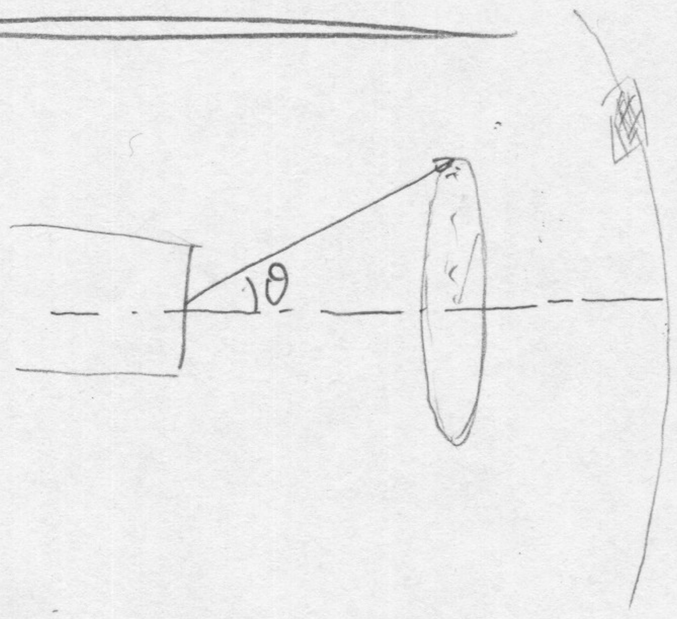
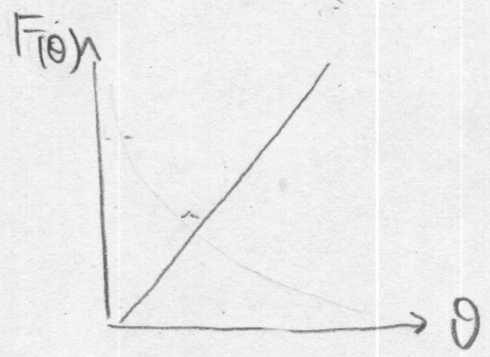
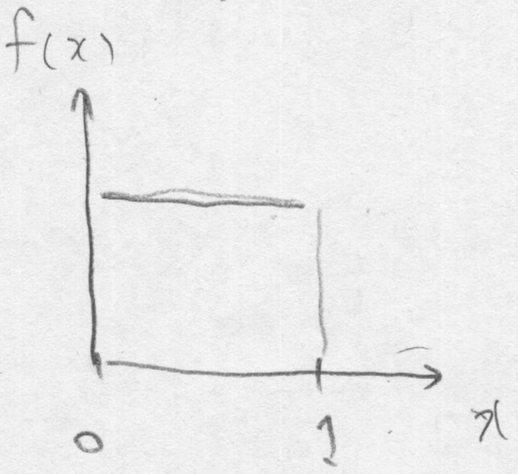
angular distribution

2011 5 27



$F(\theta) \sim \theta \cdot d\theta$





$$\int_0^{\pi} c \cdot \theta \cdot d\theta = \frac{c}{2}\left[\theta^2\right]_0^{\pi}$$

$$= \frac{c}{2}\pi^2 = 1$$

$$c = \frac{2}{\pi^2}$$

$$x = \frac{1}{\pi^2}\theta^2$$

x	$0 \to 1$
θ	$0 \to \pi$

$$dx = \frac{2}{\pi^2}\theta \cdot d\theta$$

$$F(\theta)d\theta = \frac{2}{\pi^2} \cdot \theta\, d\theta = f\left(\frac{\theta^2}{\pi^2}\right) \cdot dx$$

$0 < \theta < \theta_{max}$.

$$x = \frac{1}{\theta_{max}^2}\theta^2$$