

Template for a Journal Club Presentation



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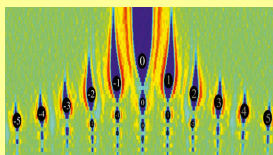
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Start with a “title” slide

**“The Title of the Paper You’re Presenting”
Complete Bibliographic Citation**



**Presented by <Your Names>
Department of <your affil> • University of Illinois at Urbana-Champaign
PHYS 496, <Date>**

**The title slide cues the audience “Get ready to listen”
Include an interesting graphic to grab their attention**

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Your talk should answer the following questions:

- What is new about the paper? (Introduction)
- Where does it fit in the context of prior work? (Background)
- What methods were used? (Methods)
- What were the primary results? (Results)
- What do the authors think these results *mean*? (Conclusions)
- What is your assessment of the paper? (Critique)

Use this paradigm to organize your presentation

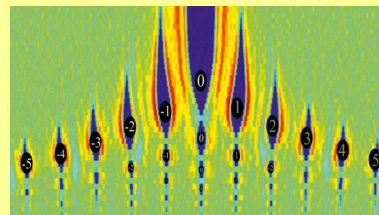
3

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What about an “outline” slide?

Outline

- Background and Introduction
- Methods
- Results
- Conclusions
- Critique
- Questions



SciTechDaily.com

give credit for figures you use

I think the use of “outline” slides is vastly overrated—
little meaningful content, eminently forgettable (*cme*)

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If you feel compelled to provide an outline, make it content-rich

Today we'll discuss

Majorana fermions (MFs), theory background

InSb nanowires used as "colliders"

Zero-energy peaks observed; believed to be electrons scattering off MFs

Could be used for solid-state qubits

Assessment of the paper's validity & importance

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Consider an "outline" graphic at the bottom of each slide to orient listeners

Motivating statement, written as a sentence and left justified

<SLIDE STUFF>

Theory • InSb Nanowires • 0-energy Peaks • MF Observed • Applications • Critique • Q & A

Place a running outline at the margins of the slide
(bottom or right margin)

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6

Consider an “outline” graphic at the bottom of each slide to orient listeners

Motivating statement, written as a sentence and left justified

<SLIDE STUFF>

Theory • InSb Nanowires • 0-energy Peaks • MF Observed • Applications • Critique • Q & A

Be creative but not distracting

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Allow at least 2 min* per slide

Do the math:

25 min total – 3 min for Q&A = 22 min for “talk”

$\frac{22 \text{ min talk}}{2 \text{ min/slide}} = 11 \text{ slides max}$

11 slides – title slide – summary slide = **9 slides**

*Allow more time for dense slides, equations, tabular data

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How do you divide up your 9 slides?

1. Problem/motivation (1 slide)
2. Background—prior work/context (1 slides)
3. What is new and why it is significant (2 slides)
4. Methods (1 slide)
5. Results (2 slides)
6. Conclusions (1 slide)
7. Your critique of the paper (1 slide)

How you divide up your slides depends on what you want to emphasize—more important = more slides

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The last slide should be a summary that recaps the main points of your talk

First observation of Majorana fermions in semiconductor nanowires

Predicted in 1930s, never before observed

Used InSb nanowires as “nano-colliders”;
zero-energy peaks observed

Generated quasiparticles of electrons, possible qubits for topological quantum computers

Didn't actually “observe” Majorana fermions;
inferred them from electron scattering



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Put your contact information on the last slide

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Don't use a pointless last slide



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The last slide will get the longest audience exposure—make it count!*

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***Reiterate your important points and stimulate audience questions**

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To recap...

Discuss all aspects of the paper—background, methods, results, conclusions

Be selective; distill your message to the essentials

Emphasize what is new or different

Present a critique of the paper—discuss strengths and weaknesses; evaluate its likely impact

Provide a title slide and a summary slide

Aim for about 11 slides total

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