

Pulsar Science Assessment Workshop Program - 17-18 July 2013

Wednesday 17 July

9:00 - 10:30

Ben Stappers & Robert Braun Introduction/Purpose/Welcome/
Introductions
Dewdney - General Introduction to the Baseline design and Motivation
Turner - Detailed non-imaging processing numbers and motivation/choices

11:00 - 12:30

Kramer - Pulsar Science, the SKA and the DRM
From the Science to the DRM

13:30 - 15:00 & 15:30 - 16:30

SKA LOW sessions

To be discussed:

- a) Simulations of survey returns.
- b) What frequency would be optimal for us?
- c) Is it sufficiently centrally concentrated?
- d) How many beams for searching?
- e) What about Timing and other pulsar studies?
- f) How many beams for timing?
- g) What fraction of the sky do we need/want to be able to see?

16:30 - 17:30

SKA Survey Sessions

- a) how might we use it?
- b) discussion of continuum follow up observing model (Johnston with input from Hobbs/Cordes and others)

Thursday 18 July

9:00 - 10:30 & 11:00 - 12:30

SKA Mid - Astrometry - (Deller)

SKA Mid Searching

- a) What modifications to layout?
- b) Frequencies and bandwidths?
- c) How many frequency channels?
- d) Dedispersion?
- e) Acceleration Searches? how? Time or Frequency domain/best?
- f) single pulse detection strategies
- g) Real-time searching, including candidate identification.

h) Sky visibility (i.e. max hour angle).

13:30 - 15:00

SKA Mid Timing

a) How many beams required?

b) Frequencies and bandwidths?

c) Polarisation calibration requirements?

d) How many dishes to include in phasing up?

e) Real-time phasing not currently specified, pressure on resources to have correlation and beam-forming in parallel.

f) Real-time cyclic spectroscopy

15:30 - 16:30

Overall System requirements - Archiving, Data Products, Clocks

16:30 - 17:30

Summary, wrap up, planning on baseline change requests.