



La Silla Observing School 2024

How to make a good presentation

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Outline

1. Why giving talks?
2. Audience
3. Design basics
4. Talk structure
5. Performance aspects



1. Why giving talks?



1. Why giving talks?

- Share your science results
- Catch up attention on our work
- Facilitates science collaborations

(key for the next steps in your career)

An important fraction of your time will be spent in attending to science conferences
(in person or online)

2. Audience

- What do they want?
- What do you want to convey?



2. Audience

- **What do they want?**
 - People want to learn
 - People want to understand
- **What do you want to convey?**
 - Reach the audience
 - You want their focus





2. Audience

- **Adjust every talk to different audience**
 - Experts in your field
 - Scientists working on a different topic
 - General Public
 - Kids

- **What would you like to listen if you were part of the audience?**

Present a well-designed and organized talk adapted to the audience



3. Design Basics

- **Color scheme**

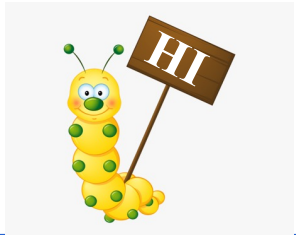


3. Design Basics

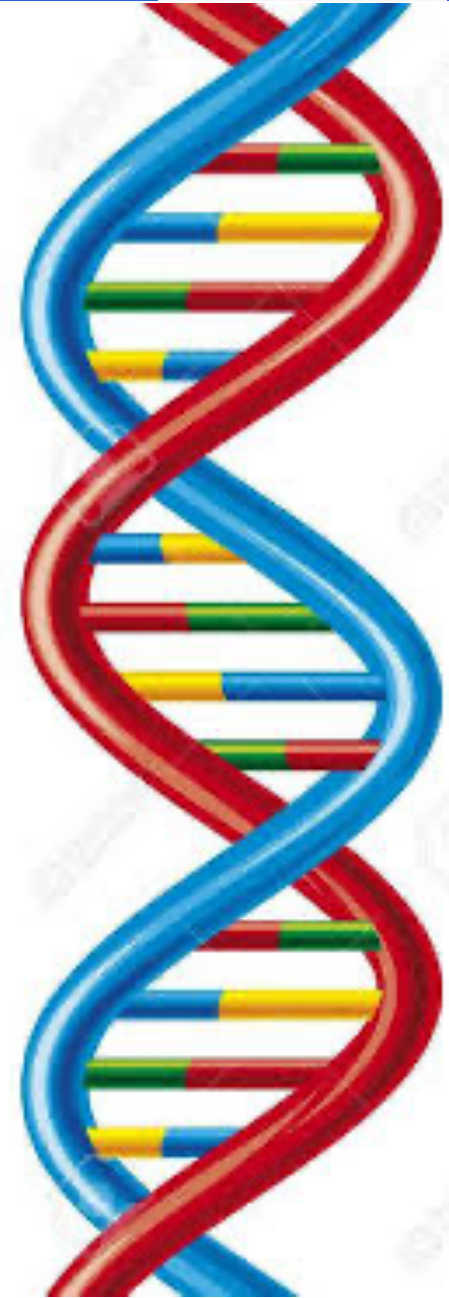
- **Color scheme**
 - Keep background simple



3. Design Basics



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3. Design Basics

- **Color scheme**
 - Keep background simple
 - High contrast with background
 - Light against dark

3. Design Basics

- **Color scheme**
 - Keep background simple
 - High contrast with background
 - Light against dark
 - Dark against light



3. Design Basics

➤ Color scheme

- Keep background simple
- High contrast with background
 - Light against dark
 - Dark against light
- Big rooms: better dark background
- Small rooms: better light background



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➤ Color scheme

I am color blind and I cannot see this

- Avoid red-green combinations (color blind people)

3. Design Basics

➤ Color scheme

I am color blind and I cannot see this

I am not color blind but cannot see this

- Avoid red-green combinations (color blind people)
- Think always on contrast



3. Design Basics

➤ Fonts

■ Sans Serif fonts

- Have no marks on the ends of their lines
- Natural, simple, easy to read
- Usually seen as modern, sleek and clean
- Arial, Comic Sans, Times New Roman, Helvetica

■ Size

- Reach the audience at the end of the room
- 18 points or larger, **up to 36**
- For references no less than 14 points



3. Design Basics

➤ Layout

- Headings: top. Simple sentence
- Use small text blocks (2-3 lines maximum)
- Short lists
- Be generous with empty space
- Be generous with boundaries

Too much text on the slides distracts!

