

MAGNIFICATION OF A TELESCOPE

f_o = focal length of objective lens
 f_e = focal length of eyepiece lens

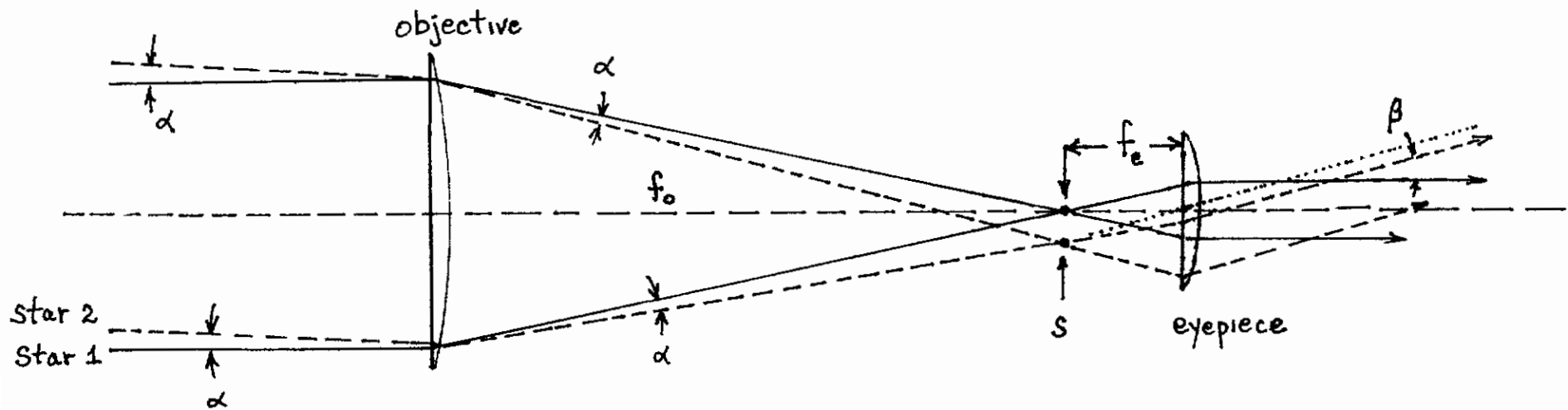


Image separation $S \approx \alpha f_o$

also $S \approx \beta f_e$

$$\Rightarrow \alpha f_o = \beta f_e \quad \text{or} \quad \frac{f_o}{f_e} = \frac{\beta}{\alpha} \equiv \text{magnification}$$