#### Template for a Journal Club Presentation

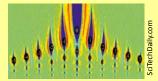


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#### Start with a "title" slide

"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 499, April 11, 2014

The title slide cues the audience "Get ready to listen"

#### **Answer the following questions:**

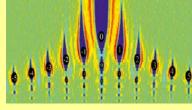
- What is new about the paper? (Introduction)
- Where does it fit in the context of prior work? (Background)
- What methods were used? (Methods)
- What were the primary results? (Results)
- What do the authors think these results mean? (Conclusions)
- What is your assessment of the paper? (Critique)

Use this paradigm to organize your presentation

#### 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

# If you feel compelled to provide an outline, make it meaningful

#### Today we'll discuss

- Majorana fermions, theory
- InSb nanowires used as "colliders"
- Zero-energy peaks observed; electrons scattering off MFs
- Could be used for solid-state qubits
- Critique
- Questions

### 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 left margin)

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Be creative but not distracting

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#### Allow at least 2 min per slide

#### Do the math:

20 min total – 5 min for Q&A = 15 min for "talk"

15 min talk 2 min/slide = 8 slides max

8 slides – title slide – summary slide = 6 slides

#### How do you divide up your 6 slides?

**Problem/motivation** 

Background—what audience needs to

know; what is new (prior work)

**Methods** 

**Results** 

**Conclusions** 

Your critique of the paper

# The last slide should be a summary that recaps the main points

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