

AstroCoffee

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Goals

1. Understand **main idea** of paper (**Dissection**)
2. Tell the most **streamlined** but complete narrative of the paper (**Presentation**)
3. Get **repetitions** (**Practice**)

Streamline

- Understand the main idea.
- Ruthlessly pare away all unnecessary details.

Both while reading and presenting!

- Continually assess interest of audience.
- Stick to 10 minutes (people will tune out by 15).
- Stop when you're done.

Visuals

- **Plots.**
 - Fully describe plot axes, line types, colors, etc.
 - What should we take away from a plot?
- **Avoid:**
 - equations
 - tables
 - big walls of text
 - jumping to other papers/websites

Presenting

1. Motivation

- Few sentences of context
- Main problem and implications

2. Technique

- Boil down methods to minimal description

3. Results

- Show and explain key plots.

4. Implications

5. Critical Analysis

- Leaps in logic? Unfounded assumptions?
- Incorrect physics?

Dissection

1. Big Picture

- Read the **Title** carefully.
- Read the **Abstract**. Read it again. One more time.
- Read the **Conclusions**.

2. Actual Pictures

- Skim through the **Plots**.
- 1—3 are critical. The rest are merely supporting.
- Understand the important ones.

3. Words

- Read enough introduction and methods to present the logical flow of the paper.
- Read more explanation of key figures if unclear.

Practice

- **Starting out**
 - Read papers directly related to your research
 - Read review papers on the subject
 - Read introductions for many papers
 - Well-known/well-cited authors/papers
- **Check astro-ph daily**
 - Read titles to select abstracts to read in detail
 - Read abstracts to decide whether to read the paper
 - Skim for important figures
 - Re-assess before investing lots of time
- **Present**
 - Crafting a narrative

Goals

1. Learn interesting idea (**Dissection**)
2. Share interesting idea (**Presentation**)
3. Repeat (**Practice**)