Brief information to external examiners (faculty opponents) concerning doctoral thesis defence within the Faculty of Science.

The doctoral thesis defence (dissertation) in Sweden is a public event. The audience consists normally of staff, colleagues and family of the respondent. Always present is the respondent, the external examiner (faculty opponent), a chairperson of the public part of the event and the examining committee, normally consisting of three persons.

The dissertation normally contains the following 8 steps:

- 1. The chairperson opens the dissertation by presenting the *external examiner*, the title of the thesis, the respondent and the examining committee.
- 2. The respondent continues by accounting for misprints and other corrections, if any.
- 3. The *external examiner* gives a short, about 15 minutes, summary of the work presented in the thesis. This summary should include an account for the role of the work in the scientific area of the thesis.
- 4. The respondent gives an about 15 minute's long presentation which could be a summary of the highlights of the thesis or could cover a topic in the thesis chosen by the external examiner. The *external examiner* should inform the respondent in advance of the topic chosen if any.

Concerning point 3 and 4: The exact way this is done (order, length, topic etc) may be decided upon by the supervisor and the external examiner.

5. The dissertation continues with the major discussion between the external examiner and the respondent, during which the *external examiner* critically scrutinizes the work presented in the thesis, including the relevance of the work, the methods chosen to solve the problems, and the interpretations of the results. The objective of the discussion is to invite the respondent to demonstrate her/his mastery of the subject of the thesis and ability to discuss it at a high level. The discussion lasts until the examiner is satisfied and all relevant aspects of the thesis have been sufficiently presented, a typical time may be about 1.5 hours. The respondent should be able to answer the questions and criticisms of the *external examiner*. If the thesis is a summary of papers with several authors, the role of the respondent in the work must be distinguishable. Before the *external examiner* closes her/his discussion, she/he may summarize her/his opinion of the thesis.

- 6. The chairperson invites for further discussion and questions from the members of the examining committee and finally from the audience.
- 7. The chairperson closes the public part.
- 8. In a following closed session the examining committee, selected by the Board of the Faculty, meets to decide whether the respondent should be passed or not. The *external examiner* and the supervisor are allowed to participate in this meeting, but have no vote in the final decision. That means that the *external examiner* and the supervisor are not allowed to be present when the committee takes the decision.