

Measuring a Star's Diameter

The visibility arising from the angular diameter of each component is:

$$V(b) = 2|J_1(\pi\Theta b/\lambda)|/(\pi\Theta b/\lambda)$$

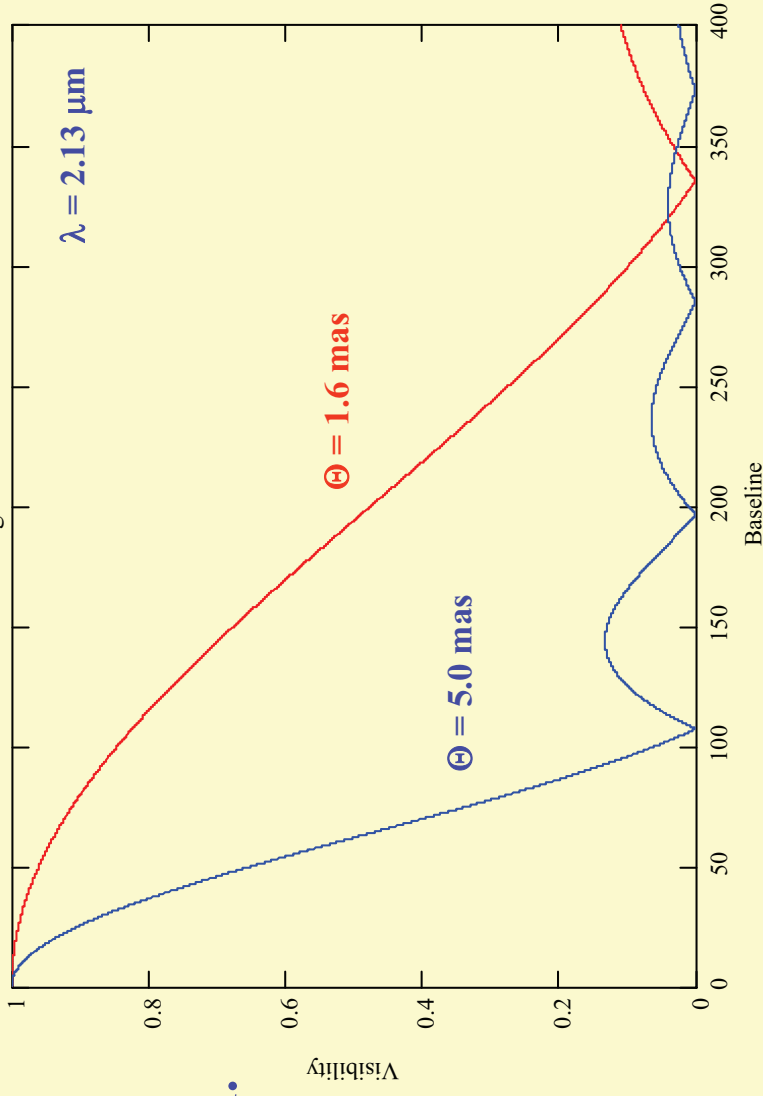
where Θ is the angular diameter (in radians),

b is the baseline, and λ is the effective wavelength of the

observed spectral pass band.

J_1 is the first order Bessel function.

Before we do such fits, we must derive actual visibilities from what we measure with an interferometer. This involves a straightforward calibration process using other stars.



An Example Angular Diameter Fit

GJ 752A (Ross 652)

