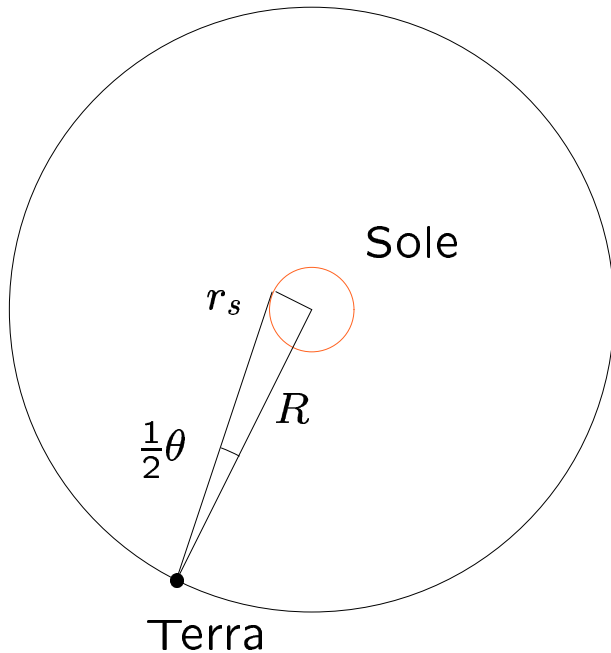


Temperatura di una stella

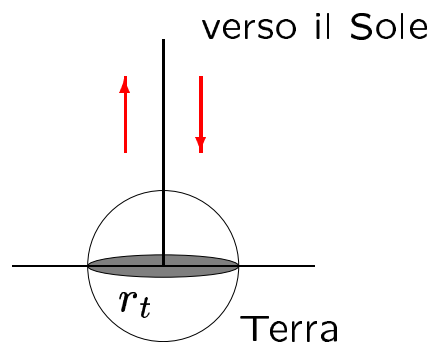


$$\theta = \frac{2r_s}{R} = 9.31 \times 10^{-3}$$

$$\text{Sole irraggia: } \sigma T_s^4 4\pi r_s^2$$

$$\text{Terra irraggia: } \sigma T_t^4 4\pi r_t^2$$

in equilibrio:



$$\sigma T_s^4 4\pi r_s^2 \frac{\pi r_t^2}{4\pi R^2} = \sigma T_t^4 4\pi r_t^2$$

$$\Rightarrow T_s^4 = T_t^4 \frac{4R^2}{r_s^2} = T_t^4 \frac{16}{\theta^2} \Rightarrow \boxed{T_s = 6010 \text{ K}}$$