

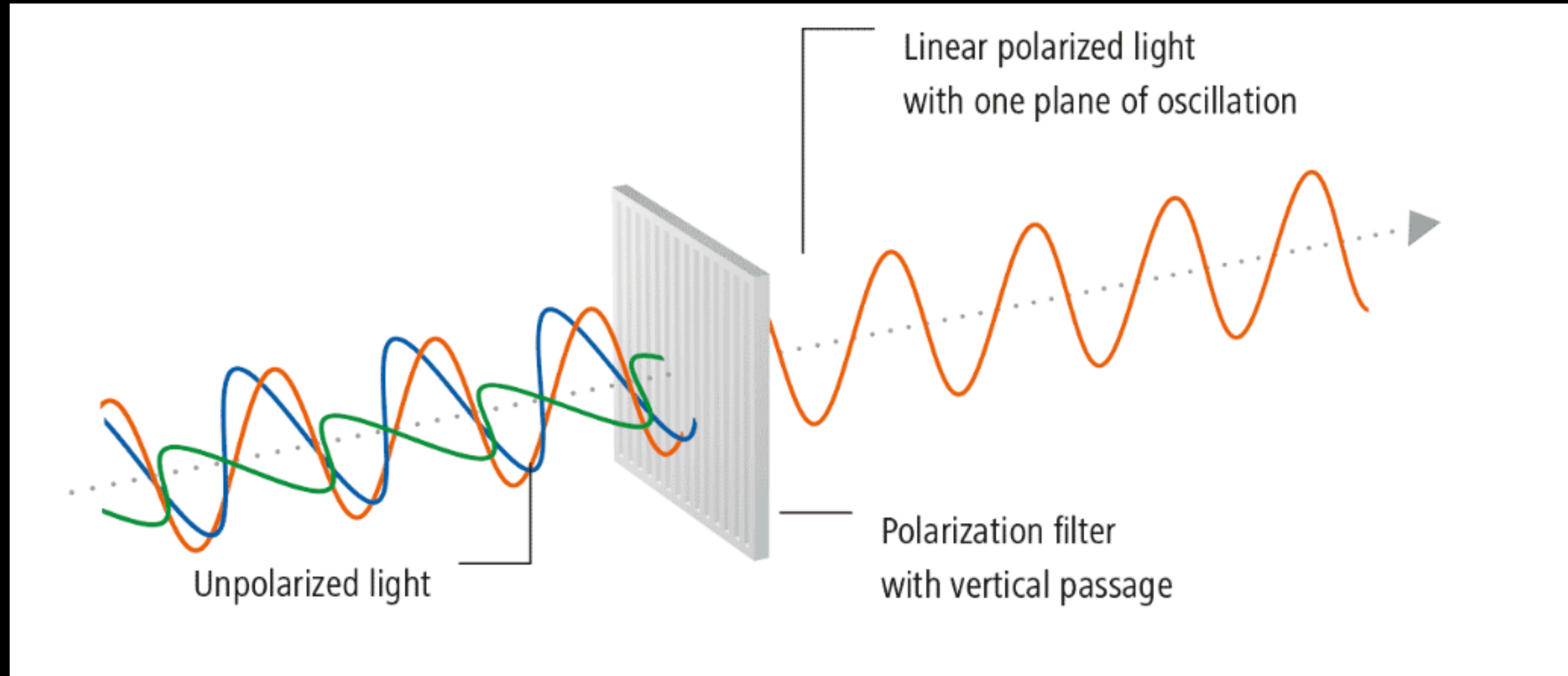
Physics 3306

Provides an introduction to a wide variety of topics in classical (pre-quantum) physics as a bridge to prepare students for subsequent upper-level courses in physics. The topics covered include thermodynamics, fluid mechanics, mechanical waves, optics, radiation, electromagnetic phenomena, atoms, and laboratory techniques. Prerequisites: C- or better in PHYS 1106; and in PHYS 1304 or PHYS 1308.

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Polarization



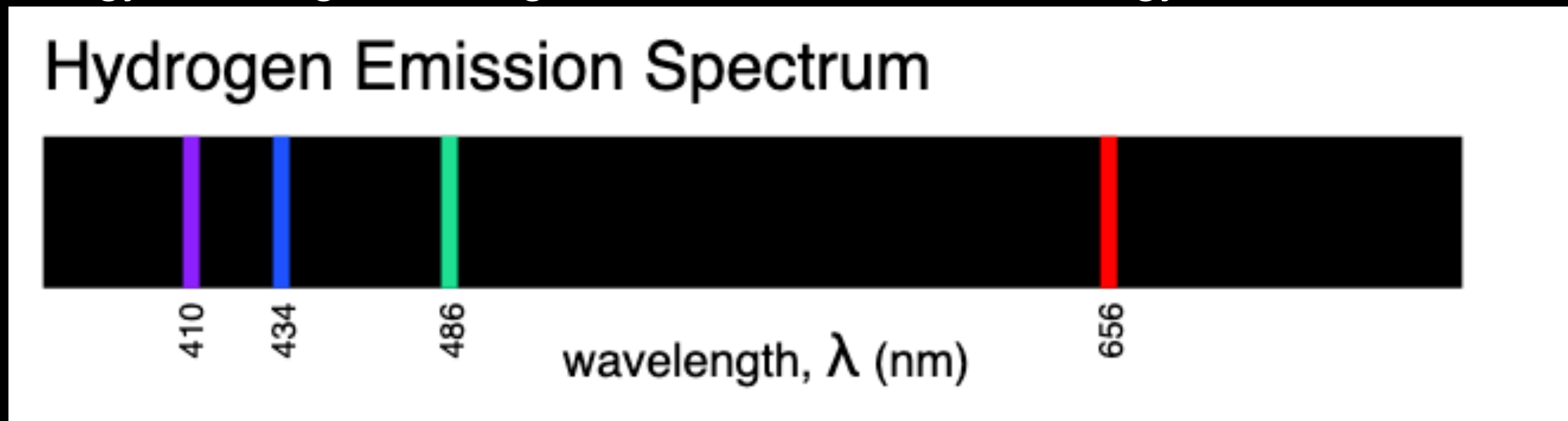
Spectrometers



Spectrometers

By looking at the specific wavelengths of light that are either absorbed or emitted from a sample of H atoms, we discover something about the energy of the electrons in the atom.

First, we notice that only specific wavelengths are associated with transitions. This means that there are discrete energy levels that the electron is moving between. The energy of the light of the transition corresponds to the difference in energy between two of these levels. If the energy of the electron is increasing, this is from absorption of the light energy. If the light is being emitted, this is from the energy of the electron decreasing



Emission spectra

