

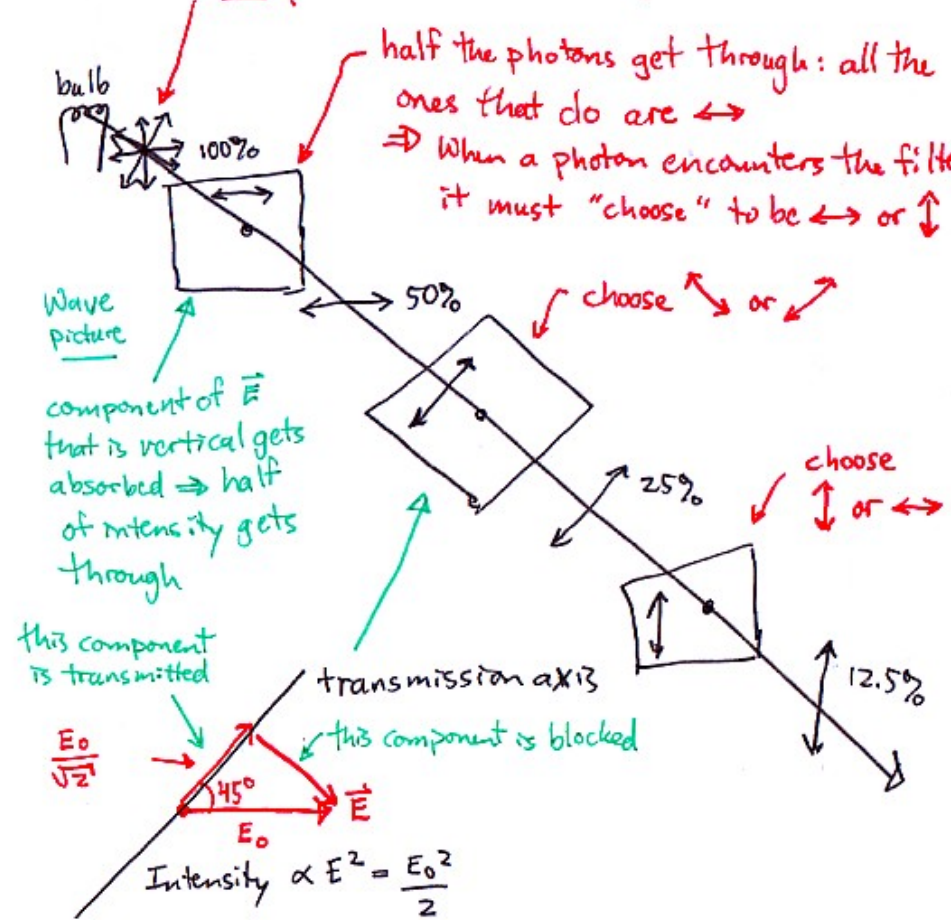
Polarization (ctd.)

Photon picture

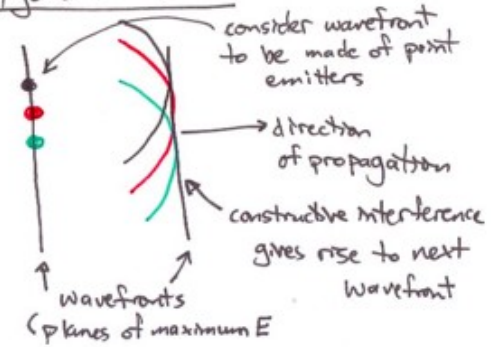
each photon in a mixture of polarization states

half the photons get through: all the ones that do are \leftrightarrow

\Rightarrow When a photon encounters the filter, it must "choose" to be \leftrightarrow or \updownarrow



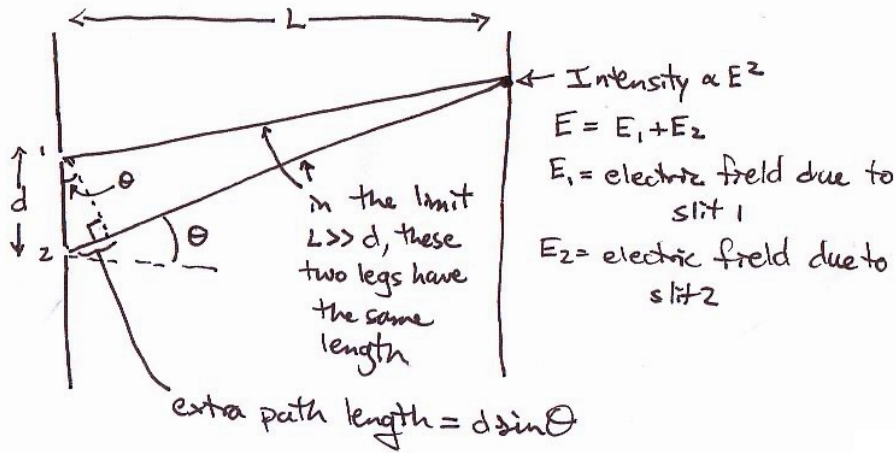
Huygens' Principle



Diffraction (qualitative)



Two-slit interference



⇒ For constructive interference between rays emanating from the two slits, we require
 difference in path length = integer number of wavelengths

⇒ $d \sin \theta = m \lambda \quad m = \dots -2, -1, 0, 1, 2, \dots$

