$v\cos\theta$

$f = \frac{v\cos\theta}{\lambda}$

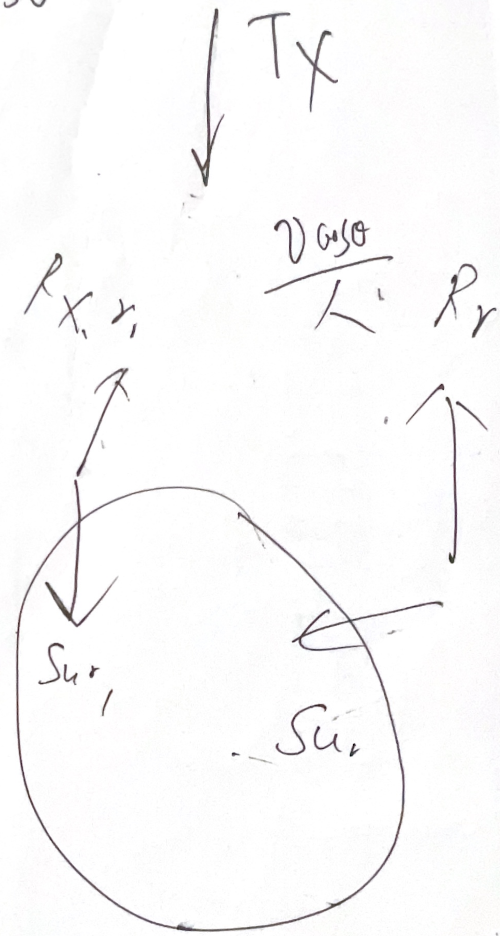
λ

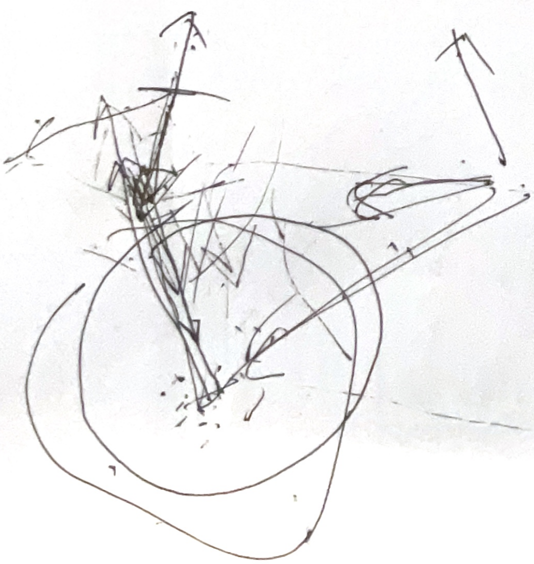
$\frac{df}{f} \lambda \frac{f}{\lambda f} v\cos\theta$

$= f \quad f$

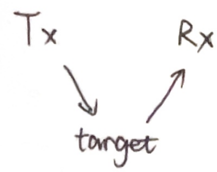
$f_c \quad f$

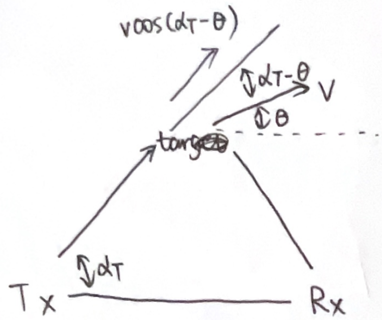
$\underline{f_c} \quad 0$





DFS = ~~发信号~~ $f_{发} - f_{收}$

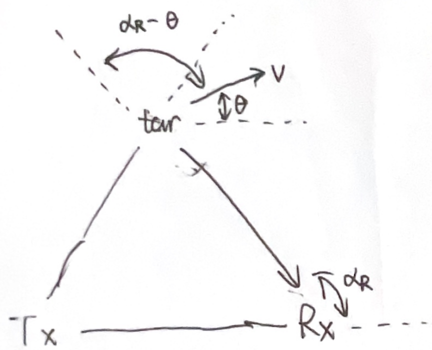




$$\frac{c}{f_{tx}} = \frac{c - v\cos(\alpha_T-\theta)}{f_{tar}}$$

$$= \frac{-v\cos(\alpha_T-\theta)}{\cancel{f_{tx}-f_{tar}}\ f_{tar}-f_{tx}} = \frac{-v\cos(\alpha_T-\theta)}{\Delta f_{p1}}$$

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



$$\frac{c}{f_{tx}} = \frac{c - v\cos(\alpha_R-\theta)}{f_{tar}} =$$

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

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

~~$c - v\cos(\alpha_T-\theta)$~~

~~$\oplus[-v\cos(\alpha_R-\theta)]$~~

~~$f_R - f_{tar}$~~

Δf_{p2}

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

$$= -\frac{2f_{tx}v}{c}\cos\left(\frac{\alpha_T+\alpha_R}{2}-\theta\right)\cos\left(\frac{\alpha_T-\alpha_R}{2}\right)$$

C − V cos(αR −