3. Design Basics

➤ Style

- Audience: Readers vs visuals
 - Convolution of image, text and speech
 - Include one simple image per slide
- ~1 slide/min
- Don't overwhelm audience with loads of data
- Avoid (long) formulae
- Delete excess text (less is more)
- Avoid fancy transitions unless good reasons

Keep it simple and short. Less is more

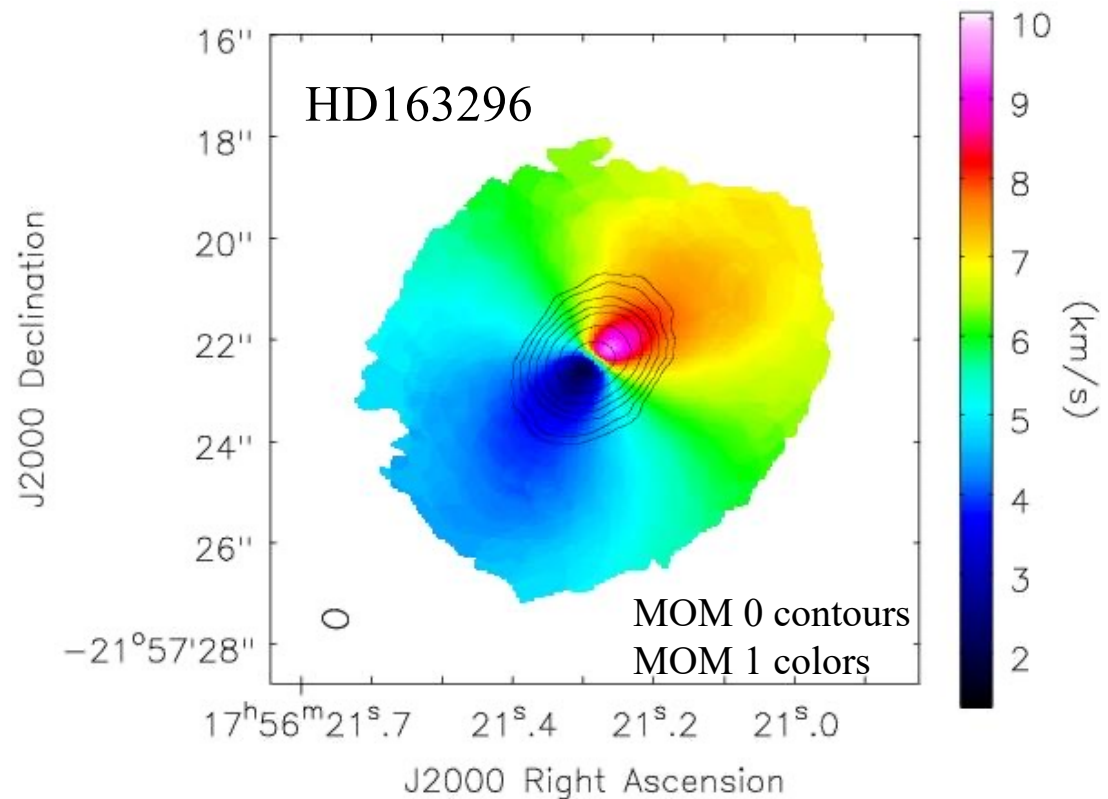
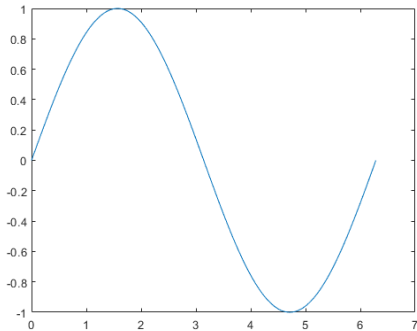


3. Design Basics

- **Some more details**
 - Include axis information and title in the plots

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3. Design Basics

- **Some more details**
 - Include axis information and title in the plots
 - Movies: make sure they will work in the projection computer
 - Prefers pdf: it always work!

