

HOW TO PRESENT A MATHEMATICS TALK

Leonard R. Rubin—7 Apr 2010

Here is a list of some ideas to use in preparing a mathematics talk. In our discussion, we might find several others that could be added to this list.

1. Avoid long definitions.
2. Don't be afraid to repeat a definition.
3. Put only a small amount of print on any given page.
4. Do not patronize. Examples of this are such things as “the proof of this is obvious;” “any high school student could prove this;” . . .
5. Present the talk “in reverse”—this means to give perhaps a few definitions and then state one or two main results. Then maybe go back to show the kinds of techniques needed in proving such theorems. It is at this time that you might name some lemmas that are important in your proofs. But you do not need to prove all (or even any) of these lemmas.
6. Do not try to list all the things in this area that have been proved.
7. Use no slang or colloquialisms. An example of this is: E. Multitask “ripped off” his main theorem from R. Goodwrench.
8. Try to give credit to others who have made contributions in the area, but also make plain what was your contribution. You may list several names in the beginning without being too specific as to which ones did what. (B. Pascal, A. Einstein, M. Twain, . . . were major contributors to work in this area—I have a full list of references in a preprint of my paper.)
9. End on time! Have “escape valves” available—this means to have places from which you could jump ahead without losing continuity or even places where you could end without presenting everything you had in mind in the beginning. It is better to go a bit slower and not cover everything. But you do not want to end in a situation where you just made several definitions and then have no time to say what these were meant to produce.
10. Do not direct your talk to the one or two experts in the audience at the expense of the others. Many speakers seem to be afraid of giving a talk that would be too “trivial” because they see a few people in the audience who are known to be very big in the field. But you must focus on presenting your talk to the larger audience.