\[ H = \frac{4L \text{ (cm)}}{2L + 4L} \]

Objective: very short focal length

\[ f = \frac{1}{2} \text{ (cm)} \]

Interference:

- Observer: eye
- Source: very short focal length

\[ 2.5 \times 10^1 \text{ cm} + 1 = \frac{1}{2} \]

- Improve: L = 1 cm

Subjective:

- Observer: eye
- Source: very short focal length

\[ f = \frac{1}{2} \text{ (cm)} \]

123.45

Eyes: deviation, accommodation

- Subjective: eye
- Source: very short focal length

123.45
Telescopes

Refracting Telescope

Source @ \infty

\[ m = \frac{f_o}{f_e} \]

Reflecting Telescope

Use converging objective mirror to produce same behavior as objective lens above

Support for mirror

Problem: atmospheric distortion

- essentially rapidly changing "n" in sky

Adaptive Optics

- actuators use information from "fake" star to adjust mirror shape in real-time

- can get near-HST quality in some cases