Keep in mind: The slides just support your talk

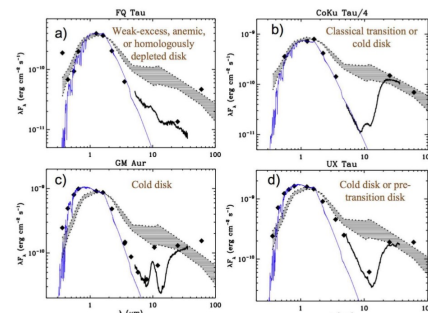
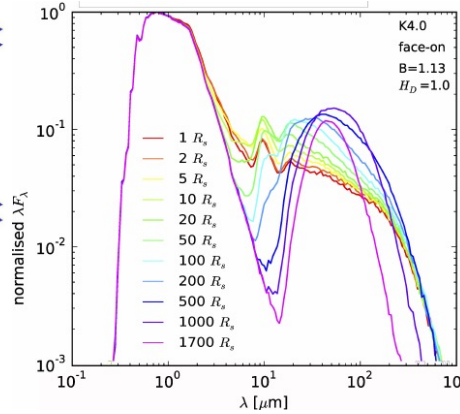
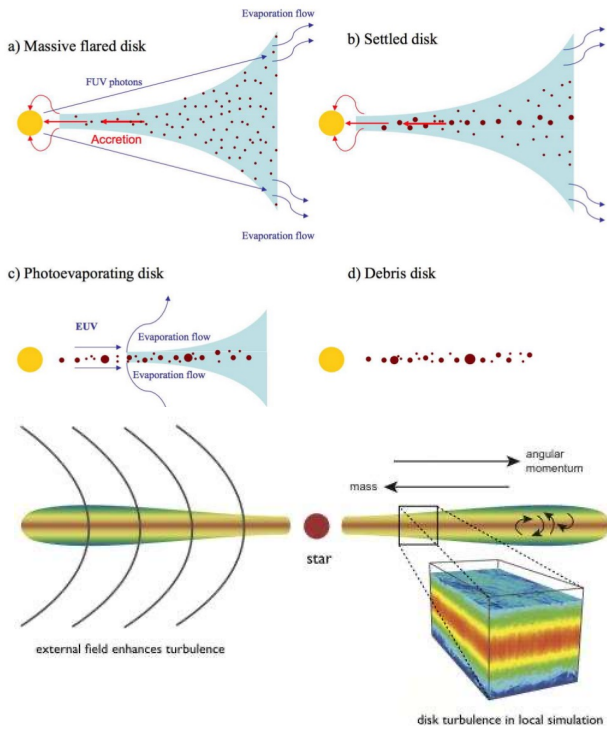
(too many details / text will be distracting, as the audience will be busy reading the slides and will not listen to you ...)

3. Design Basics





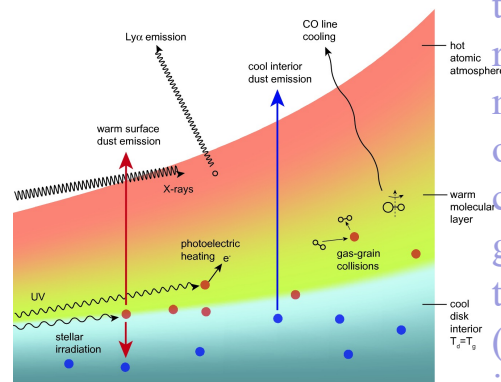
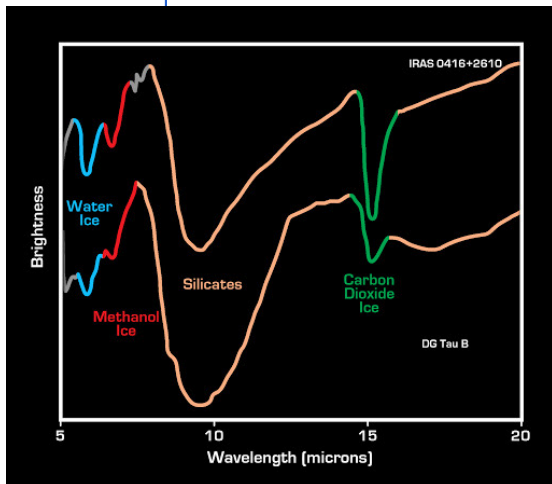
Unveiling the gas-and-dust disk structure in HD 163296 using ALMA observations and theoretical simulations: changing paradigms of planetary formation



Aims. The aim of this work is to study the structure of the protoplanetary disk surrounding the Herbig Ae star HD 163296.

Methods. We used high-resolution and high-sensitivity ALMA observations of the CO(3–2) emission line and the continuum at 850 μm , as well as the three-dimensional Monte Carlo radiative transfer code, MCFOST, to model the data presented in this work.

