



Guidelines for External Referees of Doctoral Theses at the Department of Physics and Astronomy, Heidelberg University

We would like to thank you in advance for taking the considerable effort to be an external referee for a doctoral thesis in our department. Your work will be an important contribution to the continued success of our graduate education. These guidelines should help you to understand the procedures applied in the process towards a doctoral degree. Our dean's office will be glad to provide any further information, if required.

As a referee, you are usually expected to contribute to both of the steps of the examination, the written evaluation and the oral exam. Written reports are to be provided by 2 referees (of which you are one). The oral exam is conducted as a closed session with the candidate, the 2 referees as well as 2 other professors.

The Written Evaluation

The candidate should provide you with a written version of the thesis typically 10 weeks before the oral exam is scheduled to take place. You will have 4 weeks to write your report, which needs to be submitted to the HGSFP by the date communicated to you by the candidate. It is important that the deadline for the written report is met because both the thesis and the written reports of the 2 referees will be made available to faculty members for their consideration before the oral examination takes place.

The thesis represents the final results of the dissertation work and cannot be altered after the referees' reports have been obtained, with the exception of correcting minor spelling mistakes.

Your written report should consider the scientific value of the work performed and the quality of the written presentation. A doctoral thesis is expected to be an original piece of scientific work that has been performed by the author. The results of the thesis may have been published before the evaluation. Otherwise the results should be of such a quality that a refereed publication can be expected according to your judgement.

Your report should contain a grading in the range from 1 to 4 in steps of 0.5. The meaning of the gradings is:

1 (very good), 2 (good), 3 (satisfactory), 4 (passed)

Feel free to contact me if you are not familiar with the typical grading scale at the department.

In very exceptional cases you may recommend that the thesis merits a "distinction (summa cum laude)". This would have to be clearly stated in your report. For a distinction to be awarded, this recommendation has to be made independently by both referees and the oral exam has to show a matching performance. Please consider the recommendation for a distinction very carefully, as only the best 5% (among typically 100 theses per year) receive this very prestigious grade.

Please mail your signed report to the office of the HGSFP. In case of deadline problems, a scan of the original letter can be sent by e-mail.

Oral Examination

The oral examination usually takes place in the departmental offices. Online participation is possible. If you do travel, your travel costs will be covered by the candidate's research group. The candidate will have agreed with you on the date for the oral examination and you will receive an e-mail invitation from the department ahead of time. As a rule, the candidate presents him/herself in front of the examination committee consisting of the 2 referees and 2 other professors. The exam begins with a 20-30 min. blackboard presentation¹ followed by about 30-45 min. of questions and answers. Questions typically start with thesis related issues, then extend to more general questions on physics and/or astronomy in the thesis context and finally come to subjects outside of the thesis work. You are invited to ask questions at any stage during the exam but of course your input is mostly needed for your special field of work.

At the end of the oral examination, grades are given by the 4 individual examiners using the same grade scale as was used for the written report. The final grade is calculated according to a procedure defined in the regulations for doctoral theses at Heidelberg University.

Let me thank you again for doing this important service to our department.

I do hope that you enjoy the science and the atmosphere at the oldest German university.

Prof. André Butz, Dean

¹ The exam is divided into 2 parts: a) the presentation of the thesis by the candidate, and b) the oral examination. The former may be public if application by the candidate is made in this respect and if a suitable room is available. The public is not admitted to b).