

The Low Frequency Radio Universe

Scientific Programme

December 8 – 12, 2008

Scientific Programme

Venue: Chandrasekhar Auditorium, IUCAA

Lunch and dinner will be in the NCRA Campus

Monday, 8th December 2008

0915 *Rajaram Nityananda*
A few words of welcome

Low-Frequency Surveys and Cosmology

0920 - 0940	<i>A.G. de Bruyn</i> (invited) The first deep WSRT 150 MHz full polarization observations
0940 - 1000	<i>Russ Taylor</i> (invited) Deep polarization fields
1000 - 1020	<i>Ravi Subrahmanyan</i> (invited) Surveys of low surface-brightness radio sources (ATLBS survey)
1020 - 1040	<i>Ue-Li Pen</i> (invited) GMRT epoch of re-ionization experiments
1040 - 1100	<i>Lister Staveley-Smith</i> (contributed) Galaxy evolution with ASKAP
1100 - 1130	Tea
1130 - 1150	<i>Dave Green</i> (contributed) Deep wide-field surveys at 610 MHz with the GMRT
1150 - 1210	<i>Sandeep Sirothia</i> (contributed) 325-MHz observations of the ELAIS-N1 field using the GMRT
1210 - 1230	<i>Jeffrey Peterson</i> (invited) EOR / HI at high redshifts
1230 - 1250	<i>Tigran Arshakian</i> (contributed) Exploring the weak magnetic fields at low radio frequencies
1300 - 1430	Lunch and viewing of posters

Extragalactic Neutral Hydrogen and OH

- 1430 - 1500 *Nissim Kanekar* (invited review)
High-redshift absorbers
- 1500 - 1520 *Neeraj Gupta* (invited)
21cm absorbers at intermediate redshifts
- 1520 - 1540 *Philip Lah* (invited)
HI gas at moderate redshifts
- 1540 - 1600 *Willem Baan* (invited)
OH at high redshifts
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- 1600 - 1630 Tea
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- 1630 - 1700 *Marc Verheijen* (invited review)
HI observations of galaxies and clusters
- 1700 - 1720 *Rabbi Angiras* (contributed)
Origin of disk lopsidedness in spiral galaxies
- 1720 - 1740 *Prasun Dutta* (contributed)
HI power spectrum of the spiral galaxy NGC 628

Tuesday, 9th December 2008

Extragalactic Neutral Hydrogen and OH

- 0930 - 1000 *Erwin de Blok* (invited review)
Observing nearby galaxies in HI with THINGS
- 1000 - 1020 *Jayaram Chengalur* (invited)
Gas and star formation in dwarf galaxies
- 1020 - 1040 *Ekta* (contributed)
GMRT HI observations of the most metal deficient galaxy SBS 0335-052
- 1040 - 1100 *Arunima Banerjee* (contributed)
Dark matter halo properties of galaxies deduced from HI vertical scale heights
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- 1100 - 1130 Tea
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Extragalactic Radio Sources

- 1130 - 1200 *Martin Hardcastle* (invited review)
Radio galaxy physics at low frequencies: lobes, jets and environments
- 1200 - 1220 *Lakshmi Saripalli* (invited)
Radio galaxies as probes of large-scale environments
- 1220 - 1235 *Marek Jamrozy* (contributed)
A multifrequency study of double-double radio galaxies
- 1235 - 1250 *Nithyanandan Thyagarajan* (contributed)
Searching for variables in the FIRST survey

- 1250 - 1305 *Alain Omont* (contributed)
Radio emission and properties of Spitzer-selected $z \sim 2$ submillimeter galaxies
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- 1305 - 1430 Lunch and viewing of posters
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Extragalactic Radio Sources

- 1430 - 1500 *Jeroen Stil* (invited review)
Probing magnetic fields in distant spiral galaxies by integrated polarization
- 1500 - 1520 *Dharam Vir Lal* (contributed)
Low-frequency results for radio sources and the role of GMRT
- 1520 - 1540 *K.S. Dwarakanath* (contributed)
On the nature of steep-spectrum sources in the VLA 74-MHz survey
- 1540 - 1600 *Mousumi Das* (contributed)
Radio emission from AGN in giant LSB galaxies
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- 1600 - 1630 Tea
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Clusters of Galaxies

- 1630 - 1700 *Rossella Cassano* (invited review)
Large-scale diffuse radio emission from clusters of galaxies
- 1700 - 1720 *Tiziana Venturi* (contributed)
The GMRT radio halo survey
- 1720 - 1740 *Ruta Kale* (contributed)
On the nature of diffuse radio emission in Abell 754
- 1740 - 1800 *Roberto Pizzo* (contributed)
Polarization in and around the Abell cluster 2255

Wednesday, 10th December 2008

Clusters of Galaxies

- 0930 - 0950 *Somak Raychaudhury* (invited)
AGN feedback in groups and clusters of galaxies
- 0950 - 1010 *Ewan O'Sullivan* (contributed)
A joint GMRT/X-ray study of galaxy groups: interactions between AGN and the hot IGM
- 1010 - 1030 *Jan M. Vrtilik* (contributed)
GMRT observations in the study of AGN feedback in galaxy groups
- 1030 - 1050 *Joydeep Bagchi* (contributed)
Diffuse bubble-like radio-halo emission in MRC 0116+111: a fossil remnant of AGN feedback in a distant cluster of galaxies
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- 1050 - 1130 Tea
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Our Galaxy

