4/26/23, 1:50 PM Gaussian

```
import numpy as np
In [ ]:
         import matplotlib.pyplot as plt
In [ ]: x_axis = np.arange(-100,100,0.1)
         print(x_axis)
         [-100. -99.9 -99.8 ...
                                      99.7
                                             99.8
                                                     99.9]
         mean = np.mean(x_axis)
In [ ]:
         std = np.std(x_axis)
         print(mean,std)
         -0.05000000000567525 57.73501970208048
In []: y_{axis} = 1/(std * np.sqrt(2 * np.pi)) * np.exp( - (x_axis - mean)**2 / (2 * std**2)
         plt.plot(x_axis,y_axis,linewidth=3, color='r')
         plt.show()
         0.007
         0.006
         0.005
         0.004
         0.003
         0.002
               -100
                    −<del>7</del>5
                          -50
                                -25
                                            25
                                                  50
                                                       75
                                                            100
In [ ]:
```