

# **DOING PHYSICS WITH PYTHON**

## **QUANTUM MECHANICS**

### **VISIBLE SPECTRUM DISPLAY**

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### **DOWNLOAD DIRECTORY FOR PYTHON SCRIPTS**

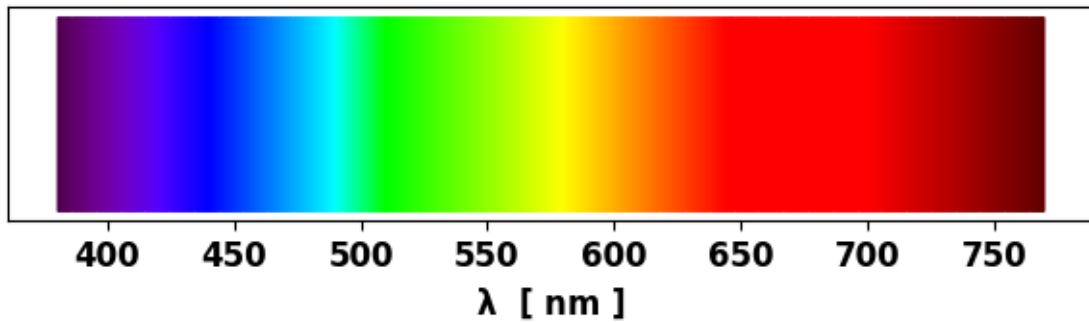
**qmSpectrum.py**

**[GitHub](#)**

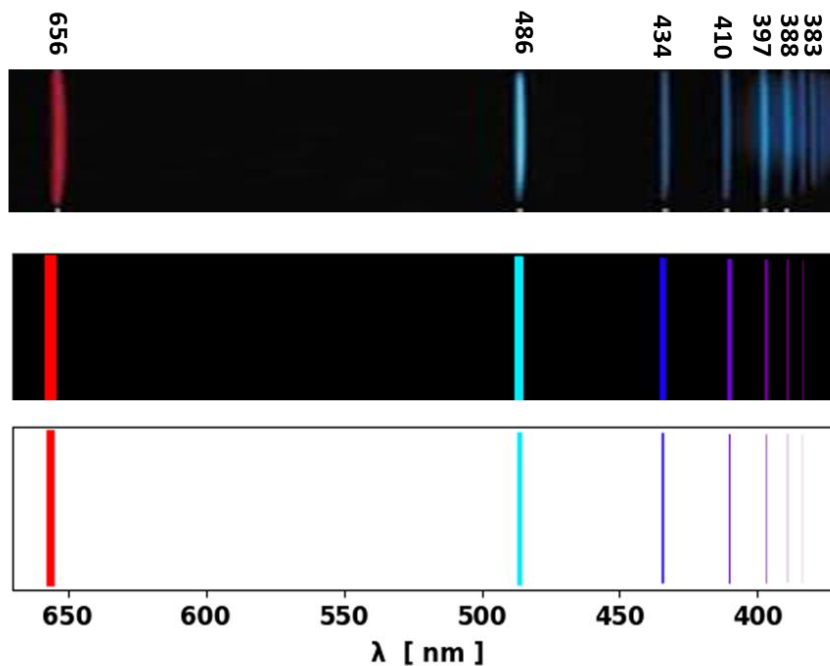
**[Google Drive](#)**

The Python code **qmSpectrum.py** can be used to produce a plot of the visible spectrum for the wavelength range from 380 nm to 780 nm. The script uses the **fill\_between** plot function to give the spectrum. The colour for each wavelength is calculated from the function **colour(wL)** where wL is the wavelength of the light from 380 nm to 780 nm.

The plot of for the visible spectrum is shown below.



## HYDROGEN: BALMER SERIES VISIBLE SPECTRUM



Balmer series spectrum for the visible components. Top is an image of the spectrum and the lower two spectrum are created using the code [qmSpectrum.py](#).

