Formal Lab
Hooke's Law

Physics 4A

Connor Darling

Lab Partner: Gabe Ilano

December 2022

Contents

Chapter 1

Purpose

To verify Hooke's law and calculate the spring constant.

Chapter 2

Theory

The force due to a spring stretched (or compressed) a distance Δx from the equilibrium position is given by the following expression:

$\vec{F_s} = -k\Delta\vec{x}$where s = (force exerted by) spring k = the spring constant (in N/m)

Chapter 3

Theory

Chapter 4

Procedure

Chapter 5

Data

Chapter 6

Analysis

Chapter 7

Error Analysis and Procedural Errors

Chapter 8

Conclusion

Chapter 9

Suggestions for Improvement