

Basic Demos

- Observation Demo
 - Point source: QSO(3C84)
 - Extended source: Planet(MARS)
- Data Inspection (Plot)

Observation Outline

1. Setup CARMA project database
2. Track Target
3. Tune Receiver
4. Setup Correlator
5. Integrate
6. Check Read-time data
7. Reset CARMA project database

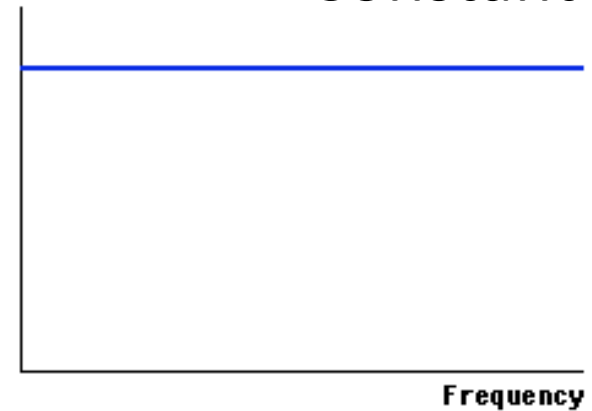
Fourier Transform

Point source: δ -function

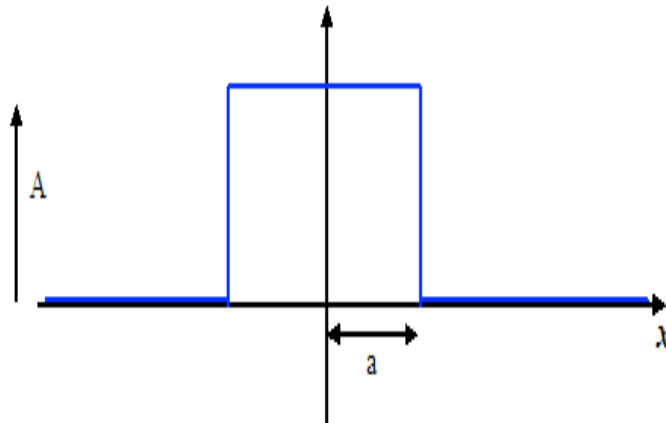


Fourier
Transform

Constant

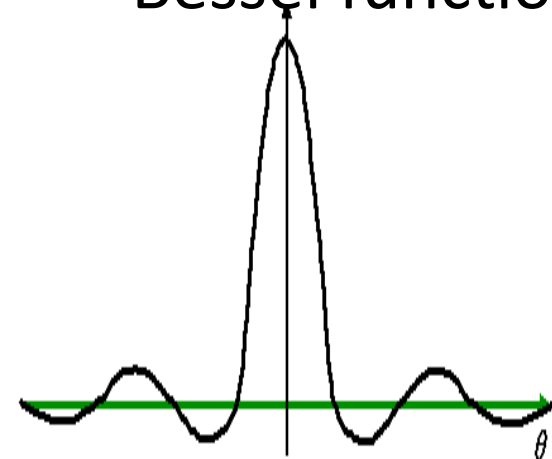


Planet: tophat function



Fourier
Transform

Bessel function



Plot data

- Plot
 - Amplitude vs uv-distance
 - `smauvplt vis=xxx.mir axis=uvdistance,amplitude options=nobase device=/xs`
 - Phase vs uv-distance
 - `smauvplt vis=xxx.mir axis=uvdistance,phase options=nobase device=/xs`

Copy data

scp [_r obs@cedarflat4.carma.pvt:/misc/sdp/sciencedata/fringe.summerschool.orion.1.mir](mailto:obs@cedarflat4.carma.pvt:/misc/sdp/sciencedata/fringe.summerschool.orion.1.mir) .

Plot the point source 3C84

smauvplt device=/xs vis=fringe.summerschool.orion.1.mir axis=uvdistance,amplitude options=nobase

"select=window(2),source(3C84)" yrange=0,30

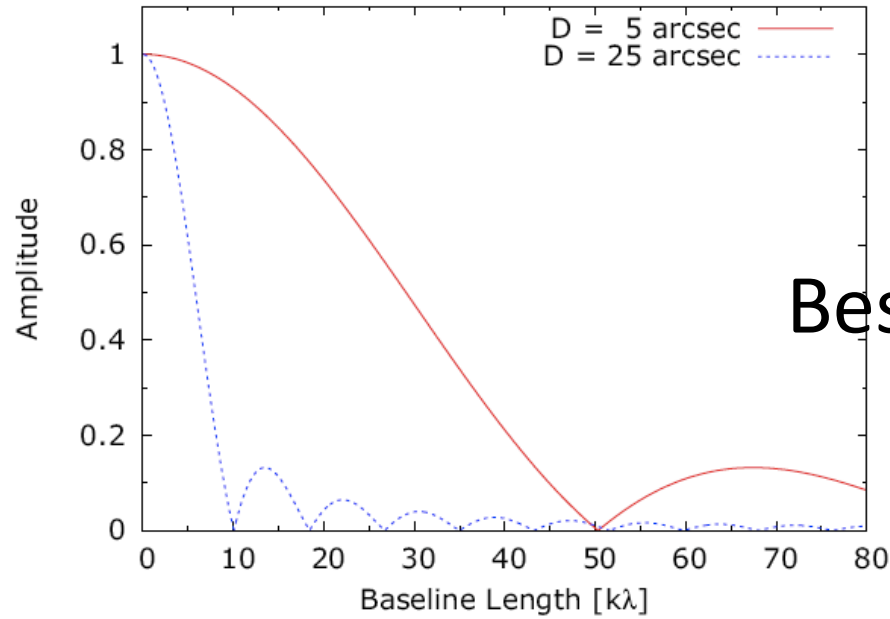
Plot the point source MARS

smauvplt device=/xs vis=fringe.summerschool.orion.1.mir axis=uvdistance,amplitude options=nobase "select=-

auto,window(2),source(MARS)" yrange=0,30

MARS

Bessel function: J_1



C-array data

