

# Antenna Working Group: Open Questions

## Cylinder Antennas

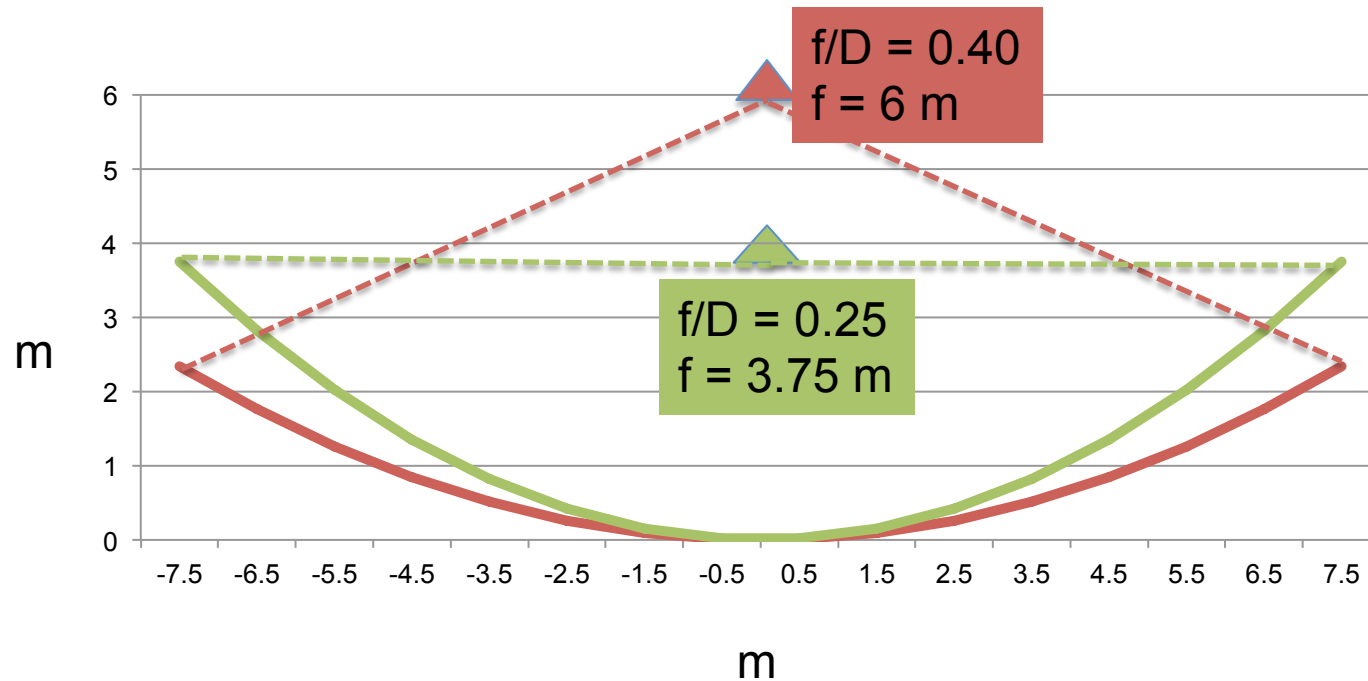
- on-axis vs off-axis?
- antenna width?
- f/D ratio?
- feed antenna design?
- compute Tspill
- can we use 4-square feed without the 'coffee can'?
- simulate beams/grating lobes with 1.6 m feed spacing (  $\sim 4 \lambda$  )
- simulate beams for 4-dipole sum
- simulate feed x-talk

## Dish Antennas

- design complete?
- compute Tspill

## Other Issues?

# On-axis cylinder f/D ratio

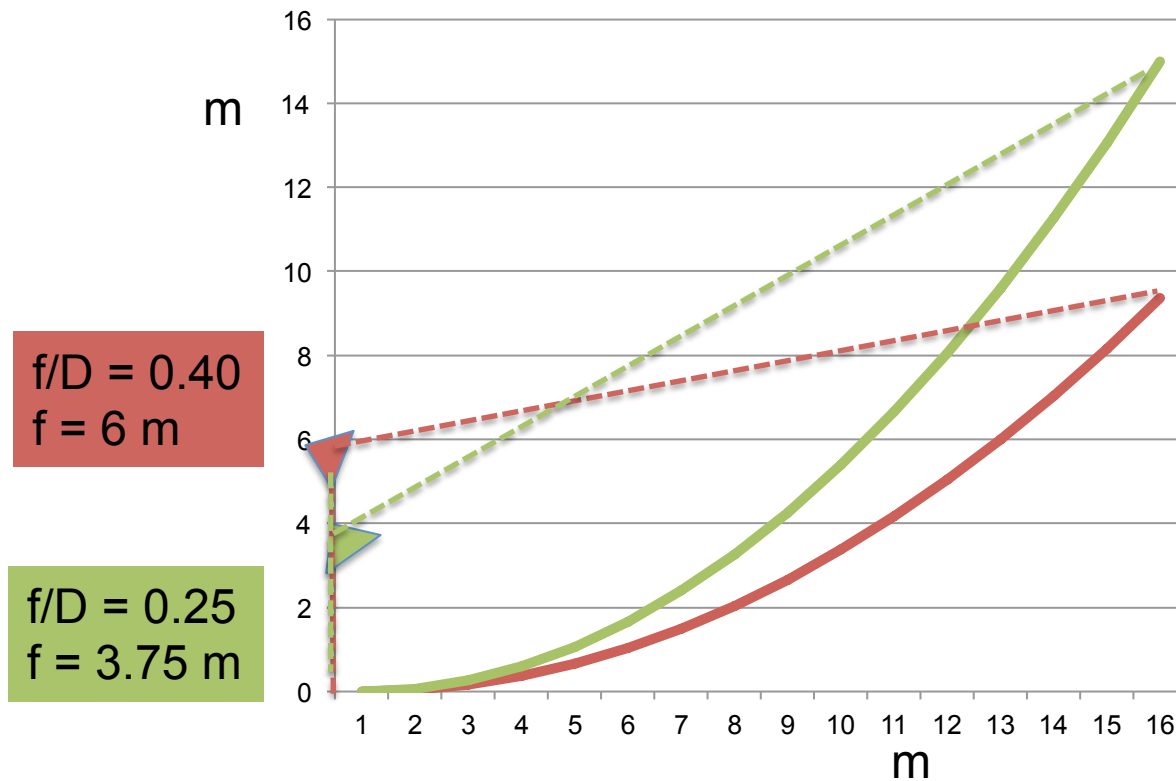


10 March 2014

AWG Videoconference



# Off-axis cylinder f/D ratio



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Interactions between feeds are important

## Four-square Feed



### Molonglo Observatory Synthesis Telescope

- 11.6 x 778 m cylinder
- 300 - 1400 MHz
- Martin Leung thesis (2008)

