

ARDRA meeting - 13-15 November, 2019
The Fariyas Resort, Lonavala

13 November, 2019 (09:15-18:00)		
09:15-09:30	Melanie Johnston-Hollitt & Yashwant Gupta Divya Oberoi	Setting the stage SOC/ LOC announcements
Session 1 – Sun and Heliosphere (Divya Oberoi)		
09:30-09:45	Divya Oberoi	Solar science with MWA - status, plans and possibilities
09:45-10:00	Iver Cairns (remote)	Solar Radio Bursts: Research Topics for SKA and Extensions to MWA
10:00-10:15	John Morgan	IPS results with the MWA
10:15-10:30	Discussion - Sun and Heliosphere	
10:30-10:50	Andrew Zic, Poonam Chandra	Magnetic stars
10:50-11:00	Discussion - Magnetic stars	
11:00-11:30	Tea Break	
Session 2 – Galaxies and Clusters of Galaxies (Melanie Johnston-Hollitt)		
11:30-11:45	Dharam Vir Lal	
11:45-12:00	Surajit Paul	Future perspective on radio astronomy with low mass clusters
12:00-12:15	Abhirup Datta	
12:15-12:30	Melanie Johnston-Hollitt	
12:30-13:00	Discussion	
13:00-14:00	Lunch	
Session 3A – Transients (Poonam Chandra)		
14:00-14:15	J-P Macquart	Fast Transients - Australian activities
14:15-14:25	Jayanta Roy	Fast Transients - Indian Activities
14:25-14:30	Poonam Chandra -	Transient research in India in EM counterparts of GW sources and other slow transients
14:30-14:40	Shivani Bhandari	<i>1-2 slide/s talks each related to collaboration opportunities FRBs with ASKAP</i>

	Firoza Sutaria Ryan Shanon Manoneeta	Transients with AstroSAT FRBs Search for fast transients in large scale surveys
14:40-15:00	Discussion	
15:00-15:30	Tea Break	
Session 4 - EOR (Tirthankar Roy Choudhury)		
15:30-15:45	Ben McKinley (remote)	Update on MWA EoR activities
15:45-16:00	Abhirup Datta	Recent results from uGMRT observations on 21cm Foregrounds and Galaxy Clusters: Scope for Signal Extraction
16:00-16:15	Tirthankar Roy Choudhury	Theoretical models of the EoR
16:15-16:30	Prasanta Das	Non-linear electrodynamics: a model of inflationary universe
16:30-17:00	Discussion	
Session 3B – Pulsars (Goerge Hobbs)		
17:00-17:15	Yashwant Gupta	An overview of pulsar astronomy in India
17:15-17:30	Ramesh Bhat	An overview of pulsar astronomy in Australia
17:30-17:40		1 slide collaboration ideas relating to pulsar astronomy
17:40-18:00	Discussion	
14 November, 2019 (09:30-17:30)		
Session 5 -Surveys and Extra-galactic Deep Fields (Ishwara Chandra)		
09:30-09:45	Ishwara-Chandra	GLASS and other deep fields with uGMRT
09:45-10:00	Veeresh Singh	High redshift galaxies from deep fields
10:00-10:15	Abhirup Dutta	Cosmology with deep fields
10:15-10:30	Pankaj Jain	Large scale anisotropy in the Universe
10:30-11:00	Discussion	
11:00-11:30	Tea Break	
Session 6 – VLBI (Bhal Chandra Joshi)		
11:30-11:45	Tasso Tzioumis	Overview - Australian perspective

11:45-11:55	Bhal Chandra Joshi	Overview - Indian perspective
11:55-12:00	B Ajith Kumar	Technical developments at the uGMRT
12:00-12:15	Manikantan Ramadas A. Deshpande Visweshwar Ram Marthi	<i>3 x 5 min talks</i> DDOR application of VLBI SWAN Pulsar VLBI – possible IND-AU collaboration opportunities
12:15-13:00	Discussion	
13:00-14:00	Lunch	
Session 7 – Science Data Processing, Calibration and Imaging (Wasim Raja)		
14:00-14:12	Ruta Kale	The uGMRT pipeline and recent developments and challenges
14:12-14:24	Huib Intema	Direction-dependent, wide-band calibration and imaging: SPAM
14:24-14:36	Dharam Vir Lal	A-projection for uGMRT
14:36-14:48	Eric Bastholm	Overview of ASKAP Science Data Processing
14:48-15:00	Wasim Raja	ASKAP Wide-field imaging and calibration: challenges and solutions
15:00-15:30	Discussion	
15:30-16:00	Tea Break	
Session 8 – Big Data, SKA Regional Centers, Artificial Intelligence/ Machine Learning (Yogesh Wadadekar)		
16:00-16:12	Greg Sleep	MWA Archive and Data flow
16:12-16:24	Yogesh Wadadekar	Plans for an Indian SRC
16:24-16:36	Snehal Valame	Experience in areas of Virtual Observatory, Observation Management (GMRT, SKA) and delivering software with design thinking & SAFE approach
16:36-17:00	Rajesh Tamhane + Shraddha Surana	Understanding SKA Data Challenges from Data Science and Data Engineering Lenses
17:00-17:30	Discussion	
	Banquet Dinner	
15 November, 2019 (09:30-17:30)		
Session 9 – Monitor and Control (Yashwant Gupta)		
09:30-09:45	Andrew Williams	Monitor & Control system of MWA

09:45-10:00	Mangesh Patil	Design of SKA Telescope Manager and plans for construction phase
10:00-10:15	Jitendra Kodilkar	TANGO based next generation M&C system for the uGMRT
10:15-10:40	Discussion	
10:40-11:10	Tea Break	
Session 10 – Signal Processing towards SKA (Prabu T.)		
11:10-11:32	Ajith Kumar B	Overview of digital signal processing systems at GMRT
11:32-11:46	Srivani K S	Wide band Digital Tile Processing system for Low frequency arrays
11:46-12:00	Girish B S	Ongoing developments and future trends in high-speed signal processing platforms for low frequency applications
12:00-12:14	Somashekar R	Precision analog receiver for EoR
12:14-12:28	Ragunathan A	Challenges in the design of an antenna for the detection of Global 21cm EoR signal
12:28-13:00	Discussion	
13:00-14:00	Lunch	
Session 11 – SKA Field Node and LFAA (Raunaq Bhushan)		
14:00-14:12	Raunaq Bhushan	LFAA Project update and future proposed activities
14:12-14:24	David Emrich	LFAA Hardware presentation
14:24-14:36	Mia Walker	LFAA Operational lessons learned
14:36-14:48	Philip Edwards	SKA Low Site and Infrastructure
14:48-15:00	Suresh Kumar	The design and performance of RF frontend and Signal Transport system of GMRT
15:00-15:12	Sandip Khopkar	Tantrayut's perspective on Indian contribution to building of SKA Antennas and Electronics
15:12-15:45	Discussion	
15:45-16:10	Tea Break	
Wrap-up/ Summary		
16:10-17:00	<i>5 min summaries by all session coordinators</i>	
17:05-17:30	Discussion	

Close of meeting