Stony Brook University
Department of Physics and Astronomy

PHY 121 L99

Title of the Lab

First and Last Name

Lab partner: First and Last Name

TA: TA Name

Experiment Date: 20 August 2022
Report Date: 24 August 2022

Data

Your raw data (measurements you took in the lab) will be in the .xlxs data sheet which you include with your lab report submission. Your TA may require that you present some of the data in the report itself. This is best done in a table such as the one below.

You can make a table in LaTeXusing this nice online table generator, either by importing an excel/csv file, or by inputting your numbers by hand: https://www.tablesgenerator.com/

Table 1 is an example table with some made-up student data!

Student Number	Measured Value of Velocity (m/s)	Error (m/s)
1	10.3	0.2
2	9.7	0.4
3	10.2	0.1
4	9.8	0.3

Table 1: Table with made-up student data of measured velocity and error.

Calculations

Include calculations of important results and uncertainty propagations here. For large data sets you can include only one calculation of each kind. As the semester goes on, you will not need to show steps that you so in your data sheet.

You may include calculations as images of hand-written work at first, but you should learn to use an equation editor of some variety (Word, Google Docs, MatLab, etc).

In LaTeX, equations are formatted very nicely! Here are some examples of

equations or expressions using math:

$$\frac{x^2 e^{-x+5}}{2y} \tag{1}$$

where x and y are variables.

$$x(t) = x_0 + v_0 t + \frac{1}{2} a t^2 \tag{2}$$

is the more familiar position equation, where x_0 is the initial position, v_0 is the initial velocity, a is the acceleration, and t is the time.

Results

Present plots, important results and mention whether your values agree with the accepted (or 'expected') values within experimental uncertainty.
Present the discussion questions and your answers here, as well. Use full sentences but be brief and to-the-point.

Abstract

Similar to the abstract of a scientific paper, this is a summary of the important findings of the experiment. Compare your results (within error) to 'accepted' results or those from other experiments. If they are not consistent, what could be some reasons why? Repeating some of the information from above is appropriate here but stay brief.

References

This section is optional, perhaps even discouraged. We do not regard your lab report as a piece of independent scholarship and so do not require references. Include them only for sources from which you have quoted or paraphrased.

As a rule-of-thumb, if you feel that a source should be cited for something you put in your lab report, it is better to leave it out of the lab report!