Giving a Talk

tips on how to make a good presentation

✓ Why giving a good talk is important?

✓ Preparing for a presentation

✓ What is important in a talk?

✓ Rules for making good slides

✓ Giving a talk (delivery)
Why giving a good talk is important?

- Helps you critically assess your results and their place in the larger picture.

- An opportunity for your results to have immediate impact even before the publication.

- For a young researcher: a quick entry into research mainstream, the best way to get people to know your results and ideas.

- It can impress a thesis committee, supervisors, collaborators, colleagues, potential employers.
Preparing for a presentation

- Let the talk *grow* over several days or even weeks rather than throwing it together in half an hour.

- Take notes, collect ideas, information, plots, sketch a plan before you start working on slides

- Collect and learn far more information than you are going to use.

- Think of possible questions. Think of who your audience will be: general level, individuals.
Practice. Practice. Practice.

- A well-practiced talk is 9/10 delivered

- Practice the talk aloud just the way you are going to give it, at least once.

- The best is to give it to a friend who can give comments. Alternative is to do it in front of the mirror.

- At the very least, practice the first and last few slides (opening and finish).
What is important in a talk?
(who, how, and what)

- Good opening is highly important

- A clear, coherent, and enthusiastic presentation which is well tailored to your audience.

- Give credit when the credit is due

- Clear conclusions. At least one main point hammered home.

- Do not run overtime - aim to finish before the allotted time.
Making slides

- Transparencies: still used, but increasingly rare

- PowerPoint: most common now
  - Windows, Mac

- OpenOffice
  - Linux, Windows, Mac OSX, Free BSD

- MagicPoint
  - Linux, X11

- LaTeX, PDF
  - Linux, Windows, Mac
Rules for making good slides

- Make slides after you thought the talk through

- Concentrate on content, not on fancy bells and whistles (but don't make it ugly either).

- Keep content super-simple. Do not include information you will not use.

- Use simple slide templates and background/text colors easily viewable under all conditions

  Avoid brown, orange, yellow, pink, light green, cyan - note that some of these will not be shown by projector AT ALL.
Rules for making good slides
(continued)

- Prominent, informative, short, and catchy headings
- One major concept per slide. Only two content levels: major and minor points
- Have <5 major points per slide
- Use no more than 2 fonts: clean sans-serif for the title, times or serif for body. If you need more room:
  
  Reduce space between lines
  Make fonts smaller
  The best is often to use another slide
Rules for making good slides (continued)

- Use good plots/pictures to make a point.
  *Make plots clear (put clear labels for axis, lines, points)*

- Use equations when needed, but sparingly.
  *Explain variables or, at least the structure and significance of each equation*

- Define unfamiliar terms both on slide and verbally during presentation
  *don't be afraid to repeat definitions in other slides*
cumulative circular velocity function (CVF)

# of objects $> V_{\text{max}}$

maximum circular velocity $V_{\text{max}} = (GM/r)^{1/2}$
Giving a talk

Tell 'em what you're gonna tell 'em, then tell them, then tell 'em what you've told 'em.

☐ On average, 2 min per slide, > 5 min per point

☐ Open strongly. Interest the audience.
   (Try to) motivate their staying awake.

☐ State the problem. Place it in the bigger picture.
 State your main conclusion(s).
   For example, David Hogg's talk two weeks ago

☐ Speak clearly, confidently, and with enthusiasm, facing the audience
Giving a talk

- Use examples, be specific. Give insight into problem or solution, details are often not necessary.

- Once in while, use humor or grab attention with other tricks if you can. Ask (rhetorical) questions.

- Break your talk into modules, some of which you can be prepared to skip

- Spend a third to a half of the allotted time on your results and conclusions, focusing only on the main points.
Giving a talk

- After stating your results, discuss caveats, open problems, future work

- Finish strongly by reiterating your *main* conclusions
  "This is all I wanted to say" - is NOT a strong finish

- Don't overload conclusions! Include one or two main points you want people to *remember*
If you remember only one rule it is this:

Practice, practice, practice, practice, practice, practice, practice, practice, practice, practice, practice, practice
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TIME-TESTED METHODS of PERSUASION FROM THE BESTSELLING AUTHOR OF How to Win Friends and Influence People

DALE CARNEGIE