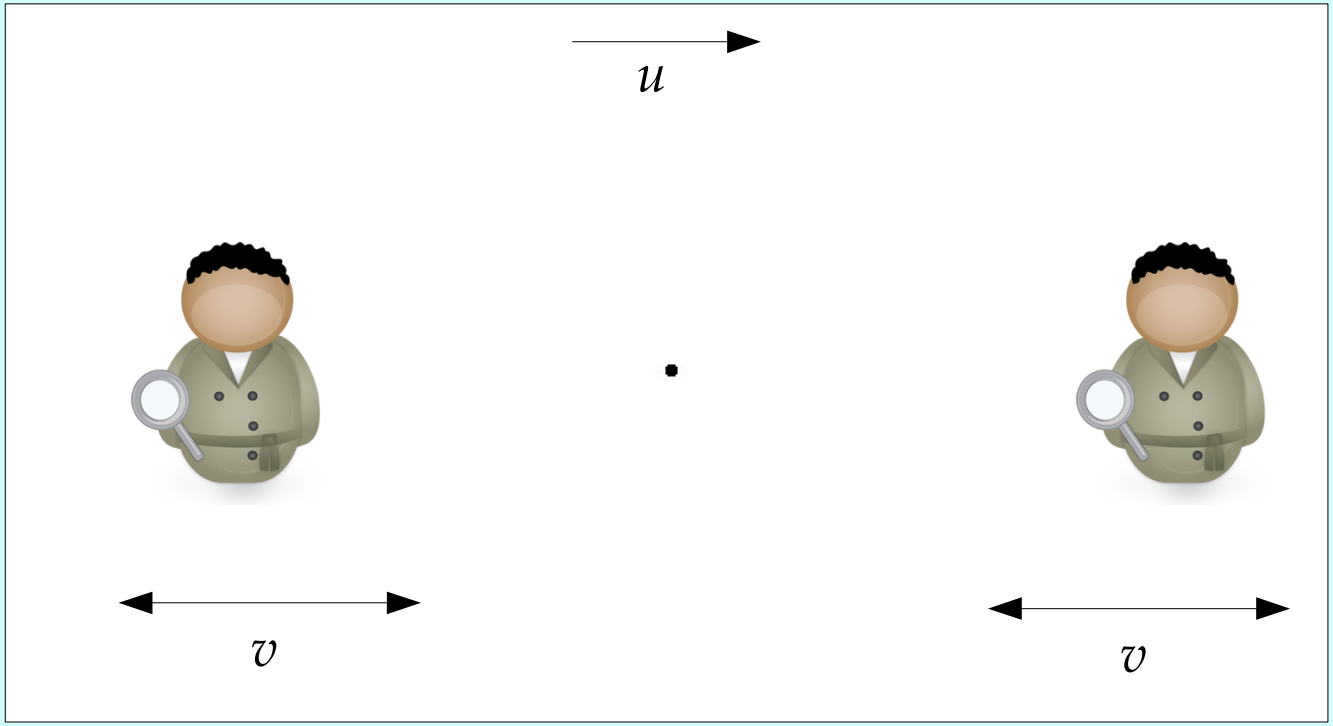
Dopplerův jev

zdroj i pozorovatel se pohybují



$$\omega = \frac{2\pi(c \pm v)}{(\lambda \pm uT)} = \frac{2\pi c\left(1 \pm \frac{v}{c}\right)}{\lambda\left(1 \pm \frac{u}{c}\right)} \quad \Rightarrow \quad \omega = \omega_0 \frac{\left(1 \pm \frac{v}{c}\right)}{\left(1 \pm \frac{u}{c}\right)} \qquad f = f_0 \frac{\left(1 \pm \frac{v}{c}\right)}{\left(1 \pm \frac{u}{c}\right)}$$