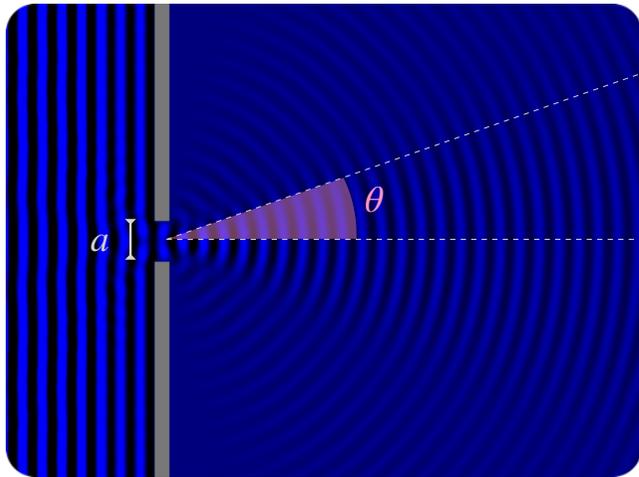
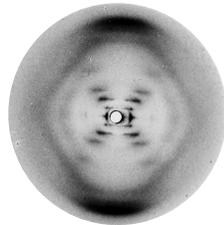
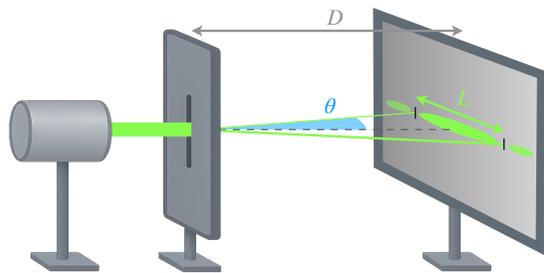


# Diffraction

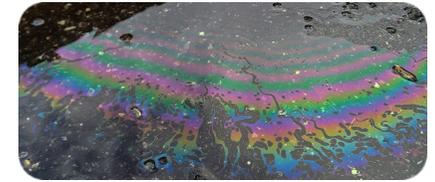
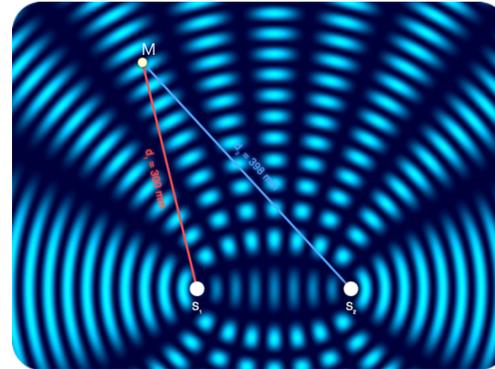


- conditions d'observations :
- $a \lesssim \lambda$
  - pour la lumière  $a \lesssim 100\lambda$

$$\theta = \frac{\lambda}{a}$$



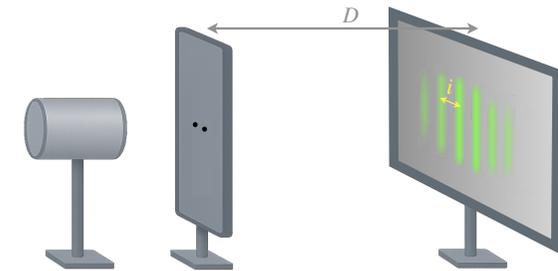
# Interférences



- conditions d'observations :
- ondes de même nature
  - sources synchrones
  - sources cohérentes

$\delta = [S_2M] - [S_1M]$  différence de marche ou de chemin optique

- Interférences constructives  $\frac{\delta}{\lambda} = 2\pi k$
- Interférences destructives  $\frac{\delta}{\lambda} = 2\pi \left( k + \frac{1}{2} \right)$



expérience des trous d'Young

