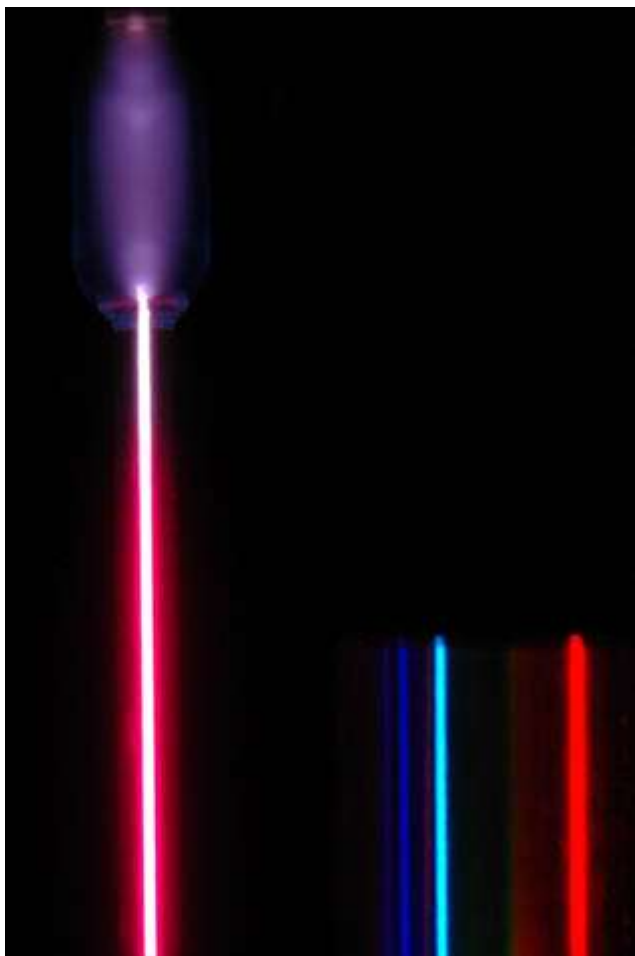


will have wavelength $\lambda =$ nm

and quantum energy $h\nu =$ eV



At left is a hydrogen spectral tube excited by a 5000 volt transformer. The three prominent hydrogen lines are shown at the right of the image through a 600 lines/mm diffraction grating.

An approximate classification of spectral colors:

- Violet (380-435nm)
- Blue(435-500 nm)
- Cyan (500-520 nm)
- Green (520-565 nm)
- Yellow (565- 590 nm)
- Orange (590-625 nm)
- Red (625-740 nm)

Radiation of all the types in the electromagnetic spectrum can come from the atoms of different elements. A rough classification of some of the types of radiation by wavelength is:

- Infrared > 750 nm
- Visible 400 - 750 nm
- Ultraviolet 10-400 nm
- Xrays < 10 nm

[Bohr model](#)

[Measured hydrogen spectrum](#)

[Other spectra](#)

Measured Hydrogen Spectrum

The measured lines of the Balmer series of hydrogen in the nominal visible region are:

Index to HyperPhysics

[Close](#)
[Index*](#)

*The true address of the document is not shown when the index is open.

[Google search of HyperPhysics](#)

- * [acceleration](#)
- * [absorption, quantum](#)
- * [adhesion](#)
- * [admittance](#)
- * [air, constituents](#)
- * [air friction](#)
- * [airbag](#)
- * [airfoil](#)
- * [airplane in wind](#)
- * [albedo](#)
- * [algebra](#)
- * [Alpha Centauri](#)
- * [alpha particle](#)
- * [alveoli of lungs](#)
- * [Ampere's Law](#)
- * [AM radio](#)
- * [angular acceleration](#)
- * [angular displacement](#)
- * [angular momentum](#)
- * [angular momentum, quantized](#)
- * [angular velocity](#)
- * [Archimedes' principle](#)
- * [arctangent problem](#)
- * [aspirator](#)
- * [astronomical unit](#)
- * [asymptotic freedom](#)
- * [atmosphere, constituents](#)
- * [atmospheric pressure](#)
- * [atomic clock](#)
- * [atomic mass unit](#)