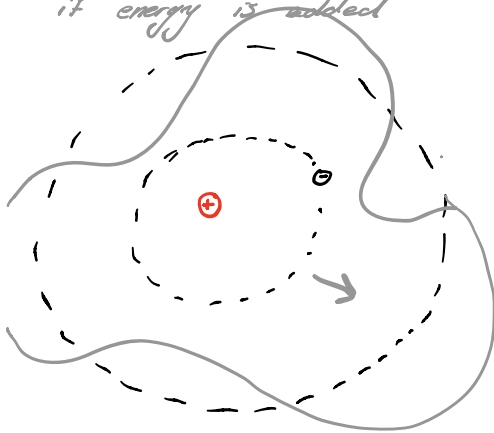


Consider an atom with an orbiting electron with a wavelength proportional to its energy



if energy is added



in order to line up the electron will reach a higher wavelength but the wavelengths will interfere with itself, and the electrons orbit will reduce, the electron will oscillate until it reaches an orbit with a continuous non-destructive wavelength.

The electron oscillation will cause electro magnetic waves, that's why the atom appears to absorb and re-emit light, the electron interacts with light and after interacting with the light oscillates until it reaches a stable orbit, in reaching that stable orbit, the electron oscillates in a rapid fashion that causes the emission of em waves
light.