Represent as sinusoids of increasing frequency.

F(S):
What is power distribution across frequencies?
Fourier Transform relationship of aperture and beam

circular aperture

"diffraction" pattern

cross-section of aperture

cross-section of diffraction pattern
(reverse x axis for kernel, slide it across function, integrate over area of the two functions multiplied)
Convolution

Cross-correlation

Autocorrelation

\[ f \ast g \]

\[ f \ast g \]

\[ f \ast f \]
Response of some interferometric telescope to a signal.
(Weak example): Parkes pulsed calibration signal.
Similar image plane effect

Disk $\rightarrow$ Bessel
Gibbs ringing: MRI