## Phys-UA 210 Computational Physics Problem Set 01

Sandhya Sharma

September 8, 2023

## Introduction

I am a junior majoring in Physics with a minor in Computer Science. This course is the perfect intersection of my major and minor and also aligns with my interests. I have previously worked in astrophysics research with regards to active galactic nuclei (AGN) to study the relation between AGNs and star formation rates in the host galaxies. Next, I worked in experimental physics to use x-ray fluorescence for elemental analysis of artworks. Both of these research required good amount of computational work that made me realize the importance of having skills that would help in processing data, simulating real-world phenomena and more. I hope this class prepares me to build a strong foundation on computational works that can be helpful in physics research and beyond. Please find my **GitHub account** here: https://github.com/sandhyasharma2059

## Gaussian Curve

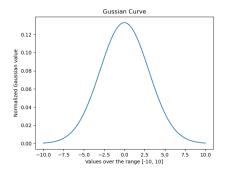


Figure 1: A normalized Gaussian curve