Act 3: Resolving Stars

Halley's Comet

1. Assuming diffraction-limited optics, what is the minimum angular separation of two stars that can be resolved by a D = 5 m telescope using light of λ = 500 nm?

    a. 0.1 μrad   b. 1 μrad   c. 10 μrad

2. If the two point sources are not quite resolved at screen 1, will they be resolved at screen 2?

    a. Yes   b. No

screen 1   screen 2