How Not to Give a Talk

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Outline

0) Intro
1) Format of Talk
2) Content of Talk
   - font, background
3) Plots
4) Public Speaking Skills
5) Misc
   - how to handle questions
   - getting feedback on your talk afterwards
   - how to improve
6) Examples (time-permitting)
• Why is a good talk important?
• What is the purpose of a talk?
• What makes a good talk?
Format of a Talk

- Know your audience and put yourself in their shoes
- Check beforehand:
  - Length of Presentation
  - Screen Size
  - Size of Room
Structure of Talk

• Outline
  - Roadmap for audience
• Introduction
  - Primer on your field
  - Why is the question/field/subject you’re tackling important? i.e. give context, larger picture etc.
• Details of your work
  - Your contribution to field
  - Why you research rocks
• Conclusion
  - 3-4 main points for audience to take away
Content-The Basics

- Keep things simple
- Avoid distractions like unnecessary animations
- Maximize signal to noise
- Good graphics/plots can say 1000 words
• Keep in mind font size at all times (12 point)

• Keep in mind font size at all times (32 point)

• Especially important when grabbing plots from papers.
SN 2002ap

A peculiar Type Ic SN
• DON’T CAPITALIZE UNNECESSARILY! NO NEED TO YELL!

• Use a font that is easy on the eyes

• Don’t get cute with colors
  – Color is OK to emphasize a point

• Choose a color that will contrast with your background
Good Backgrounds

- Light backgrounds with dark text or vice versa offers best contrast
- Use the same background throughout presentation
Bad Background

- Astro-porn, although pretty, can be very distracting
- Hard to find font color that adequately contrasts with background
Animations Gone Awry

• Flying text is distracting
• Increases noise in presentation
• Sure it looks cool
Animation done better

HR Diagram
Slide Content

- Spend 1-2 minutes per slide
- Each slide should have a point
- 4-5 points per slide
- Avoid excessive text on a slide
- Double check grammar and spelling
Plots

- Graphs and tables convey more than words
  - Trends are easier to pick out
  - Easier to visualize

- Do:
  - Explain:
    - Meaning of different lines/symbols
    - Axes

- Things to avoid:
  - Too many gridlines
  - Small font
Plots Done Poorly

What are we plotting?  Axes too thin to see!

Too many tick marks!

SN 2002ap
B band
Plots Done Better

SN 2003fa

Apparent Magnitude

Relative JD

B

I

R

V

B
SAGOWAB

(scientists against green on white background)

courtesy of John Johnson’s blog:
http://mahalonotrtrash.blogspot.com/
Public Speaking

• Practice in front of an audience
• Vary tone of voice and pace talk
• Pause after making important points
• Make eye contact with audience
• Avoid fidgeting
• Avoid turning your back to audience
Misc-Taking Questions

• Repeat question for entire audience
• If you didn’t understand question, ask for clarification
• Be honest when giving response
  - OK to admit you don’t know answer
  - Don’t fake it
• Avoid confrontation with hostile questioners
  - Take discussion offline
• Improve talk:
  - Practice
    - Get feedback
  - Learn from other [good] talks
Summary

• Motive your talk and sub-aspects! Know audience
• Know clearly the main point(s) of your talk
• Keep things simple, clean, and consistent
• Put yourself in the audience’s shoes
• Practice
References

• Chronicles of Higher Education:

• Grad student resources:
  http://www-personal.umich.edu/%7Edanhorn/graduate.html

• Grad students, postdocs & beyond:
  http://ctl.stanford.edu/Tomprof/links.html
Reference (cont’d)

• AAAS Science Careers:
  http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2006_10_20/noDOI

• Job-talks:
  http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2008_06_20/careedit.a0800093

• More AAAS Science Career:
  http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2001_06_01/noDOI.
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