

How to Present a Journal Club Talk



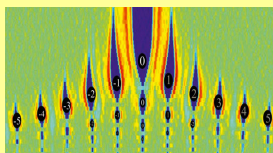
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1

Start with a “title” slide

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



Presented by <Names of Team Members>
Department of Physics • University of Illinois at Urbana-Champaign
PHYS 496, December 4, 2020

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

2

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)

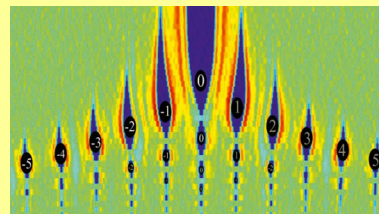
Use this paradigm to organize your presentation

3

What about an “outline” slide?

Outline

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



SciTechDaily.com

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

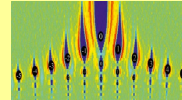
InSb nanowires used as "colliders"

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

Could be used for solid-state qubits

Critique of paper

Audience questions



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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)

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

7

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<SLIDE STUFF>

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

↑

8

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Motivating statement, written as a sentence and left justified

<SLIDE STUFF>

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

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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

10

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

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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

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Allow at least 2 min* per slide

Do the math:

13 min total – 3 min for Q&A = 10 min for “talk”

$$\frac{10 \text{ min talk}}{\approx 2 \text{ min/slide}} = 5\text{--}7 \text{ slides max}^*$$

7 slides – title slide – summary slide = **6 slides**

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

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How do you divide up your six slides?

1. Problem/motivation
2. Background—what audience needs to know (prior work)
3. What is new and why it’s important
4. Methods
5. Results and conclusions
6. Your critique of the paper

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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

No more than seven slides

Rehearse and revise (shorten); mind the time

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