

Some Dos and Don'ts For Giving Talks

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What follows is a very brief and biased list of things that I believe you should (or should not) do during a mathematics lecture. I have largely (and intentionally) stayed away from most issues regarding content and style. Rather what appears should be thought of more as a safety check, similar to the kind one would run through before jumping out of an airplane. In other words, the rules of conduct laid out below focus more on basic mechanics than anything else. Actually organizing a beautiful and purposeful lecture is another thing entirely, and that subject has been written about many times. I strongly recommend Paul Halmos's "How to Speak Mathematics" as a place to start.

This document is a work in progress. I often think of rules for giving talks after having seen someone give a lecture. Now I have a place to jot them down. Also, some of the items below could use some explanation, and I hope to do that in future versions.

Do thank the organizer for inviting you. Do dress professionally (no t-shirts!). Do make sure you have all supplies and computer equipment working well in advance.

Do give the general context for your work. Do tell the audience in the first few minutes what they can expect to learn in your talk, and in broad terms what your work is about.

Do construct your talk in such a way that if someone misses one sentence, they can still follow. Do repeat yourself many times, especially the main definitions and theorems.

Do practice your talk out loud in advance. Do prepare with names, dates, proofs of major lemmas, and sketches of proofs of pertinent black boxes. Do give credit where credit is due and write the relevant names, in full, on the board.

Do use good handwriting. Do use clean, concise sentences on the board. Do speak slowly, with pauses in between your sentences. Do make eye contact with the audience. Do express enthusiasm.

Do be 100% precise at all times. Do sweep unnecessary technicalities under the rug.

Do explain why your theorem is not obvious. Do explain why the proof of your theorem requires some work and/or new ideas. Do explain the toy model (or special case) of your theorem first.

Do err on the side of understandability (for the first 90% of your talk).

Do create moments of tension (and release!). If everything sounds like a foregone conclusion, your audience will be bored!

Do create escape valves in your talk, to adjust for time. Do give your talk closure and purpose at the end. Do end with: Thank you.

Don't prepare the night before.

Don't do the moderator's job (ask if it is time to start, ask for questions at the end, etc.).

Don't use your cell phone as a clock - use a travel clock.

Don't feel the need to say anything non-mathematical at the beginning of your talk. In particular, don't feel the need to say that this is your first time visiting a certain location. Don't try too hard to be funny. Don't be silly.

Don't use the sentence: Let me begin with some notation. Don't use too many acronyms or insider language.

Don't be a magician. Say what you are going to say, say it, then say what you said.

Don't present your entire paper, or the entire proof of your theorem. Instead, give the "trailer" for your paper and the main ideas.

Don't dawdle in the beginning - you will regret it at the end!

Don't cover yourself in chalk/ink. Don't leave markers open. Don't draw on things that aren't meant to be drawn on. Don't erase with your hand, especially on a white board.

Don't refer to mathematicians as Dr. LastName.

Don't be intimidated. Don't be self-deprecating. Don't be depressed. Don't make excuses. Don't BS. Don't apologize except in extreme circumstances. Don't compliment your theorems or degrade anyone else's work.

Don't ask the audience what to do next. Not only will they rarely answer at all, but they will usually lose confidence in you.

Don't try to say too much. Don't spend a lot of time drawing a complicated picture during your talk.

Don't panic if you can't give a good answer to a question.

Don't ever, ever go over time - even if you started a few minutes late. Don't end with: I guess I'll stop there. Don't go on too long answering a question.