**Guideline for 1st step report**

You are working in research laboratories under the supervision of different PIs who have different supervision styles but also different styles when it comes to write research papers. This also leads to somewhat different requests when it comes to how they would like that you structure your 1st step or master thesis report. It is not our intention to interfere with the teaching styles of your PIs; nevertheless here are some general guidelines for the report.

Abstract (typically 200-300 words). An abstract is difficult to write because it has to be self-sufficient and should properly put into context and highlight the most important aspects of the work. To be written at the very end.

Introduction. There is no need to write a long introduction on a broad topic. What is needed is enough information to put your work into the scientific context. The introduction should allow the reader to understand what is known about the topic and why the research aims are important. End with a paragraph that clearly links the introduction to the results section by briefly describing the goal(s) of the work you have been carrying out and the experimental strategy.

Results. Describe the results of your experiments. Remember the reader only sees what is in your figures and /or tables. Therefore it is important to exclusively describe what is shown in the figures or tables that you present (not other experiments that you do not show).

Figures, Tables and legends. Figures must be clear and explicit, the reader must easily find all information (e.g. define all axis in a graph) to understand what he is looking at. A careful description in the figure legend is important to allow the reader to understand the experiment. It also allows you not to write details (that might be very important) in the results section that potentially break the flow of your text. Make sure that Figures have legends (below) and number the figures according to their appearance in the text. Tables have a title (above), and can have footnotes (below). Number the tables according to their appearance in the text.

Discussion. Interpretation of the results with respect to the research goals (project goals), and putting them in the wider context of the current state and the open questions of the field. Do not just repeat the result section!

Materials and methods. Standard procedures can be referenced without having to describe them in detail. More complex methods that are key to the project should be explained in sufficient detail that allows proper understanding and repetition of your experiments. Include a description of statistical treatment of the data.

References. List all cited references with a consistent nomenclature that allows to find unambiguously the referenced publications (authors, title, year, journal names and pages).

Christian Fankhauser, October 2015