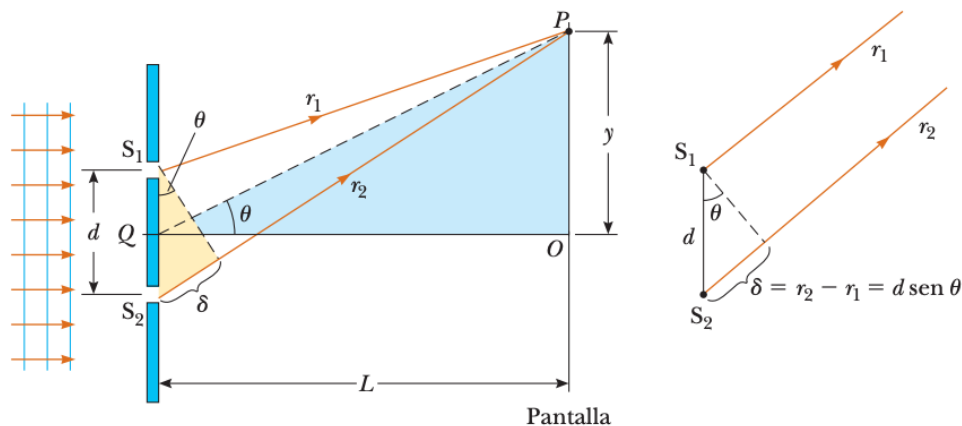


UNIDAD V:

INTERFERENCIA DE ONDAS DE LUZ



INTERFERENCIA CONSTRUCTIVA

$$y_{\text{brillante}} = \frac{\lambda L}{d} m$$

INTERFERENCIA DESTRUCTIVA

$$y_{\text{oscura}} = \frac{\lambda L}{d} \left(m + \frac{1}{2} \right)$$

INTENSIDAD

$$I = I_o \cos^2 \left(\frac{\phi}{2} \right) \quad I = I_o \cos^2 \left(\frac{\pi d}{\lambda L} y \right)$$

Diferencia de fase

$$\frac{\delta}{\lambda} = \frac{\phi}{2\pi} \quad \phi = \frac{2\pi}{\lambda} \delta = \frac{2\pi}{\lambda} d \sin \theta$$

PELICULAS DELGADAS

REFLEXION SIN DIFERENCIA DE FASE

$$2nt = \left(m + \frac{1}{2} \right) \lambda \quad (m = 0, 1, 2, \dots) \quad \text{Destructiva}$$

$$2nt = m\lambda \quad (m = 0, 1, 2, \dots) \quad \text{Constructiva}$$

REFLEXION CON DIFERENCIA DE FASE

$$2nt = \left(m + \frac{1}{2} \right) \lambda \quad (m = 0, 1, 2, \dots) \quad \text{Constructiva}$$

$$2nt = m\lambda \quad (m = 0, 1, 2, \dots) \quad \text{Destructiva}$$