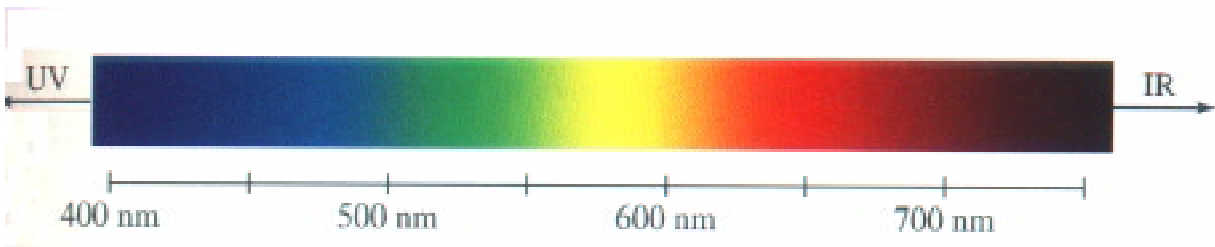
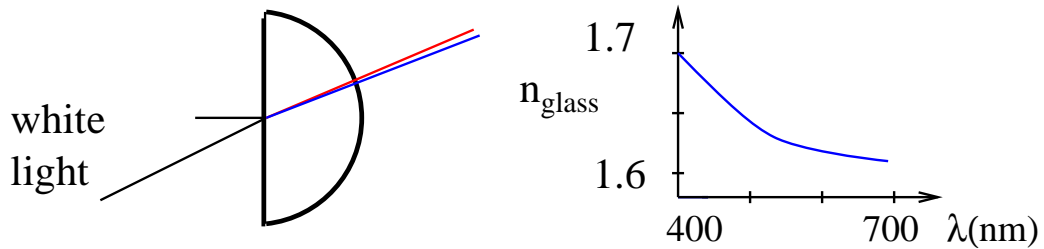


Physics 113 -Lecture 4

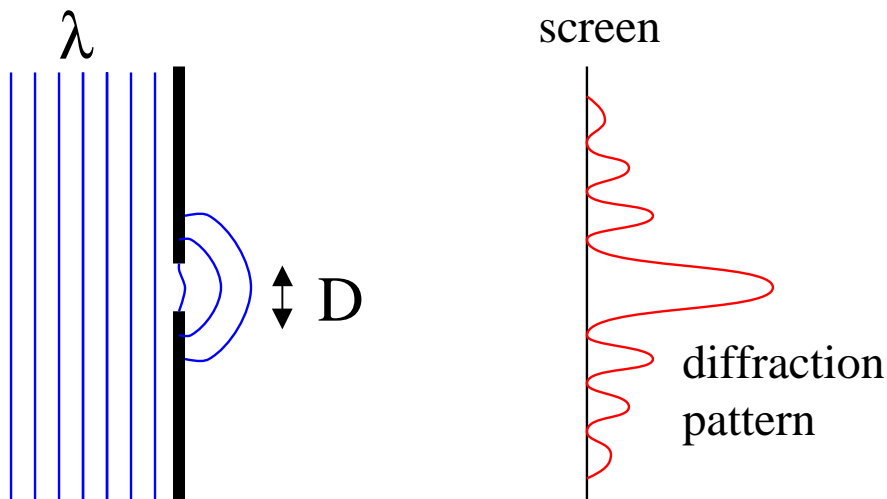
Color (Monochromatic Light)



Dispersion - Refractive Index depends on λ



Single Slit Diffraction

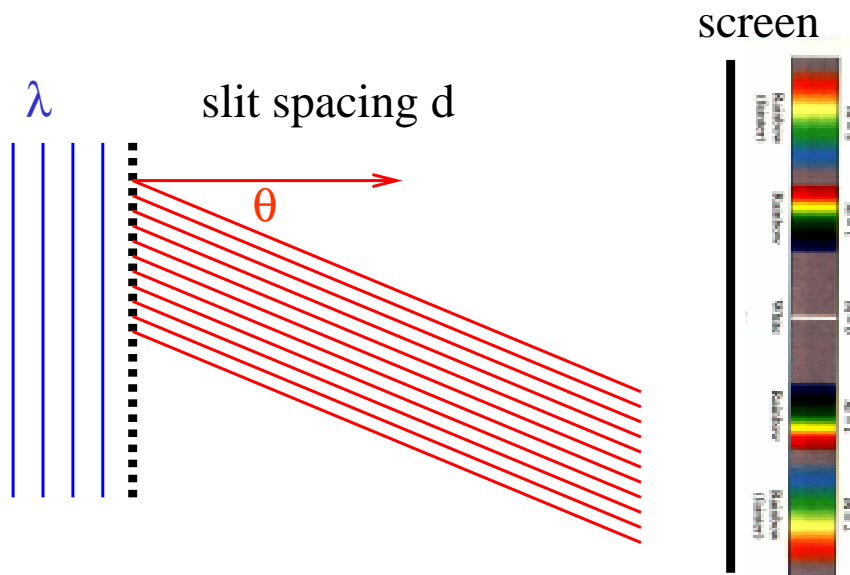


$$D \sin \theta = m\lambda \quad \text{where } m = 1, 2, 3, \dots$$

(note : $m \neq 0$)

Diffraction Grating

Multiple equally spaced slits



bright spots at

$$\sin\theta = \frac{m\lambda}{d} \quad \text{where } m = 0, 1, 2, \dots$$

Spectroscope will prove to be an important instrument !