Guidelines for defending a licentiate thesis

(most recent update 2014 09 02)

Before:

When time approaches a Licentiate seminar, the PhD-student and the supervisor (SV - typically the main supervisor - MS) *first* establish with the <u>full</u> thesis-group (TG) that the achievements required for a Licentiate are likely to be fulfilled.

Requirements:

This includes course points of at least 40 hp, an introduction to the thesis of 30-60 pages, and typically 1-2 research papers, in total equivalent to 120 hp of credits (corresponding to 2 years of full time studies). These 40 hp include the 7.5 hp that can be given for a Literature review - which is typically equivalent to the thesis introduction itself. A paper submitted/accepted to an international refereed journal, where the PhD-student is first/lead author, is normally the core of the thesis. Other equivalent research achievements are conceivable, but it is important that the student has conducted a major part of the research presented, and this contribution should be spelled out explicitly in the thesis introduction. The bulk of the scientific work presented in the Licentiate thesis should have been conducted in the course of the PhD-programme. A Licentiate thesis needs to be orally presented in an open seminar with a dedicated examiner and examination-group.

Once the thesis-group endorse the idea to proceed towards a Licentiate seminar, the PhD student and MS should contact the Director of Graduate Studies (DoGS) with a short synopsis (title, abstract, included papers) and initial suggestions for examiner and other committee members (including a substitute). This informal inquiry is done already prior to contacting the examiner or the other committee members. This should be done no less than ten weeks before the anticipated date of the seminar.

Examiner:

The work of the main examiner (sometimes called the opponent) is to examine the licentiate thesis and also function as opponent at the licentiate seminar. The examiner must have a PhD and may not have published or collaborated with the candidate or the supervisor in the last five years. Exceptions can be made - by the director of the department (Prefekt) for publications or collaborations outside the subject matter of the licentiate thesis. The examiner at the Lic seminar should not later be considered as opponent or committee member for the PhD defense. Also the other committee members should be different at these two occasions, to ensure maximum independence.

The grading is done by a committee consisting of the examiner, one researcher with PhD from within the Department (not any of the supervisors) and the DoGS or his/her substitute. Note that the examiner is part of the committee and examination for the Lic - which is not the case for a PhD defense. Neither the committee members nor the chair of the seminar (which is also often the DoGS) should have published or collaborated with the candidate or the supervisor in the last five years. At least one of the committee members should be Docent or equivalent.

The DoGS will then quickly inquire with relevant parties (the thesis-group/director) to ensure that the procedure can start in earnest. The DoGS will also investigate the formal merits of the suggested examiner and committee members, and check for eventual conflicts of interest. The Director has delegated to the DoGS to decide on examiner and committee members, i.e., the decision is taken by the DoGS and not by the supervisors.

The Department normally pays travel costs for the examiner and committee members. This normally applies to travel within Sweden. For international committee members the Prefekt need be consulted.

The MS contacts examiner and committee members to ask for availability. If positive, the supervisor should submit a formal suggestion for examiner and committee to DoGS, using the available form (on internal wiki). The DoGS approves the examiner and committee and informs the Prefekt via email. This is to be done at least 8 weeks before the proposed Lic seminar date. If there is no unanimous decision to allow for a Licentiate seminar, the final decision to support (or not) is taken by the Prefekt, who will also inform the student and motivate this decision.

For practical reasons, the DoGS can act as both committee member and chair the session. We do not encourage using the mentor in the committee - but allow for having the mentor as back-up member for the committee, since this person is relatively unbiased and well acquainted with the thesis subject.

At least <u>four weeks</u> before the seminar, the Thesis is sent to the examiner and to the other committee members. This is done by the student. Please cc: also the supervisors and the DoGS.

The DoGS writes a formal letter to the committee members to inform them about the formal procedures, and urge them to contact the department (DoGS) in case of any further questions. The letter explains that it is of importance to inform the DoGS if there are any major concerns about the quality of the thesis of such a degree that a failure to pass the exam is foreseen. In such cases it may be better to postpone or cancel the defense. If the DoGS is made aware of such concerns,

he/she will immediately contact the prefekt and MS. A draft of such a mail to the examiner is attached to this document for completeness.

The examiner/opponent is also informed that a Lic-seminar typically consists of the PhD-student giving a talk on the thesis subject (40 minutes) followed by a series of questions by the opponent (about 20-30 minutes) after which the committee and general audience may also ask questions. The defense is chaired by a chairperson, often the DoGS.

