

Pointers on Giving a Talk

BEFORE YOUR TALK:

Know your audience! Your talk should be tailored to the background of your audience. When a talk goes Bad, this is the most common problem. It is usually better to err by making the talk too elementary rather than too advanced.

Types of Talks:

Seminar: a very specialized talk, given to an expert audience.

Colloquium: a talk given to an entire department. Should be aimed at the level of a beginning graduate student (but often isn't)

Popular talk/Public lecture

Talk to children

The talks for AJC should be aimed slightly more specialized than the "Colloquium" level. Assume your audience has a good knowledge of general astronomy topics, and a hazy knowledge of the specific issue in a particular subfield.

Make sure the size of your topic is appropriate for the allotted time. Talk times can range from 5 minutes to 2 hours (although a "standard" time is usually 45 minutes to 1 hour). The broader your topic, the more superficially you will need to cover it, and this can create problems. It is usually better to make a talk more focused than broad. NEVER try to cram in more information by talking faster, rushing through slides, etc.

Determine the best medium for your talk. These days, powerpoint has become the default method for giving talk in astronomy, for good or ill. There are several very important issues to deal with when giving a talk that uses any kind of electronics.

1. Before your talk (at least 10 minutes) make sure your presentation is able to display.

That means that the slides show up, and that all font, figures, and animation display properly. The longer you do the test beforehand, the longer you have to fix any problems.

2. Check the connection method. Know beforehand whether you will be plugging in your own laptop, loading the talk from a USB stick, or some other way. Make sure all relevant cables are available (especially if you use a Mac!).

3. Check beforehand if there will be a laser pointer or pointer stick. Easiest solution is to always bring your own laser pointer. If you use your own laptop, you can buy combination laser pointer/slide advance remote control, which will let you switch slides without having to run back to your computer each time.

THE CONTENT OF YOUR TALK:

Not all of these suggestions here will apply to every talk, and you should certainly not use this as a rigid outline in constructing your talk. However, you may find many of these suggestions to be useful.

When giving a talk, including Journal Club talks, it is your responsibility to know more about the paper or topic than anyone in the room. If you are presenting someone else's paper, always have a paper copy to refer to, but you should have read the paper extensively enough that you should not have to refer to the hardcopy unless you are asked about a minor technical detail. You should already know all major points.

When presenting someone else's work, there is nothing wrong with acknowledging that there are flaws in the work, but you need to have already looked into them and be able to explain what the flaw is and at least thought about possible solutions.

Begin with a title slide, giving the title of your talk, your name, and your professional affiliation (if any). Some speakers also include the venue where the talk is being given and the date. Always list the names of your collaborators (if any).

Provide an outline of your talk. What the main topics you plan to discuss?

Provide some background for your topic. Why is it important or interesting? How does it fit into the bigger picture? Sometimes giving the history of a scientific topic can be interesting, but sometimes it really bogs things down - you need to use your best judgment here.

Always proceed from the more general to the more specific. Early in the talk, provide any technical background information that the audience will need to understand the later portions of the talk.

Nice graphics are always a way to maintain the interest of the audience. Be sure to acknowledge the source of any pictures. Some topics (e.g., mathematical ones) will not lend themselves to pictures.

Any time you show a chart or plot, always explain what it is, and tell the audience what the axes, point types or colors represent. Try your best to make sure that all those properties show up clearly when the plot is displayed.

Define any unfamiliar terms the first time you use them, including all acronyms.

Avoid extensive use of mathematical equations. Some equations will certainly be necessary for many talks, but avoid entire slides filled with mathematics. When you do use equations, be sure to explain what they mean physically (if possible).

Avoid filling slides with text, whether bullets or paragraphs. Assume that the audience will try to read every word on the slide, and decide if it is reasonable to expect for them to read the slide while you talk. Use this principle to cut text from the slide until it is easy to watch the slide and hear a person talking without getting confused. Don't succumb to the temptation to throw a lot of material at the audience in hopes that they will get too confused or lost to notice you don't know what you're talking about.

When you change topics, try to provide a smooth transition. How is topic 2 related to topic 1? (Sometimes this can be as simple as saying "Now that we've looked at 1, let's move on to 2.")

Finish your talk with a slide of conclusions, or a summary of the important points. (This may not be possible or appropriate for all talks). If nothing else, this will tell the audience that the talk is finished.

THE STYLE OF YOUR TALK:

Try to avoid nervous mannerisms: wringing hands, pacing, fidgeting etc.

Make eye contact with your audience. Vary whom you look at (i.e., don't stare at a single person for the entire talk).

Make sure the speed and volume of your delivery are appropriate. Conversational speed is too fast for public speaking, and most speakers do not speak loudly enough. So slow down and speak up! This will seem weird at first and may take some practice. (Exception: if you are using a microphone, speak in a normal tone of voice).

Manage your time! Going over or under your allotted time by a few minutes is acceptable, but exceeding your time limit by more than 5 minutes is Very Bad. In general, it is better for a talk to be too short than too long. How do you manage this? First, practice your talk to see if it is the appropriate length. Second, monitor your time during the talk. If it looks like you are going to run long, be prepared to skip part of your prepared talk. Never rush through slides if you are running out of time. Instead, plan ahead and determine which slides, at the end of your talk, are "disposable."

Powerpoint problems: Resist the temptation to produce dancing equations with flames shooting out of them. Clever graphics should enhance your talk, not distract the audience away from it. Similarly, avoid excessive use of weird/oddly colored fonts.

Avoid reading text directly from your slides or from prepared notes. While this is considered standard operating procedure in the humanities, we scientists don't do it.

Treat your slides as lecture notes, which you can expound on as you talk. A corollary is that the phrases on your slides do not have to be complete sentences (and usually won't be).

QUESTIONS FROM THE AUDIENCE:

Most speakers will take questions from the audience during the talk, and it is appropriate to do so. However, if the questions/answers are seriously interrupting the flow of the talk, it is entirely appropriate to indicate that you will answer these questions at the end of the talk. (This is really the responsibility of the moderator, but you will sometimes need to do it yourself). Also, if a question touches on a topic to be covered later in the talk, it is also appropriate to say this, and move on.

Answers to questions should be short and to the point. Never use the answer to a question to give a lengthy discussion of some point you couldn't get to in your talk. Don't ramble.

You will occasionally encounter a crazy/abusive/hostile questioner. Don't panic, and resist the temptation to respond in kind! Note that audience in this case will naturally side with you, and will perceive you to be in a position of power. Answer politely, and move on. If the questioner refuses to give up, it is the responsibility of the moderator to control the situation. If he fails to do so, just take the next question from somebody else.

If you don't know the answer to a question, say "I don't know," and move on. Better to admit ignorance than to wander into quicksand. (I have found this also works well in real life).

GENERAL ADVICE:

If you lose your train of thought, or something goes horribly wrong in your talk, don't panic! Take a deep breath, and pause for a few seconds to gather your wits. This does not look unnatural in a public talk, and the audience will assume you are a deep thinker.