P51a — Instructions For First Lab Report (Draft)

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N.B. These instructions are subject to change as Lab2 and Lab3 are made available.

1 Submission

Assignment 1 Submission Deadline: 23 February 2023 12:00 Noon Submission: submit through moodle, as a single pdf file. Maximum file size 20MB.

The first lab report is intended to summarise your experience over the first three labs. While the experiments are conducted in teams, students are required to prepare their reports individually.

2 Structure

The report should be written according to the following guidelines:

- A summary of lab 1, between 2 and 4 pages long, single column.
- A summary of lab 2, between 2 and 3 pages long, single column.
- A summary of lab 3, between 2 and 3 pages long, single column.
- Graphs and figures, referenced from within the text, not counted toward page length.
- A printout of your Jupyter notebooks, from all three labs.

Minimum font size is 10pt. Use the template provided for formatting. The list of sections and their titles can be changed.

Points will be deducted for exceeding the page limit.

3 Contents

The first report is intended to demonstrate that you have mastered the tools and methods taught and that you are able to analyse and discuss your results. Therefore, your report should focus on analysing your results. As you are attaching a printout of your notebooks, there is no need to detail each and of your results. Instead, focus on the following aspects:

- Detail any specific difficulties that you have encountered.
- Discuss surprising or unexpected results. Explain what led to these results.
- Compare and contrast different tools and methodologies.
- Consider where your measurements were affected by the tools, and discuss where you exhibited measurement artifacts.
- Explain how you can compensate for different tools deficiencies, once you have measured them.
- Discuss the relations between Lab 2 and Lab 3, and how lessons learned from Lab 2 affected Lab 3.

The plots provided as part of the Jupyter notebook are intended to provide a sketch of the results for debug purposes. You may find it useful to add your own graphs, e.g., using different scales or overlapping the results for different experiments. Adding such graphs is optional, but may provide you with important insights while writing your report. When plotting graphs, make sure to use error bars or box plots (according to the experiment).