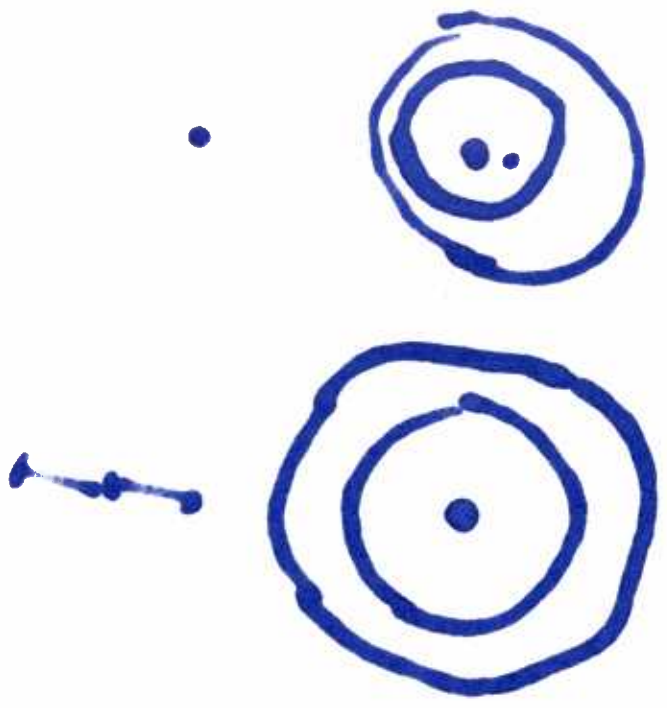


Prof. Shiva Prasad
Cer. No. 18
Date: 19/2/13



1

∴
20

→

$$E = \gamma (E' + v p_x')$$

$$h\nu = \gamma \left(h\nu' - \frac{h\nu'}{c} \cdot v \right)$$

$$\nu = \gamma \left(\nu' - \frac{\nu' v}{c} \right)$$

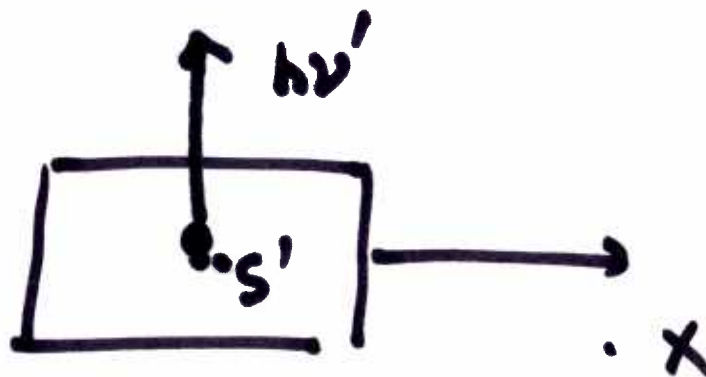
$$\sqrt{1 - \frac{v^2}{c^2}} = \sqrt{1 - \frac{v}{2}} * \sqrt{1 + \frac{v}{2}}$$

$$\sqrt{1 - \frac{v}{c}} = \left(1 - \frac{v}{c}\right)^{1/2}$$

$$\frac{1}{\sqrt{1 + \frac{v}{c}}} = \left(1 + \frac{v}{c}\right)^{-1/2}$$

$$\left(1 - \frac{v}{c}\right)^{1/2} \left(1 + \frac{v}{c}\right)^{-1/2}$$

os



$$\nu_{ds} \approx \nu_0 \left(1 - \frac{v}{c}\right)$$

..




$$\frac{h\nu}{c}$$

D

