





Transition!



No Transition

Light Source







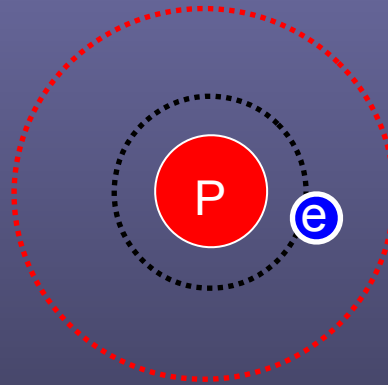
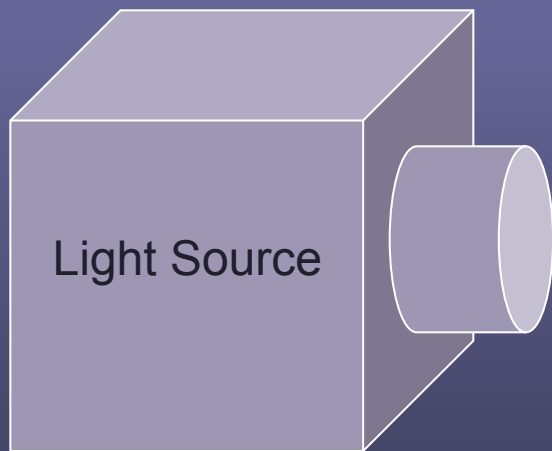


Detector (PMT)

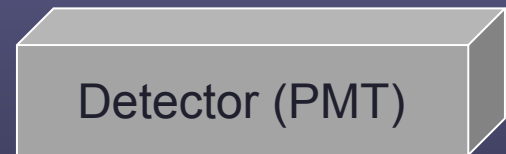
Decay

How do we study atoms?

- Spectroscopy – how light interacts with atoms
- Energy of a photon proportional to frequency (color); $E=h\nu$
- First, we excite an atom using light
- The atom then decays back to the ground state
- We detect fluorescence with a PMT



No Transition



If the color is not right, we don't get a transition

What's that frequency?

