

Two-Slit Interference

Constructive interference:

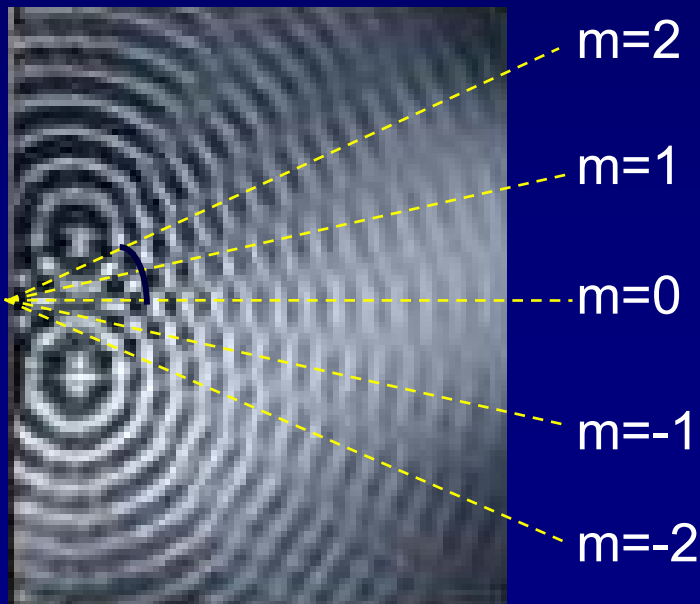
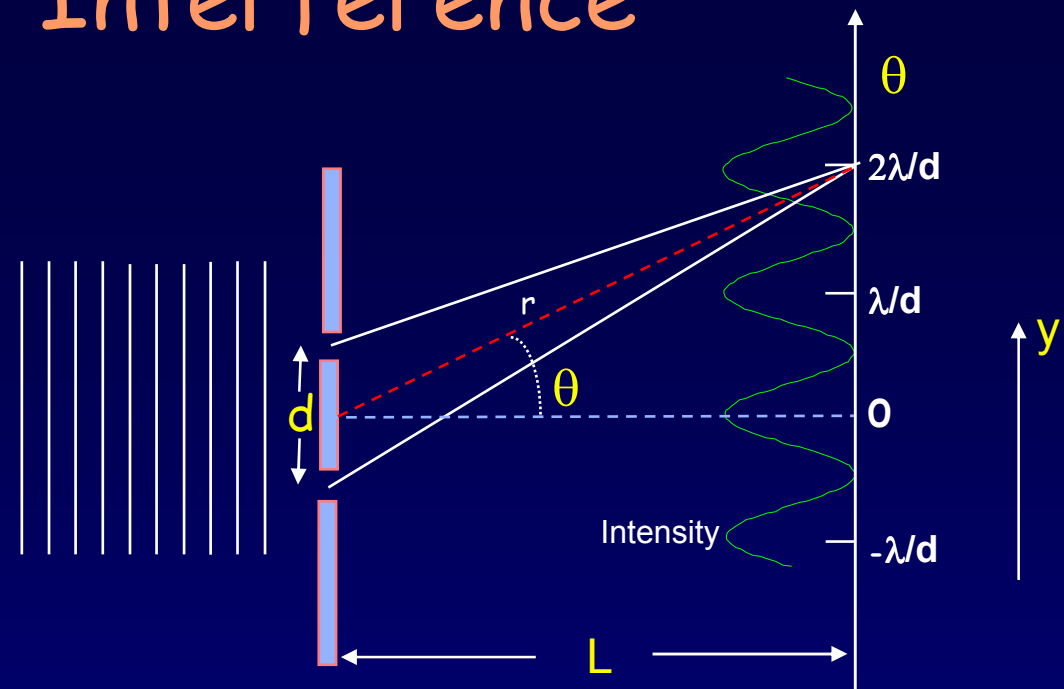
$$\delta = d \sin \theta = m \lambda$$

$$m = 0, \pm 1, \pm 2, \dots$$

Destructive Interference:

$$\delta = d \sin \theta = (m + \frac{1}{2}) \lambda$$

$$m = 0, \pm 1, \pm 2, \dots$$



Lines of constructive interference

Usually we care about the linear displacement y of the pattern (because our screens are flat):

$$y = L \tan \theta$$