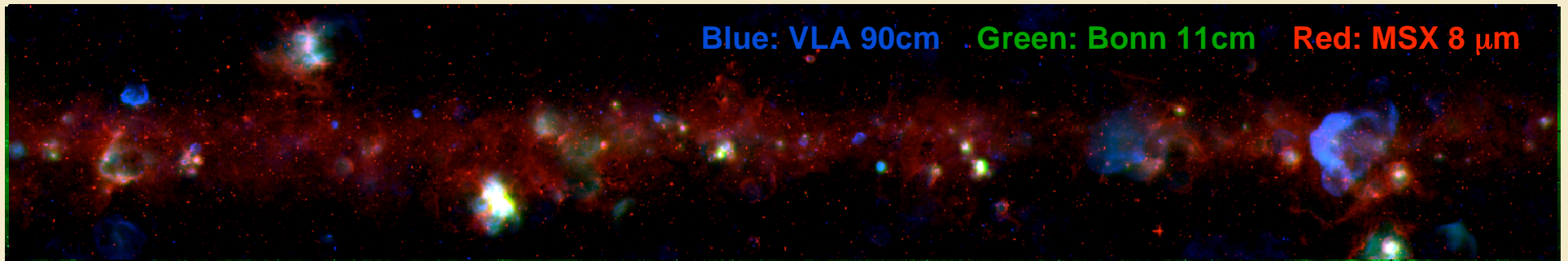




Galactic & Extragalactic Science

- Current membership & science teams
- Tasks & resources
- Early science with 32T
- Communication
- Policies & protocols





Current Membership

<u>Name</u>	<u>Institute</u>	<u>Areas of Interest</u>
Judd Bowman	Caltech	Surveys
Shami Chatterjee	U. Sydney	Supernova remnants, pulsar winds
Mousumi Das	RRI	Galaxies
Tracey DeLaney	MIT	Supernova remnants
A. A. Deshpande	RRI	Faraday tomography, MW magnetic field
John Dickey	U. Tasmania	RRLs, diffuse ISM, Faraday tomography
K. S. Dwarakanath	RRI	Diffuse emission (MW, MCs, ICM, IGM)
Bryan Gaensler	U. Sydney, chair	SNRs, H II, cosmic rays, MW, MCs, Faraday
Anne Green	U. Sydney	Supernova remnants, H II regions
Lisa Harvey-Smith	U. Sydney	<i>[starts 1 Oct, 2007]</i>
Merv Lynch	Curtin U.	RRLs, supernova remnants
Greg Madsen	U. Sydney	RRLs, H II regions
Tara Murphy	U. Sydney	Supernova remnants
Divya Oberoi	Haystack	Supernova remnants, diffuse ISM
John Raymond	CfA	Supernova remnants
D. Anish Roshi	RRI	RRLs, diffuse ISM
Lakshmi Saripalli	RRI	Radio galaxies, quasars, AGN
Lister Staveley-Smith	UWA	Magellanic Clouds, RRLs, tomography
Ravi Subrahmanyan	RRI	Radio galaxies, quasars, AGN, clusters
N. Uday Shankar	RRI	LSB galaxies, Faraday tomography, RRLs
Randall Wayth	CfA	Surveys



Proposed Science Teams

- **Radio galaxies & clusters**

Das, Dwarkanath, Saripalli, Subrahmanyam, Uday Shankar

RRI

- **Faraday tomography & Galactic magnetic field**

Deshpande, Dickey, Gaensler, Staveley-Smith, Uday Shankar

U. Sydney

- **Radio recombination lines, H II regions, diffuse ISM**

Dickey, Dwarkanath, Gaensler, Green, Lynch, Madsen, Oberoi, Roshi, Staveley-Smith, Uday Shankar

RRI

- **Surveys**

Bowman, Wayth

CfA

- **Magellanic Clouds & nearby galaxies**

Staveley-Smith, Gaensler

UWA

- **Supernova remnants, pulsar wind nebulae & cosmic rays**

Chatterjee, DeLaney, Gaensler, Green, Lynch, Murphy, Oberoi, Raymond (volunteers?)

U. Sydney?

- **Other topics?** Planets, stars, planets, planetary nebulae, Galactic Centre, [pulsars, XRBs ...]



Tasks & Resources

- Array specifications & data formats **
- Observing modes & survey specifications **
- Observing plan (piggybacking vs. dedicated surveys) *
- Storage & archiving *
 - Full data rate is 15 TB per hour! What do we want to keep?
- Calibration & analysis (\leftrightarrow EOR, SHI, TSC)
- Specialised software for tomography
- Catalogues & public archives

- Tie above to science teams, or to separate “instrumentation” groups?
- Gaensler to organise Twiki page on staff/resources/commitments



Early Science

- Supernova remnant survey
 - Spectral curvature/turnover of “the A team” (Cen A, Fornax A, ...)
 - Magellanic Cloud maps
 - Steep spectrum point sources (cross-correlation w. SUMSS & MRC)
 - Galactic Centre
 - “Ghost nebulae” around pulsars and X-ray binaries
 - Clusters & relics
 - ... other ideas?
-
- Volunteers to lead each of these & interface with RTS
 - Decisions *a priori* decisions on first papers from 32T?



Communication, Policies & Protocols

- Mailman email list OK?
- Twiki / KT (team leaders to set up initial info pages)
- Science document?
- Session at MWA consortium meeting every 6 months
- Telecons weekly (teams), monthly (project)
- Interface to Science Council and science package coordination?

- Open to outside co-i's? (coordination w. LWA/VLA team?)
- Student projects
- Follow-up strategies & coordination (ATCA, SKAMP, ASKAP)
- Publication policy & conference presentations