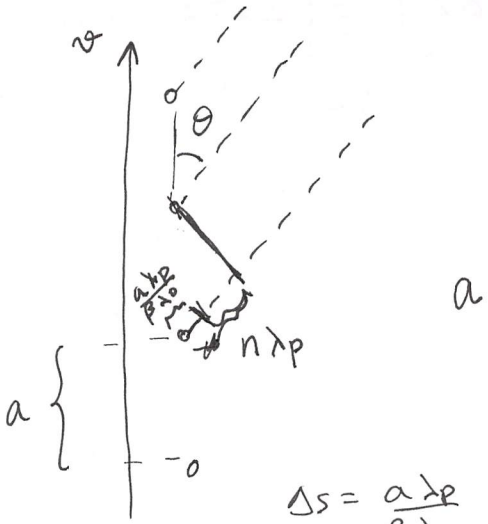
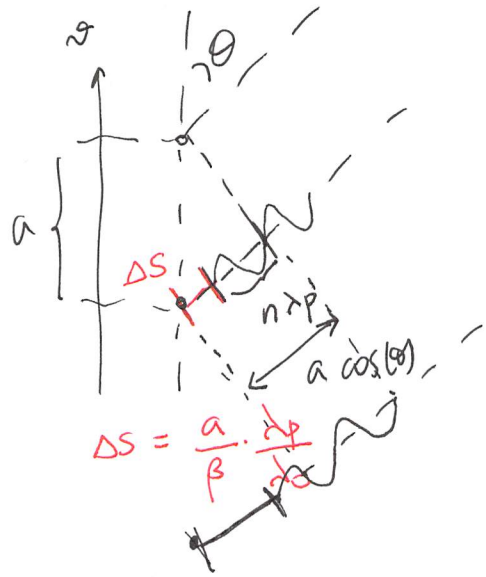
06/03/2023



$\Delta s = \frac{a\lambda_p}{\beta\lambda_0}$



$\Delta s = \frac{a}{\beta} \cdot \frac{\lambda_p}{\lambda_0}$

$a\cos(\theta) = n\lambda_p + \Delta s \quad \hookrightarrow \quad n\lambda_p = a\cos(\theta) - \Delta s$

$$\theta = \arccos\left(\frac{n\lambda_p}{a} + \frac{\Delta s}{a}\right) = \arccos\left(\frac{n\lambda_p}{a} + \frac{1}{\beta}\cdot\frac{\lambda_p}{\lambda_0}\right)$$

$$= \arccos\left[\lambda_p\left(\frac{n}{a} + \frac{1}{\beta\lambda_0}\right)\right]$$

Light: $n\lambda = \frac{a}{\beta} - a\cos(\theta)$