

Master Guidelines

Prof. R. Harlander

Formalities

- Typically, you will join my group twelve months before you submit your thesis. The first six months are the *Master's Practical*, where you acquire the skills needed for your Master's Thesis.
- After these first six months, you present what you have learned during the Master's Practical in the *Master's Seminar* (I also refer to it as "midterm talk"). It will not be graded, you can only "pass" or "fail". All members of TTK will be invited to attend, but most of the time, only the members of my group will attend. The Master's Seminar should be about 30 minutes long, plus time for discussion. The target audience are your fellow students: explain to them what your thesis is about. See the [Guidelines for Talks](#)¹ on how to prepare and present a talk.
- After the Master's Seminar, you need to register your *Master's Thesis* at the ZPA. The registration form will be sent to me by the ZPA. I will fill in the title, the start date, and the second referee of your thesis, and send it back to the ZPA.
- After six more months, you need to submit your thesis at the ZPA. It is your responsibility to do this in time. Please take into account the [Guidelines for Theses](#).
- The ZPA will then send a copy of your thesis to me, together with the registration form. The ZPA will also send a copy of your thesis to the second referee.
- Your thesis will be evaluated and graded by the second referee and by me.
- After handing in your thesis, you need to give the *Master's Defence Colloquium*. It should take about 40-45 minutes, plus time for questions. All members of TTK will be invited to attend, but usually only few senior people will attend. The target audience is your second referee: you can assume that he/she knows all of the theoretical basics, but not the specifics of your thesis. Please take into account the [Guidelines for talks](#).
- Your Master's Defence Colloquium will be graded by me.
- Before I submit your grades to the ZPA, I will give you feedback on them.

¹ <https://web.physik.rwth-aachen.de/user/harlander/teaching/guidelines>

Supervision

- Typically, we meet once a week.
- Most importantly: Always be prepared for these meetings: bring along *all* relevant documents, papers, and notes.
- Briefly recapitulate the status of your work. Remember that — unlike you — I have not been working on your project full time for the past week, so briefly remind me of the details at the beginning of each meeting.
- Report on progress: Did you make progress? If yes: show me results. If not: show me how you have tried to make progress. Have you read literature? Which one?
- Take notes of what we discuss and bring these notes to the next meeting; have you worked on the topics that are in these notes?
- Any actions that you take concerning your thesis should be coordinated with me. For example, before you contact an external author of a paper or a computer code, discuss it with me. Also, let me know if someone contacts you about your work.

Seminars

- TTK Theory Seminar: Thursdays, 16:30h, 26C 402.
- PhenoChat: Fridays (bi-weekly), 12:30h.
- RTG-colloquium: Tuesdays (bi-weekly), 16:30h, Physik-Hörsaal.
- Physics Colloquium: Mondays (bi-weekly), 16:30h, Physik-Hörsaal.
- From time to time, there will be special seminars, midterm talks, master's colloquia etc., which are announced through the mailing lists (see below).
- *Attend all of these events.* This holds in particular, but not only, for events announced by me. If you feel that the topic of some event is thematically far away from your interests, ask me if it is ok to skip the event.
- If, for some reason, you cannot attend a seminar, let me know in advance.

Account and Mailing Lists

- Get a TTK computer account (contact: Yannick Klein, 28A 417).

- Make sure you are on the relevant mailing lists, in particular: tpe@lists.rwth-aachen.de (contact: Anke Bachtenkirch).
- I will invite you to the communication platform mattermost. Outside of the personal meetings, use this platform to contact me. Make sure to set the notification options of mattermost in such a way that you do not miss any of my messages.

Registration

It is your responsibility to register in time for the Master's Practical, Master's Seminar, and Master Thesis.

Social interaction

Be polite and respectful to everyone in the department. The proper default way to address a professor is by his or her last name, with "professor" in front of it, so for example: "Professor Harlander, can I ask you a question?". For me personally it is fine to use "Herr Harlander", both in English and in German. Do not use "Mr." or "Mrs." to address a professor or a PhD.

Guidelines

There are specific guidelines for theses and talks. Please read them carefully and take them into account when preparing your thesis, your Master's Seminar, or your Master's Colloquium.