How to do well in a student seminar

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In this document, I describe some strategies that in my opinion are useful when you participate in a student seminar (at a university). I do not claim that this document covers everything that is important for doing well as a participant of a seminar. However, if you have any suggestions what to add, or you have any comments or feedback in general, I am happy to hear from you: andreas.wiese@tum.de.

- **Select a paper** that you find interesting. Probably the lecturer of seminar gives you a list of papers and you need to choose one paper from this list. Look at the paper titles and read at least the abstracts of the papers that look interesting to you. Then pick a paper that you like. In particular, you will spend a lot of time reading the paper, understanding its details, and preparing a presentation about it. Therefore, you do yourself a favor if you have a paper that you find interesting. Resist the temptation to pick a paper just because it is shorter than the others. Chances are that this (relatively short paper) is the short conference version of the paper in which many details are omitted (proofs in particular), and that there is a longer full version somewhere. Also, note that if a paper is written in two-column format, typically it has more content per page than a paper in single-column format.

- **Read your paper early.** Chances are that you haven’t read many scientific papers in detail when you participate in the seminar. Reading a paper takes time, in particular if you want to understand all its details. Take your time for this. It is recommended that you start reading your paper once it has been assigned to you.

- **Really, start reading your paper early.** Yes, it can be that you will give your talk only towards the end of the semester and that you still have a lot of time until then. Start reading your paper early anyway. When you think of preparing your seminar talk, think of it as a long walk, rather than a sprint. So it is good if you go slowly but steadily and take your time to let the content of your paper sink in, rather than trying to rush and finish everything in a few days.

- **Meet up with your advisor early.** Make a first appointment with your seminar advisor early, even if your talk is still some time ahead. Before you meet, make sure that you have some decent understanding of the paper. It is not necessary that you have understood every detail of it already, but you should have a good understanding of what is going on. During the meeting, you can of course ask any question about the content of the paper, including steps the proofs that are unclear to you. But your advisor will also discuss with you how you could present your paper well, what aspects of it you should focus on, which are the most important results etc. Probably your advisor has a lot of experience in giving scientific presentations and you can take advantage of this.

- **Practice your presentation** in front of other people. These can be friends of yours, fellow students, and in particular other participants of the seminar. Ask them for feedback after your presentation. This can be very useful for you in your actual presentation in the seminar. Don’t forget to tell them before your practice presentation that you will ask them for feedback, so that they can take notes during your talk.

- **Ask questions** during the other presentations. The point of the seminar is not just that every student gives a presentation, but also that you learn from the presentations of the others. Therefore, if there
is something that is unclear to you while a fellow student of yours give a presentation, please ask!
It is very unlikely that the presenting student will fail the seminar because you ask a question that 
he/she cannot answer. On the other hand, if you cannot follow the presentation because something 
important is unclear to you, chances are that for other participants the same point is unclear. Also, 
for a presenter it is much nicer if the people in the audience understand what she/he is talking about: 
when people get lost during your talk they might do things like playing with their cell phones, avoid 
eye contact with you etc. and in my opinion it is better if instead they ask what is unclear to them.

I wish you all the best in your next seminar!