Master in Physics and Astronomy

Procedure for the evaluation of the master thesis

Education council of 5 March 2013

The evaluation procedure applies from academic year 2013-14 onwards.

For the academic year 2012-13, which is a transition year, the described procedure for the evaluation of the parts B (manuscript) and C (public oral defense) applies, and feedback will be given as described in part V. For the evaluation of the research work, the procedure below will be used as a guideline.

I. The evaluation of the master thesis consists of three parts:

   A. Research work: Dedication and work during the year

      Weight = 20% of the global score
      This score is given by the promotor (together with co-promotor)

   B. Manuscript

      Weight = 50% of the global score
      This score is given by the promotor (together with co-promotor) and the two reading committee members

   C. Public oral defense

      Weight = 30% of the global score
      This score is given by the full jury, being the total of the jury members of all master theses which were defended in a certain academic year. The president and secretary of the examination committee are de facto member of the full jury.

      The global score is determined by the full jury during the closed session following the public defense.

II. Evaluation of the research work

      There are three fixed moments of contact between the student and the promotor (and co-promotor). These three moments guarantee a continuous and direct feedback to the student. The final report and the corresponding evaluation table are drawn up by the promotor (and co-promotor) and form the basis for the global evaluation of the research work. The promotor (and co-promotor) give the score for the research work. The agreement and the two evaluation forms are also to be signed by the student.

      The three aforementioned contact moments consist of the following activities:

      1) Agreement between the student and the promotor

         The student draws up an agreement together with the promotor (and co-promotor) according to the template in appendix A. This is submitted by the student on November 1st at the latest to the president of the examination committee. In the course of the month of November, all proposals are submitted for approval to the examination committee. After approval of her/his proposal, the student is to submit the registration form to the secretariat of the faculty by December 1st at the latest.
2) Intermediate evaluation research work

The intermediate evaluation happens at the start of the second semester, preferentially in the weeks 23-24 of the academic calendar. The student and promotor (and co-promotor) together fill out the evaluation form according to the template in appendix A.

3) End-evaluation research work

In the week preceding the examination period at the latest, the promotor (and co-promotor), together with the student, fill out the final evaluation form according to the template in appendix A.

In addition, the promotor fills the evaluation table below, gives a score for the research work, and writes a short motivation. In the case of a co-promotor, the promotor and co-promotor fill these documents together, and give a score together.

In the week before the examination period, the promotor submits the form, which was drawn up together with the student, as well as the evaluation table, to the president of the examination committee. This last one determines the score for the research work.

<table>
<thead>
<tr>
<th>Evaluation research work and dedication</th>
<th>Failed (0-9)</th>
<th>Passed (10-11)</th>
<th>Sufficient (12-13)</th>
<th>Good (14-15)</th>
<th>Very good (16-17)</th>
<th>Excellent (18-20)</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning, organisation</td>
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<td>Technical skills</td>
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<td>Critical scientific attitude</td>
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<td>Competence for collaboration</td>
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<td>Dedication, motivation</td>
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<td>Initiative, creativity</td>
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<td>Independence</td>
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<td>Global score research work:</td>
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<td>Motivation:</td>
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Date
Promotor
Co-promotor

III. Evaluation of the manuscript

The evaluation of the manuscript is made by the reading committee, consisting of the
promotor and two reading committee members. The appointment of the reading committee members follows the regulations of the faculty.
The members of the reading committee each fill out the table below, and send it three working days before the oral defence to the president of the examination committee. In the case of a co-promotor, the promotor and co-promotor fill the evaluation form together. The score for the manuscript is the average of the scores given by the reading committee members.

| Scientific aspects manuscript | Failed (0-9) | Passed (10-11) | Sufficient (12-13) | Good (14-15) | Very good (16-17) | Excellent (18-20) | NA |
| Problem description and context | | | | | | | |
| Description own work | | | | | | | |
| Conclusion process | | | | | | | |
| Knowledge literature, depth | | | | | | | |
| Cohesion, logical build-up | | | | | | | |
| Creativity | | | | | | | |

| Style aspects manuscript | Failed (0-9) | Passed (10-11) | Sufficient (12-13) | Good (14-15) | Very good (16-17) | Excellent (18-20) | NA |
| Quality of the text, language | | | | | | | |
| Structure of the text and syntax | | | | | | | |
| Quality of the tables and figures | | | | | | | |
| Bibliography | | | | | | | |

Global score manuscript: /20

Motivation:

Date
Signature reading committee member

IV. Public oral defence

The public oral defence is compulsory.

During the oral defence, every member of the full jury fills the table below. The president and
secretary make an average from these, between the public defence and the closed session. This is discussed during the closed session. The full jury gives the global score for the oral defence.

<table>
<thead>
<tr>
<th>Evaluation oral defence</th>
<th>Failed</th>
<th>Passed</th>
<th>Sufficient</th>
<th>Good</th>
<th>Very good</th>
<th>Excellent</th>
<th>NA</th>
</tr>
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<tbody>
<tr>
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<td>(0-9)</td>
<td>(10-11)</td>
<td>(12-13)</td>
<td>(14-15)</td>
<td>(16-17)</td>
<td>(18-20)</td>
<td></td>
</tr>
</tbody>
</table>

Presentation, timing, language
Positioning in the research context
Emphasis on core points, conclusions
Answers to questions
Critical mind during discussion

Global score oral defence: /20
Motivation:

Signed by the president and secretary of the examination committee

V. Final score

The final score is based on the weighted sum of the scores for the three evaluation criteria:
- dedication and work during the year: 20%`
- manuscript: 50%
- presentation and defence: 30%

VI. Feedback to the student

The feedback about the research work consists of the agreement, the mid-term evaluation form, and the part of the final evaluation form which is also signed by the student.

The feedback about the manuscript and the oral defence is done using the feedback form which is drawn up by the full jury during the closed session after the defence.

The three feedback forms are bundled in a feedback report. The student can request a copy of this feedback report from the president of the examination committee.

Feedback form: research work

The feedback about the research work consists of the agreement, the mid-term evaluation form, and the part of the final evaluation form which is also signed by the student. These three forms are co-signed by the student.
Feedback form: manuscript

Attributed score: / 20

Content:
  * strong points:
  * weak points:

Form:
  * strong points:
  * weak points:

Feedback form: oral defence

Attributed score: / 20

Presentation:
  * strong points:
  * weak points:

Answering of the questions:
  * strong points:
  * weak points:
Appendix A: template forms for follow-up and evaluation research work

A.1 Agreement between the promotor, (co-promotor) and student

Temporary title:

Goals:
- basic goals
- advanced goals

Relevance of the goals in the current research activity:

Is the research embedded in a larger project or a long-lasting collaboration?

Used methodology and techniques:

Example:
- Literature study:
- Lab work:
- Software development:
- Theoretical calculations:

Agreed workplan:

Date:
Signature promotor:
(Signature co-promotor)
Signature student:

A.2 Mid-term evaluation

Temporary title:

Is the thesis moving forward as expected?

Was a re-orientation of the goals done during the work?

If yes, for what reasons?

Which techniques and methodology were used?

Is a change needed of the working plan?

If yes, motivate and describe the new work plan

Remarks from the student:

Date:
Signature promotor:
(Signature co-promotor)
A.2 End evaluation

Title:

Did the student reach the goals?

Was there a re-orientation of the goals during the work?

If yes,

- Motivate
- Was this brought forward by the student?
- How relevant are the changed goals in the current research activity?

Which techniques and methodology are being used?

Was the latest work plan followed?

Remarks from the student:

Date:
Signature promotor:
(Signature co-promotor)
Signature student: