

Homework Assignment #11, Journal Club Presentation

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 Madhavan.

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 no later than **Friday, March 27**. 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 12 min to present and 3 min for questions.
3. Schedule a 30-min meeting for at least two representatives of your team (everyone if possible) to meet with Professor Madhavan 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 100 “physics” points for the assignment will be based on this meeting. Plan to meet with Professor Madhavan between **April 3 and April 17**. Do not put off until the last minute!
4. Email a nearly final draft of your presentation to phys496@physics.illinois.edu **no later than noon, Monday, April 27**, for further physics and editorial suggestions. You will be given feedback on ways to improve your presentation. Note that 35 of the total 100 “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 **by noon on May 1**.
6. Present your talk on May 1 during class and answer audience questions about the paper. Each person on the team should present a segment of the talk.

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 15-minute total time limit will be strictly enforced. You should have no more than 6 “content” slides in your presentation to meet this time constraint. Points will be deducted from your team’s communication score if you exceed your allotted time. Rehearse—out loud—with one another.

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 158. Be sure to embed your fonts!

Due Dates:

1. **Paper Selection—Friday, March 27.** Send the title and bibliographic citation for your selected paper to phys496@physics.illinois.edu by 9:00 p.m. for Professor Madhavan’s review.
2. **Team meeting with Professor Madhavan—by 2:00 p.m. Friday, April 17.** (Schedule an appointment at least a week in advance of your proposed meeting.)
3. **Nearly finished presentation slides—Noon Monday, April 27,** emailed to phys496@physics.illinois.edu.
4. **Final presentation—Noon Friday, May 1.** Email the final version of your presentation to 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 35/100 “physics” points will be based on your team meeting with Professor Madhavan, and 35/100 “communication” points will be based on your draft slides. If you miss the team meeting or fail to submit your draft slides, the team will be penalized 35 points, respectively.