Results. The CO(3–2) emission unveils for the first time at submillimeter frequencies the vertical structure details of a gaseous disk in Keplerian rotation, showing the back and front sides of a flared disk. Continuum emission at 850 μm reveals a compact dust disk with a 240 AU outer radius and a surface brightness profile that shows a very steep decline at radius larger than 125 AU. The gaseous disk is more than two times larger than the dust disk, with a similar critical radius but with a shallower profile. Radiative transfer models of the continuum data confirm the need for a sharp outer edge to the dust disk. The models for the CO(3–2) channel map require the disk to be slightly more geometrically thick than previous models suggested, and that the temperature at which CO gas becomes depleted (i.e., frozen out) from the outer regions of the disk midplane is $T < 20$ K, in agreement with previous studies.



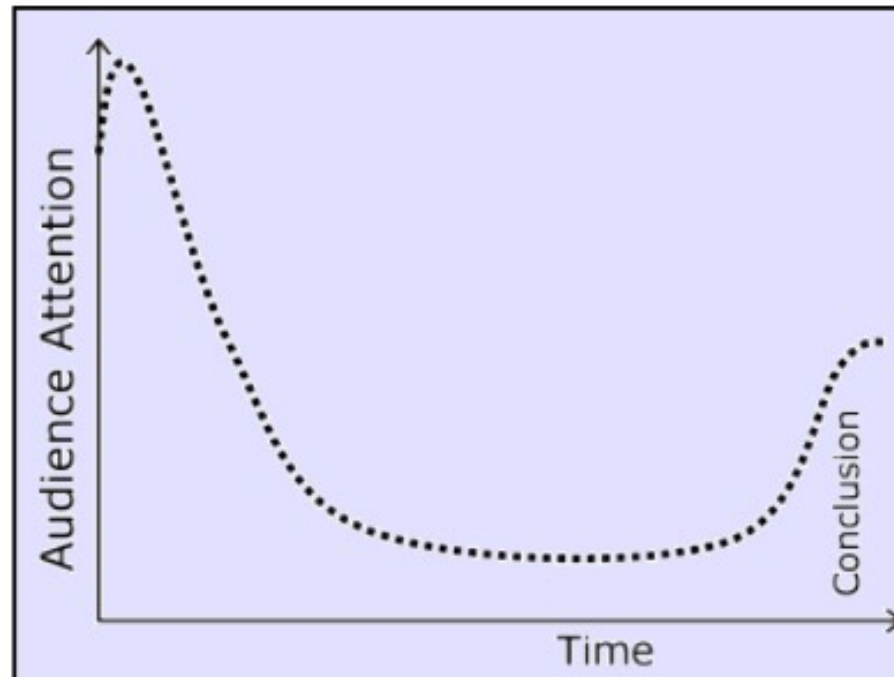


4. Talk structure

- **Start with a very good introduction**
 - Provide background
 - Introduce the biggest questions
 - End focusing into your specific topic

