Figure 1 is a diagram that outlines the fundamentals of diffraction and interference of light through a crystal lattice. As seen in the figure, light that reflects of with the incidence with respect to the normal as used in optics).

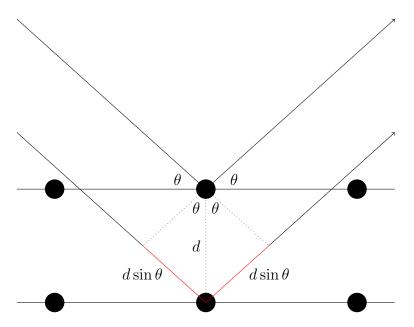


Figure 1: Diffraction of X-rays by a crystal lattice.

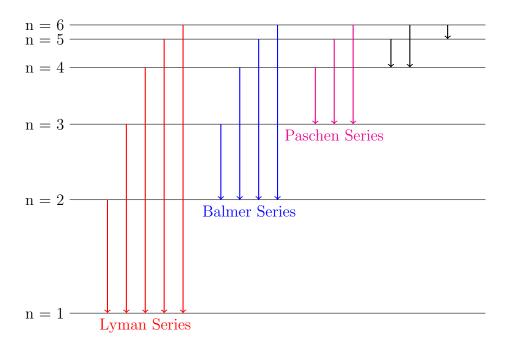


Figure 2: Energy level diagram for the hydrogen atom.

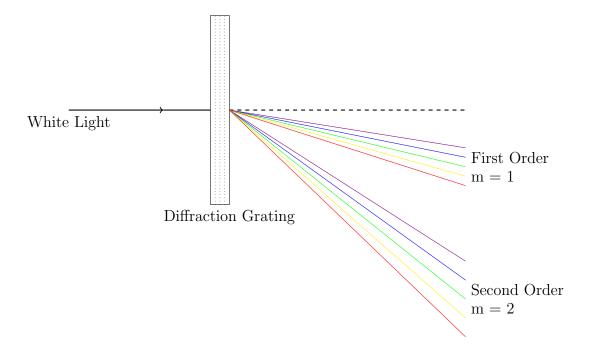


Figure 3: Diffraction of light though a grating.