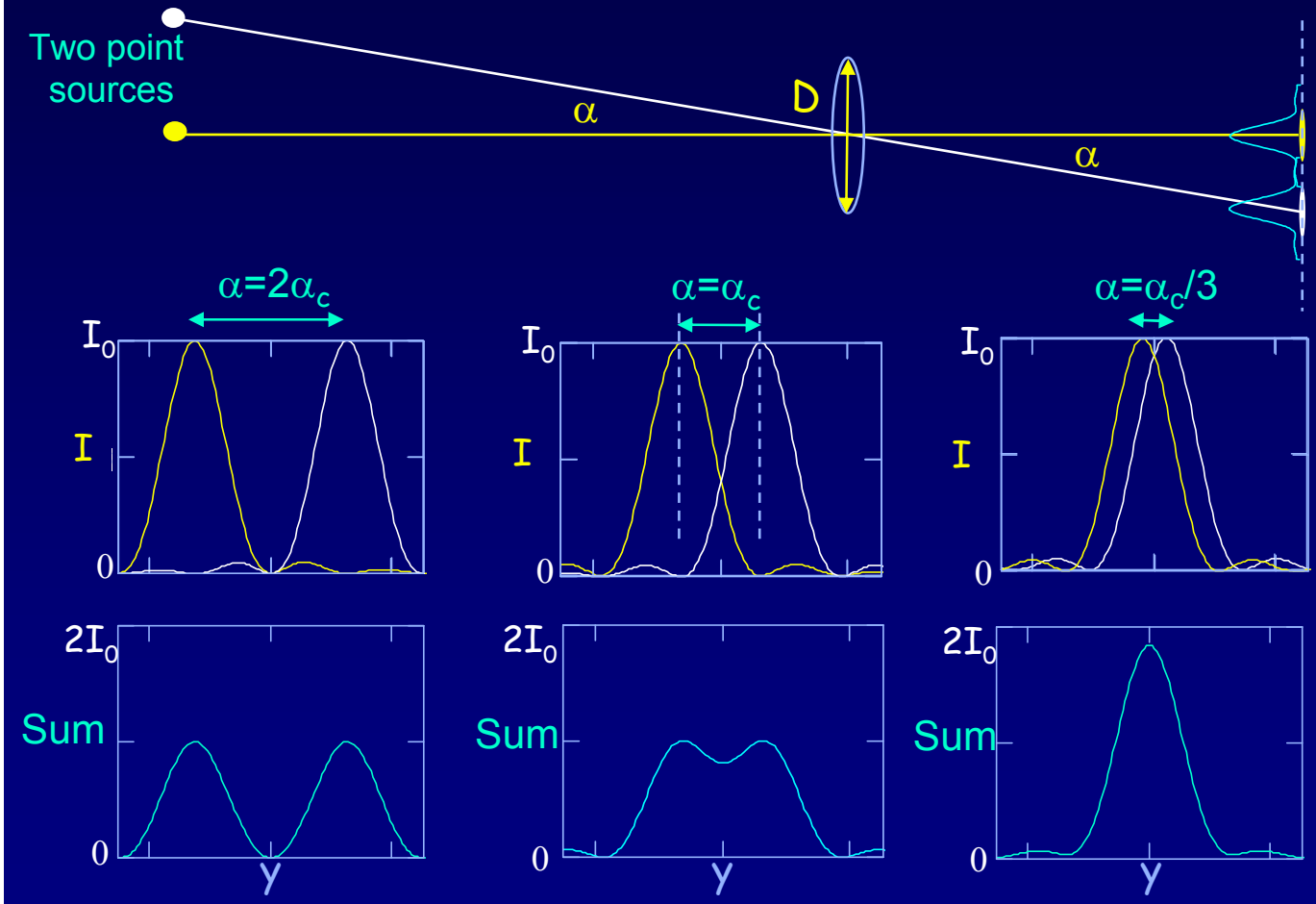
Angular Resolution

Diffraction also limits our ability to "resolve" (*i.e.*, distinguish) two point sources. Consider two point sources (e.g., stars) with angular separation α viewed through a circular aperture or lens of diameter D.



Rayleigh's Criterion defines the images to be resolved if the central maximum of one image falls on or further than the first minimum of the second image.

$$\alpha_c = 1.22\frac{\lambda}{D}$$

NOTE:
No interference!!
Why not?