Lab Report Template

Your Name

Partner Name

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Abstract

Abstract section. Briefly outline what the report covers and state results if applicable. To typeset math inline with text, use dollar signs on either side of your equation: $g = 9.81m/s^2$

1 Theory

Define sections and subsections to organize your report.

1.1 Part 1

You can add figures with descriptive captions and refer back to them later:

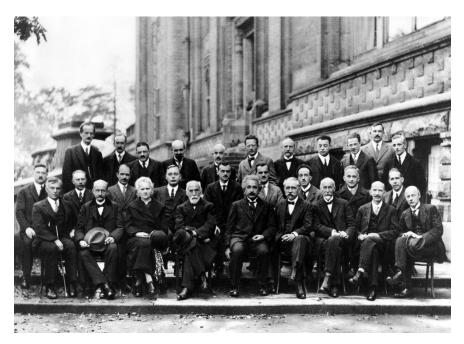


Figure 1: The $5^{\rm th}$ Solvay conference, 1927

Numbered equations can be constructed as

$$\vec{L} = I\vec{\omega} \tag{1}$$

2 Experiment

You can use \autoref to refer back to Figure 1 or Equation 1 automatically.

3 Data Analysis

Might want a table to present data:

Trial	θ_1	θ_2
1	1	2
2	3	4

Table 1: A good table with useful data

I highly recommend using the LATEX table generator to format your LATEX tables. Of course, error propagation will be in here:

$$\sigma = \sqrt{\left(\frac{\partial}{\partial x}\right)^2 \sigma_x^2 + \left(\frac{\partial}{\partial y}\right)^2 \sigma_y^2 + \left(\frac{\partial}{\partial z}\right)^2 \sigma_z^2 \cdots}$$
 (2)

Maybe some weighted mean:

$$w_i = \frac{1}{\sigma_i^2}$$

$$x_{\text{mean}} = \frac{\sum_{i=1}^{N} w_i x_i}{\sum_{i=1}^{N} w_i}$$

$$\sigma_{\text{mean}} = \frac{1}{\sqrt{\sum_{i=1}^{N} w_i}}$$

4 Conclusion

Summary

5 Remarks

remarks