation. Plan on 15 min to present and 5 min for questions.
3. Schedule a 30-min meeting for at least two representatives of your team (everyone if possible) to meet with Professor Hughes to make sure you understand the physics. Be able to demonstrate your understanding of the paper or come with specific questions. Note that 35 of the total 75 “physics” points for the assignment will be based on this meeting. Plan to meet with Professor Hughes the week of April 8.
4. Email a nearly final draft of your presentation to [phys496@physics.illinois.edu](mailto:phys496@physics.illinois.edu) **no later than noon, Monday April 22**, for further physics and editorial suggestions. You will be given feedback on ways to improve your presentation. Note that 35 of the total 75 “communication” points for the assignment will be based on this draft.
5. **The final version of the talk must be emailed to [phys496@physics.illinois.edu](mailto:phys496@physics.illinois.edu) by noon on April 26.**
6. Present your talk on April 26 during class and answer audience questions about the paper.

Your presentation must include the following elements:

- (i) A summary of the work reported in the article.
- (ii) A recap of the paper’s principal methods, results, and conclusions.
- (iii) A critical evaluation of the work reported. Did the authors answer the question they set out to resolve? Did they extend previous work? Did they justify their conclusions? Did you find any errors or ambiguities in the paper? Did the figures enhance the value of the paper? Do you believe that the work is important, the results significant, and the conclusions valid?
- (iv) An assessment of the impact of the paper. How important was it to further developments in the field?

To give everyone equal time to present, the 20-minute time limit will be strictly enforced. You should have no more than 8 “content” slides in your presentation to meet this time constraint.

Some form of standard presentation software should be used to prepare your slides; we recommend PowerPoint®. If you use some other program, provide a PDF file of your presentation to ensure compatibility with the hardware in Room 222. Be sure to embed your fonts!

**Due Dates:**

1. **Paper Selection—Friday, March 15.** Send the title and bibliographic citation for your selected paper to [phys496@physics.illinois.edu](mailto:phys496@physics.illinois.edu) by 9:00 p.m. for Professor Hughes' review.
2. **Team meeting with Professor Hughes—by 2:00 p.m. April 12.** (Schedule an appointment with him at least a week in advance of your proposed meeting.)
3. **Draft presentation—9:00 AM Monday, April 22,** emailed to [phys496@physics.illinois.edu](mailto:phys496@physics.illinois.edu).
4. **Final presentation—Friday, April 26.** Email the final version of your presentation to [phys496@physics.illinois.edu](mailto:phys496@physics.illinois.edu) by noon. Assignments submitted after the deadline will have points deducted. This assignment is not eligible for rewrite points.

Total—200 points (100 physics, 100 communication)—Note that 40/100 “physics” points will be based on your team meeting with Professor Hughes, and 40/100 “communication” points will be based on your draft slides.