- 1130 - 1150 *Russ Taylor* (invited)
The magneto-ionic interstellar medium
- 1150 - 1210 *Subhashis Roy* (contributed)
Low-frequency observations towards the Galactic centre
- 1210 - 1230 *Nirupam Roy* (contributed)
Turbulence power spectra in supernova remnants and in cold neutral ISM
- 1230 - 1250 *Sabyasachi Pal* (contributed)
Multifrequency observations of Cygnus X-3 at the time of 2006 May giant flare
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- 1300 - 1400 Lunch and viewing of posters
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Pulsars, Transients and high-energy sources

- 1400 - 1420 *Josep Paredes* (invited)
Radio properties of very high energy gamma-ray sources
- 1420 - 1435 *Atish Kamble* (contributed)
Five years of dual-frequency monitoring of GRB030329 afterglow with the GMRT
- 1435 - 1500 *Avinash Deshpande* (invited review)
Probing pulsar emission mechanisms
- 1500 - 1515 *Jayanta Roy* (contributed)
Detection of a glitch from a young pulsar J1833-304
- 1515 - 1530 *Vishal Gajjar* (contributed)
Extensive pulsar nulling study using the GMRT
- 1530 - 1545 *S. Petrova* (contributed)
Mechanisms of the physical connection between the radio and high-energy emissions of pulsars
- 1545 - 1605 *Bhaswati Bhattacharyya* (contributed)
Wide-profile drifting pulsars - an elegant way to probe pulsar magnetosphere
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- 1605 - 1630 Tea
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- 1630 - 1650 *Jason Hessels* (invited)
Pulsars and other fast transients with LOFAR
- 1650 - 1710 *Reji Thomas* (contributed)
Understanding pulsar emission profiles from geometry and rotation effects
- 1710 - 1730 *R. T. Gangadhara* (contributed)
Modeling of polarization of radio pulsars
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- 1830 - 2030 **Cultural Evening**
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- 2030 *Conference Banquet*
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Thursday, 11th December 2008

Sun and Planetary Studies

- 0930 - 0950 *P.K. Manoharan* (contributed)
Radio scintillation imaging of solar wind structures from Sun to earth
- 0950 - 1010 *Prasad Subramanian* (contributed)
Constraints on solar coronal turbulence from source sizes of noise storms at 327 MHz
- 1010 - 1030 *Anil Bhardwaj* (contributed)
Simultaneous interferometer and multi-frequency survey of Jupiter's synchrotron radiation

Instrumentation and Techniques-I

- 1030 - 1100 *Sanjay Bhatnagar* (invited review)
Calibration and imaging issues at low radio frequencies
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- 1100 - 1130 Tea
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- 1130 - 1150 *Divya Oberoi* (invited)
The Murchison Widefield Array: overview and status
- 1150 - 1210 *A.G. de Bruyn* (invited)
LOFAR at the start of its roll-out: an update
- 1210 - 1230 *Vishambar Pandey* (contributed)
LOFAR calibration with BBS
- 1230 - 1250 *Peeyush Prasad* (contributed)
Dynamic range improvement of GMRT low frequency observations
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- 1300 - 1400 Lunch and viewing of posters
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GTAC Session

- 1400 - 1600 In this session, there will be a few short presentations of twenty minutes each from a representative sample of users of GMRT describing their experiences, technical issues and possibly giving suggestions to GTAC/NCRA. The speakers are *Willem Baan, Avinash Deshpande, Dave Green, Nissim Kanekar, R. Srianand and Tiziana Venturi*
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- 1600 - 1630 Tea
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- 1630 - 1830 A discussion session for about two hours in which members of the radio astronomy community could express their views which are directly relevant to the functioning of GMRT and make suggestions for possible improvements. This session will be co-ordinated by Dipankar Bhattacharyya

Friday, 12th December 2008

0700 Departure for GMRT, Khodad from NCRA, Pune

0900 Arrival at GMRT, Khodad

0900 - 1000 Breakfast

Instrumentation & Techniques-II: GMRT

1000 - 1030 *Rajaram Nityananda* (invited)
Overview of GMRT and status of upgrades

1030 - 1050 *N. Udaya Shankar* (contributed)
A 50 MHz system for GMRT

1050 - 1110 *Jayanta Roy* (contributed)
GSB: a real-time software backend for the GMRT

1110 - 1430 Tea + Guided tour of GMRT + Lunch

Instrumentation & Techniques-III

1430 - 1450 *Harric Vin, Subhrojyoti Chaudhuri* (contributed)
Model-driven development of control system software for radio telescopes

1450 - 1510 *M.V. Panduranga Rao* (contributed)
A minimum variance method for problems in radio antenna placement

1510 - 1530 *Vivek Mohile and Chaitral Purkar* (contributed)
Architecture of a generic telescope control and monitoring system

1530 - 1550 *Mukund Deshpande and Vivekanand Moosani* (contributed)
Data analysis products from VO-India

1550 Tea

1700 Departure from GMRT, Khodad to NCRA, Pune

1900 Arrival at NCRA, Pune