The date is set to ensure the student, the MS, DoGS, examiner and other committee members can all attend. The room is booked and decided by the Department, but it is the responsibility of the student to make sure this is done and that the time and place do not conflict with other departmental activities (see department calender). The student-office is the place to contact for this. Date should be set within the dissertation semester (15 august - 15 June); in fact 3 semester weeks are needed between submission of thesis and seminar. In exceptional circumstances the Prefekt can decide on a date for a seminar outside the dissertation period. If a reception is planned (this is the responsibility of the student/MS) this should also be coordinated with Student-office.

The PhD-student should upload the thesis on DIVA, and make sure the Lic seminar is properly announced on the AlbaNova agenda system and on the Department web-page. At least 3 weeks before the seminar, the PhD-student is also expected to circulate the Thesis to a wider community, including alla@astro.su.se. Put a paper copy in the department library, and a paper-announcement of the seminar outside the reception on floor 3 at AlbaNova (or equivalent).

During defense/seminar:

The chairperson welcomes PhD-student, opponent, committee, supervisors and audience and explains the procedures:

The PhD-student presents the thesis (about 40 min). Opponent is invited to ask questions and a discussion takes place. Committee is invited to ask additional questions, and finally the same goes for the audience. Chairperson closes the session.

Opponent and committee members withdraw to grade the Thesis. The thesis can be graded by Pass or Fail. One member of this committee is elected chair of the committee and signs the paper provided by the DoGS. The supervisor may be present during the committee's discussions, but not when the actual decision on the grade is taken. The grade is decided by vote.

The grade is announced directly after the seminar. The committee typically meets up with the PhD-student at the department and the selected chair of the committee announces the grade.

After defense/seminar,

The PhD-student need to apply formally for a Licentiate-degree using the correct form. In LADOK you need to explicitly specify that all requirements for a Lic degree have been fulfilled. After obtaining a Lic-degree, the student will qualify for being transferred to level 2 in the PhD student salary scale. The student shall inform the student-office and the director when the degree has been awarded.

Letter to examiner:

Dear XXX.

We are very happy that you have agreed to be the official external examiner (sometimes called `opponent´ in Swedish) for the Licentiate seminar of XXX on XXXday XX XX. This letter is intended to inform you about the procedure.

The idea of the Licentiate seminar in Sweden is that the candidate presents his/her thesis publicly in front of a committee who afterwards decides whether to pass the candidate or not. To question the candidate at an expert level, an external specialist is invited, the examiner. You could say that the examiners task is to let the candidate prove her/his worth and allow the committee to decide whether a Licentiate degree is deserved. The process could be compared to reviewing a paper, but communicating with the author directly. The committee consists, in addition to the examiner, of two persons (plus one back-up) and are typically not all experts in the field of the PhD. In this case, the committee consists of Dr. XXXX and Dr. Jesper Sollerman (jesper@astro.su.se, Director of Graduate studies - who also acts as chairperson).

At least 3 weeks before the seminar, the Thesis will be sent to you. We would very much appreciate if you then immediately can take at least a quick look at the content. If any serious concerns regarding the thesis is raised, to the point when a failure to pass the exam is not unlikely, the examiner or committee members should immediately contact the Director of Graduate studies (Jesper Sollerman). If this happens it could be better to postpone the actual seminar.

The programme of a typical Licentiate seminar at the Department of Astronomy is as follows. First a presentation of the thesis results is given by the candidate (about 40 minutes). Since there are sometimes also friends and family in the audience, it is nice if at least some parts of the introduction are understandable for a lay audience. Next the examiner is expected to question the candidate about the content of the thesis. The typical thesis consists of an introductory part and (p)reprints of paper(s).

Your questions can be about both these parts, however, since most of the scientific work is in the papers you could dedicate most of the time to questions about them. This part of the defense usually takes some 20 minutes (but sometimes longer) and is the most important part of the whole procedure. You are in charge of it and it is up to you to decide when to stop. After this the committee members will each ask one or a few questions, and finally questions from the audience are invited (normally not many are asked). This concludes the public part of the defense.

The committee (including the examiner), the supervisor and the chair person then convenes to evaluate the thesis and the defense. You will be asked to present your impression both of the contents of the thesis as well as how well the candidate was able to answer questions about his or her work. The supervisor is there to explain which parts of the work were actually done by the candidate and give a general impression of his/her abilities. After all views have been presented, the supervisor leaves the room and the three members of the committee officially decide on whether the candidate passed the defense or not. After this you are typically welcome to join everyone else for some snacks, at which occasion the committee announces the result.

Very welcome and please let me know if you have any questions. Note that we will take care of the travel expenses.

Best wishes, Jesper Sollerman