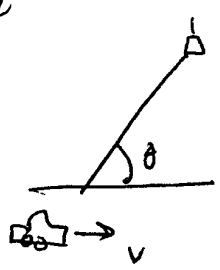
Fact Sheet Chapter 4

Doppler

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



Raleigh – NLOS

$$p(r) = \frac{r}{\sigma^2}\exp\left(\frac{-r^2}{2\sigma^2}\right) \quad 0 \le r \le \infty$$

$$0 \qquad\qquad r < 0$$

Fig 4

Ricean – LOS

$$p(r) = \frac{r}{\sigma^2}\exp\left(\frac{-(r^2+A^2)}{2\sigma^2}\right) I_0\left(\frac{Ar}{\sigma^2}\right)$$

Fig 4.1

$K = \frac{A^2}{2\sigma^2}$ ← peak amplitude of LOS signal