A Brief Overview of \LaTeX

The TAs

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Abstract

A tutorial of \LaTeX is presented. The format of a lab report in \LaTeX is discussed. Fronts and greek letters are shown to be within the capabilities of this software. Equations, figures, and tables are also created.

1 Introduction

This is where you write you lab report. You can do all kinds of fun things like Bold, italic, underlined, \textit{a} _\text{subscript}, \textsuperscript{a} _\text{superscript}, and an inline equation \textit{f} (\textit{x}) = \textit{sin}(\omega \textit{t}). I can also write equations separately in their own line.

\[ F = \int \int_0^{\infty} B_\nu d\nu d\Omega \quad (1) \]

And write a multiple series of equations and align the '=' sign for each line.

\[ y = e^x + \sqrt{x} \quad (2) \]

\[ \frac{dy}{dx} = e^x + \frac{1}{2}x^{-1/2} \quad (3) \]

I can also write greek letters is this: \( \alpha \beta \Gamma \delta \sigma \zeta \xi \). Also, \LaTeX uses some special characters to denote things like equations so to display them normally you need to put a \textbackslash before the character (e.g. $, \% ) although the backslash character itself is even more special. You'll probably also want to include figures in your lab report. Figures are tricky business in \LaTeX, but see Fig. 1 as an examaple of how to create and reference them. You can also reference equations: see Equation 1.

2 Another Section

You'll want to break up your report into sections to improve the clarity and structure of your paper.

2.1 Subsections

You can even use subsections if you want.

2.1.1 Yes these exist

Yup.

3 Tables

Table 1 shows how it can organize your results.
Figure 1: A hastily constructed image to show how to include a figure in a lab report.

Table 1: A basic 2x2 table

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Left</td>
<td></td>
</tr>
<tr>
<td>Bottom Left</td>
<td>$x^2$</td>
</tr>
</tbody>
</table>