

## RADIO CAMERA PRODUCTS

10 wideband continuum channels (I, 0.7 – 2.0 GHz)  
 605 continuum channels (IQUV, 0.7 – 2.0 GHz @ 2.15 MHz resolution)  
 5600 low-resolution channels (0.7 – 1.45 GHz @ 134 kHz resolution, HI: 56 km/s @ z = 1, 28 km/s @ z = 0)  
 Tuneable zoom band A: 4096 channels (I), 8 kHz (1.8 km/s) [extragalactic HI, D < 100 Mpc]  
 Tuneable zoom band B: 2048 channels (I), 1.05 kHz (0.22 km/s) [Galactic HI,  $\Delta v = 400$  km/s]  
 Output: 1 image / cubes (16k images) / 16k × 16k pixels per primary beam

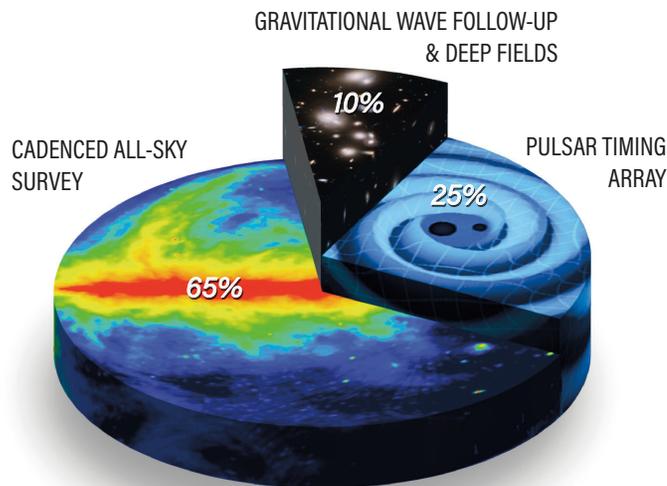
## PULSAR TIMING BEAMS

1.3 GHz bandwidth (0.7 – 2.0 GHz)  
 4 steerable, full polarization beams  
 Output: folded profiles with 2048 phase bins, 1 second integration time, and 605 coherently dedispersed channels  
 200 pulsars monitored monthly

## HIGH TIME-RES SURVEY

~4000 beams for pulsar searching (0.1 ms, 134 kHz res)  
 Full primary beam for fast transients (1 ms, 134 kHz res)

## TIME ALLOCATION



## SPECIFICATIONS\*

PARAMETER	VALUE
Reflectors	2000 × 5-m dishes
Frequency coverage	0.7 – 2.0 GHz
Primary beam FWHM	3.1 degrees at 1.35 GHz
Spatial resolution	3.5 arcsec at 1.35 GHz
System temperature	25 K
Aperture efficiency	70%
System-equiv. flux density (SEFD)	2.5 Jy
Continuum sensitivity (1 hour)	1 $\mu$ Jy
All-sky survey (per epoch)	31,000 deg <sup>2</sup> @ 2 $\mu$ Jy/beam
All-sky survey (combined)	31,000 deg <sup>2</sup> @ 500 nJy/beam
Pulsar timing fields (intermediate)	2000 deg <sup>2</sup> @ 200 nJy/beam
Deep fields	~30 deg <sup>2</sup> @ 100 nJy/beam

\*Sensitivities assume 65% usable band and 80% usable time

## SURVEY SPEED AND SENSITIVITY

