GUIDELINES FOR PREPARING EFFECTIVE PRESENTATIONS

1. Background

If you wish your ideas to be understood and to have an impact, you must be able to communicate effectively. Too often our pay and promotion incentive systems reduce conference talks to lines on a CV, of value only for documenting professional status. Thus at our meetings so often the talk seems to be afterthought — unclear, incoherent, difficult to follow, untidy, full of errors, and delivered with no evident practice. Such talks are ineffective for communication and show their presenters in the worst possible light. Again, if you wish your ideas to be understood — and if you wish your peers to think highly of you — you must be able to communicate effectively.

This document is a compendium of advice from experienced speakers and listeners on ways to improve the clarity and value of conference presentations. Our sense is that everyone — even senior people — can benefit from some aspects of this advice.

2. Preparing the presentation

2.1 Organization

1. Your presentation will be most effective when the audience walks away understanding <u>the five things any listener to a presentation really cares about</u>:

- What is the problem, and why is it a problem?
- What have others done about it?
- What are you doing about it?
- What value does your approach add?
- Where do we go from here?

2. Carefully budget your time, especially for short presentations:

- Allow enough time to describe the problem clearly. This usually will take more than 30 seconds.
- Consider omitting the “Outline” slide. As most outlines are identical (Introduction, Data, Methods, Simulation, Results, Conclusions), there is no point in wasting precious time going through them.
- Leave enough time to present your own contribution clearly. This almost never will require all of the allotted time.
- Leave time for questions. If your talk is done well, it will stimulate questions from the audience, often from senior people who are intrigued by your work and wish to learn more about it. With the tight schedules at most conferences, a question period is often left to the end or omitted entirely, effectively making this form of interchange impossible. Do what you can to bring it back!

3. Put your material in a context that the audience can relate to. Aim your presentation to an audience of colleagues who are schooled in the basic methods of our discipline but are not

necessarily familiar with your research area. Your objective is to communicate an appreciation of the importance of your work, not just to lay out the results or demonstrate your mathematical prowess. You always can (and should) give references and contact information so that those who are interested in the details can follow up afterward.

2.2 Preparing intelligible displays

Here are some suggestions to make your slides more effective. They're not hard-and-fast rules, but you ought to have pretty solid reasons for not following them, because they are known to work well.

1. Use at least a 24-point font so everyone in the room can read your material. Unreadable material is worse than useless — it inspires a negative attitude by the audience to your work and, ultimately, to you.
2. Try to limit the material to 8 lines per slide, and keep the number of words to a minimum. Summarize main points; don't include every detail of what you plan to say.
3. Limit tables to 4 rows/columns. Sacrifice detail for legibility — unreadable content is worse than useless. Many large tables can be displayed more effectively as graphs.
4. Don't put a lot of curves on a graph — busy graphical displays are hard to read. Also, label your graphs clearly with BIG, READABLE TYPE
5. Use easily read fonts. Simple fonts like Sans Serif and Arial are easier to read than fancier ones like Times Roman.
6. Use equations sparingly. If you present an equation, audience members will infer that it is important and try to understand it. But this takes time and energy, so if you quickly flash lots of equations — an entire derivation, for example — most audience members will become frustrated and lose interest. In most cases it is better to show one or two important equations and omit derivations altogether. Those few brave souls who are interested in your proofs and derivations can follow up off-line.
7. If you are presenting citations, identify the author, journal and year of publication. Audience members can probably find **Smith Biometrics 2013** but have no hope of pinning down **Smith 2013.**
8. Keep it simple. Spend your effort simplifying, not decorating.
9. Preview your slides. <u>You</u> are to blame if symbols and Greek letters that looked OK on your computer were translated into something unintelligible on the display screen.

2.3 Timing your talk

Few things irritate an audience more than a 30-minute talk delivered in 15 minutes. Your objective is to engage the audience and have them understand your message. Don't flood them with more than they can absorb. This means:

1. Present only as much material as can reasonably fit into the time period allotted. Generally that means no more than 1 slide per minute.
2. Talk at a pace that everybody in the audience can understand. Speak <u>slowly,</u> <u>clearly</u>, and <u>loudly</u>.
3. PRACTICE, PRACTICE, PRACTICE. Ask a colleague to judge your presentation, delivery, clarity of language, and use of time.

4. Balance the amount of material you present with a reasonable pace of presentation. If you feel rushed when you practice, then you have too much material. Budget your time to take a minute or two less than your maximum allotment.

Speakers at departmental seminars often go a few minutes over their allotted time. In most cases, this is harmless. At professional conferences, however, it is essential that all speakers start and end on time. Nothing is more frustrating to the last speaker in a session than to watch the second-last speaker go five minutes over; that is five minutes stolen, and there is no getting it back. If you are chairing a session, enforce time limits strictly; if you are speaking, defer to the chair when he signals that your time is up.

3. The presentation

1. If there is a microphone in the room, use it. If the only microphone is fixed to the podium, then stay at the podium and speak into it. The audience is there to listen to your talk; let them hear it.
2. Never apologize for your slides. More to the point, make apologies unnecessary by creating clear, understandable slides in the first place. If you say, "I know you can't see this, but ..." the reaction of many people in the audience will be "then why bother showing it?"
3. Don't apologize for incomplete results. People understand that research is a continuing process. Just present the results and let the audience judge. It is OK to say that "work is ongoing". If you say "I'm sorry that work is not done", you invite the audience to tune out or wonder why you are talking at all.
4. If, despite your best efforts, you find that you have taken more time than anticipated, it is better to skip whole sections of your talk than to try to squeeze five minutes of material into two. For example, people will take your word for it that simulation results came out as expected. Just say that; rushing through the slides does not make things better.