

$$\boxed{\Gamma = n\lambda}$$

Constructive
maxima

$(n + \frac{1}{2})$ for destructive
minima

highest
order

$$n_{\max} = \frac{d}{\lambda}$$

of fringes

$$2n_{\max} + 1$$

$$d \sin \theta = n\lambda$$

Screen is parallel to slits

2 beams of light
are approx. parallel
 $L \gg d$

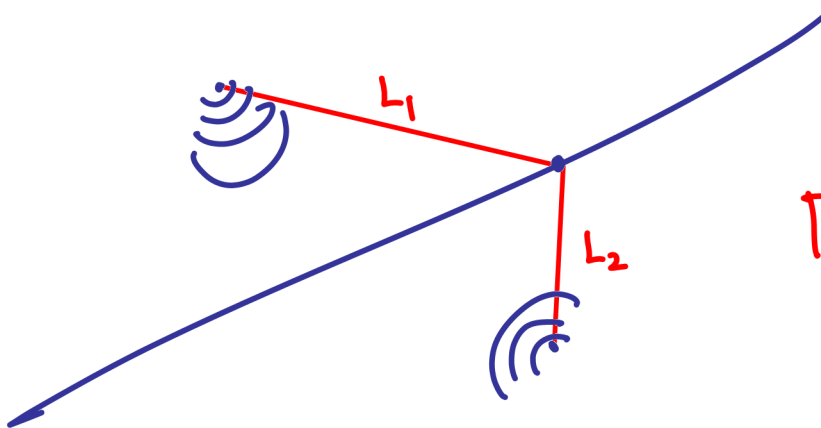
$$d \left(\frac{y}{L} \right) \approx n\lambda$$

Small angle approximation
 $\sin \theta \approx \tan \theta \rightarrow \sin \theta \approx \frac{y}{L}$

$$y_n \approx n \frac{\lambda L}{d}$$

$$\Delta y \approx \frac{\lambda L}{d}$$

$$\lambda \approx \frac{d \Delta y}{L}$$



$$\Gamma = |L_1 - L_2| = ???$$