**#1.19.4 has a bug MS says fix in January 2021, note 2 equal signs at install**

pip uninstall numpy

then

pip install numpy==1.19.3

Here is the error:

RuntimeError: The current Numpy installation ('E:\\RCBC\\Python\\Python\_3\_9\_0\\lib\\site-packages\\numpy\\\_\_init\_\_.py') fails to pass a sanity check due to a bug in the windows runtime. See this issue for more information: https://tinyurl.com/y3dm3h86

Plotting

import matplotlib.pyplot as plt

from scipy.io import wavfile as wav

rate, data = wav.read('bells.wav')

%matplotlib inline

plt.plot(data)

plt.show()

OR

import matplotlib.pyplot as plt

from scipy import signal

from scipy.io import wavfile

sample\_rate, samples = wavfile.read('h1.wav')

samples=samples[:,0]

frequencies, times, spectrogram = signal.spectrogram(samples, sample\_rate)

plt.imshow(spectrogram)

plt.pcolormesh(times, frequencies, spectrogram)

plt.ylabel('Frequency [Hz]')

plt.xlabel('Time [sec]')

plt.show()

