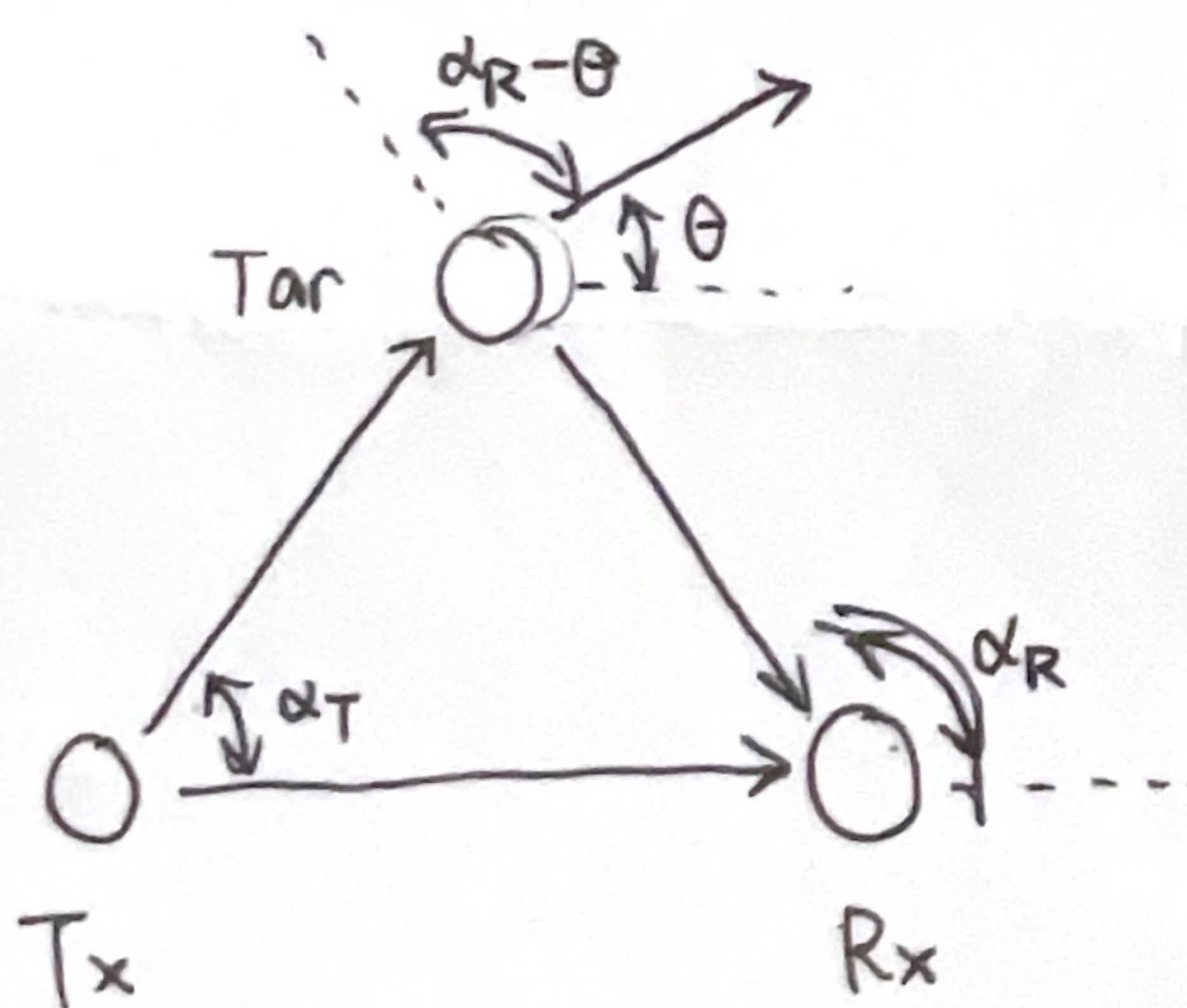


$$\frac{c}{f_{Tx}} = \frac{c - v \cos(\alpha_T - \theta)}{f_{Tar}} \Rightarrow \underline{\hspace{2cm}}$$

$$\frac{c}{f_{Tx}} = \frac{-v \cos(\alpha_T - \theta)}{f_{Tar} - f_{Tx}} = \frac{-v \cos(\alpha_T - \theta)}{\Delta f_{p1}}$$

$$\Delta f_{p1} = f_{Tx} \frac{-v \cos(\alpha_T - \theta)}{c}$$

$$= \frac{c - v \cos(\alpha_T - \theta) - v \cos(\alpha_R - \theta)}{f_{Rx}}$$



$$\frac{c + v \cos(\alpha_R - \theta)}{f_{Tar}} = \frac{c}{f_{Rx}}$$

$$\frac{c}{f_{Tar}} = \frac{-v \cos(\alpha_R - \theta)}{f_{Rx} - f_{Tar}} = \frac{-v \cos(\alpha_R - \theta)}{\Delta f_{p2}}$$

$$\Delta f_{p2} = f_{Tar} \frac{-v \cos(\alpha_R - \theta)}{c}$$

$$f_D = \Delta f_{p1} + \Delta f_{p2} = f_{Tx} \frac{-v \cos(\alpha_T - \theta)}{c} + f_{Tar} \frac{-v \cos(\alpha_R - \theta)}{c}$$