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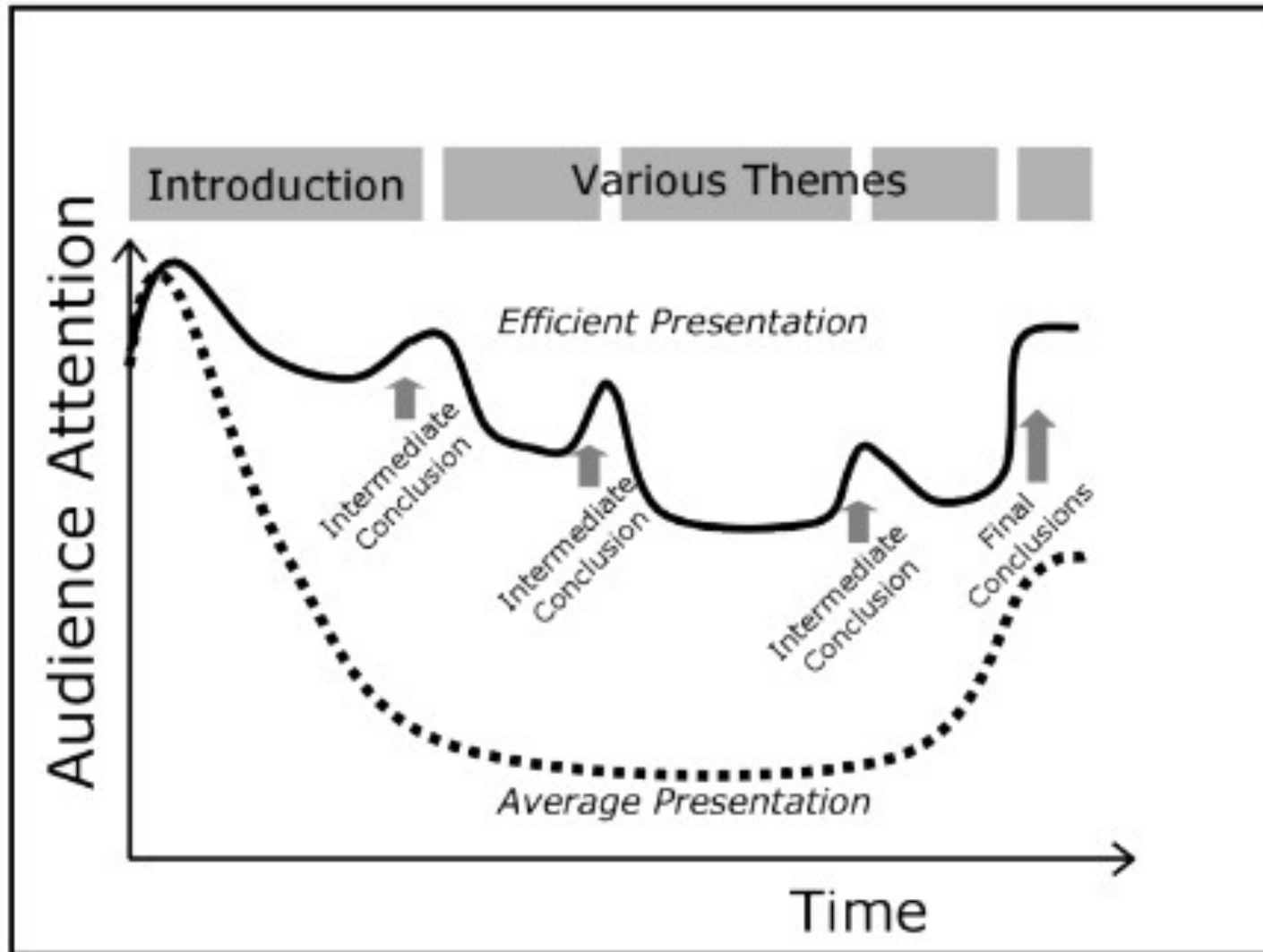


4. Talk structure

- **Start with a very good introduction**
 - Provide background
 - Introduce the biggest questions
 - End focusing into your specific topic

- **Present your results**
 - Follow the design basics
 - Build content progressively.
 - Provide intermediate conclusions
 - Enable the audience to tune back
 - Visual aids (images, colors)
 - Use outline for long talks

4. Talk structure





4. Talk structure

➤ Conclusions

- Connect to the first part of the talk
- Last chance to revisit the big questions
- Last chance to reiterate specific conclusions

Start broad, get specific, end broad

5. Performance aspects

➤ Factors "against"

- Different cultures, different styles
- Unconscious bias
- Some countries train very well in giving talks, others not.
- Non-native English speakers
- Fear of speaking in public
- Impostor syndrome



5. Performance aspects

- **“Mitigation” factors: attitude**
 - Be comfortable, be authentic
 - Don't be rude
 - Plan the talk for the time limit
 - Stand still
 - Speak clearly, speak up! You want to be heard
 - Don't talk too fast: Allow the audience to digest





5. Performance aspects

- **“Mitigation” factors: attitude**
 - Talk to the audience, not to the screen
 - Tell a story
 - Engage with the audience with a conversation
 - Be enthusiastic: get passionate, get excited...
you are presenting your work...

Enthusiasm is contagious!

...and very important

- Rehearse
- Rehearse
- Rehearse
- Rehearse



Practice a lot and ask for feedback to your colleagues

A few last advises

- Use inclusive language:
 - Los astrónomos y las astrónomas
 - Thank you ladies and gentlemen →
Congratulations ladies and gentlemen.

- Use inclusive pictures:



VS



Courtesy: ESO



Conclusions

1. Present a well-organized talk for the audience
2. Keep it simple. Less is more
3. Start broad, get specific, end broad
4. Build content progressively, provide intermediate conclusions.
5. Practice a lot and ask for feedback to your colleagues
6. Tell a story and be enthusiastic. Connect with the audience