



New Zealand Mathematics and Statistics Postgraduate
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Tips for Student Talks

NZMASP has been a platform for students to gain experience in presenting their work to an audience. Attendees and winners of the NZMASP student talk prizes have often gone on to win the Aitken prize for best student presentation at the New Zealand Mathematics Society (NZMS) Colloquium and the New Zealand Statistical Association (NZSA) Best Student Presentation award at the annual NZSA conference. Here we have included some tips that could help you get prepared for the talk. Even if you are not interested in the prizes, do your best. The tips are advice from Alex James, Jeanette McLeod and Elena Moltchenova who were plenary speakers in NZMASP13.

Slides: Beamer, powerpoint, ...? Nobody cares. As long as your slides look nice and are informative that is all that matters! Check them in a large room beforehand, can you read everything from the back row? Do all the lines on your graphs show up on a low resolution projector? Do not get carried away with fancy slide effects, revealing things one at a time should aid understanding and not just jazz up a too long list of bullet points. As a rule of thumb no more than two effects per talk. Spell-check!

Equations: Research (Fawcett and Higginson, 2012) has shown that citations decrease as equations per page increase. The same applies to talks. Try to use English words not mathematical symbols.

Style: Chatty talks are nice but do not sacrifice mathematical formality to achieve this. Experienced speakers who do this took years to perfect it and started off by giving formal talks.

Facilities: Videos and movies are great but check they work on the conference system and have a back up plan if they do not. Drawing on a whiteboard usually comes across as poor preparation, as though you could not be bothered to prepare a decent slide. We strongly recommend you avoid doing it unless there is a true pedagogical need.

Less is more: Do not include your entire thesis. The aim of a talk is to enthuse, educate and entertain your audience. Many good speakers choose one (often small) concept from their research and explain this to the audience. If your research topic is particularly obscure this may need to be a fairly basic concept!

Audience: Remember to adapt your talk to your audience. A graph theory conference participant has a different background to a more general conference participant. Be sure to define your terms! For more general audiences you should spend some time motivating your work. This is especially important for pure maths topics.

Preparation: Good talks take time to prepare. It is very obvious to your audience when you have just thrown together a talk at the last minute. They have taken time from their busy schedule to listen to you. It is quite insulting when you have not taken a similar amount of time to prepare.

Body language: Enthusiasm is a wonderful thing ☺ If you do not look interested why will your audience be interested. Look at the audience, make eye-contact with people. Try not to spend your whole talk talking to the whiteboard, screen or floor.

Laser pointers: These are a curse to the nervous, they make it obvious if your hand is shaking! For smaller rooms consider just using your hand to point instead. If you do use one, use it sparingly, do not wave it around the screen constantly, it can make people feel seasick.

Questions: Answering questions after your talk is important. But if you do not know the answer, it is fine to say so and to follow up later. Do not forget to thank the commenter.

Acknowledgements: Research is rarely the product of a single person. Who is your supervisor? Who funded you? Include references and make it clear what your contribution is.

Reference:

Tim W. Fawcett and Andrew D. Higginson. Heavy use of equations impedes communication among biologists. *Proceedings of the National Academy of Sciences of United States of America*, 2012, 109(29), 11735-11739; published ahead of print June 25, 2012, doi:10.1073/pnas.1205259109

Good luck! ☺