uGMRT–MIGHTEE: Joint exploration of the deep radio sky with MeerKAT and the uGMRT, the pathway to the SKA

PROGRAMME SCHEDULE

Monday, 2 April 2018

Project updates

Time	Title	Speaker
$0930 - 0945$	Welcome remarks	Yashwant Gupta
$0945 - 1015$	GMRT upgrade: Current status	Dharam Lal
$1015 - 1045$	MeerKAT and MIGHTEE	Russ Taylor
$1050 - 1130$	Tea break	
$1130 - 1200$	GMRT archive processing project	Yogesh Wadadekar
$1200 - 1230$	MALS: MeerKAT absorption line survey	Neeraj Gupta
$1230 - 1300$	uGMRT–MIGHTEE project and synergy with DES	Matt Jarvis
$1300 - 1400$	Lunch break	
$1400 - 1420$	Atypical radio galaxies in deep radio fields	Biny Sebastian
$1420 - 1440$	SAGAN: Search and Analysis of GRGs with Associated Nuclei	Pratik Dabhade
$1440 - 1500$	Diffuse radio emission in ACTPol clusters	Sinenhlanhla Sikhosana
$1500 - 1520$	Mergers: A MeerKAT view of diffuse emission in galaxy clusters	Kenda Knowles
$1520 - 1540$	Discussion	
$1540 - 1600$	Tea break	
$1600 - 1700$	NCRA Colloquium	Russ Taylor
$1900 - 2030$	Dinner	

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Tuesday, 3 April 2018

Radio imaging pipeline development: Problems, RFI, lessons, etc.

0930 − 0950	The IDIA pipeline	Russ Taylor
0950 − 1010	Lessons from imaging pipeline development	Ishwara-Chandra
1010 − 1030	ARTIP: An automated imaging pipeline for MeerKAT and uGMRT spectral line surveys	Neeraj Gupta
1030 − 1050	Transient pipeline for the upgraded GMRT	Sanjay Kudale

1050 − 1130	Tea break	

1130 − 1150	Real time RFI excision for the uGMRT	Kaushal Buch
1150 − 1210	Predicting the satellite RFI at the GMRT	Santaji Katore
1210 − 1230	RFI identification and flagging in the visibility plane	Srikrishna Sekhar
1230 − 1300	Discussion	

1300 − 1400	Lunch break	

Radio sky and machine learning: Big data challenges

1400 − 1420	Machine Learning in the era of Big Data Radio Astronomy	Russ Taylor
1420 − 1440	Data fusion and machine learning: Approaches to classification	Mattia Vaccari
1440 − 1500	Machine learning and its application on optical surveys	Sheelu Abraham
1500 − 1520	Machine learning aspects for deep radio images	Gauri Shah (PSL)
1520 − 1540	Machine learning applications for radio astronomy	Vineet Pathak/Harshal Hayatnagarkar (ThoughtWorks)
1540 − 1600	Deep learning for object recognition in images	Sanjay Kadam (C-DAC)

1600 − 1630	Tea break	

1630 − 1650	GPz: non-stationary sparse Gaussian processes for heteroscedastic uncertainty estimation in astronomical data sets	Matt Jarvis
1650 − 1710	Process and equipment analytics through machine learning	Venkat Runkana (TRDDC)
1710 − 1730	Machine learning aspects for morphological classification	Wathela Alhassan
1730 − 1800	Brainstorming: Synergy between radio astronomy and industry	Yashwant Gupta and Russ Taylor

1930 − 2100	Workshop banquet	

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PROGRAMME SCHEDULE

Wednesday, 4 April 2018

Science interests using sky surveys

0930 − 0950	Upgraded GMRT, its imaging capabilities	Dharam Lal
0950 − 1010	Cluster of galaxies with deep radio imaging	Ruta Kale
1010 − 1030	Tracing the late evolution of galaxy mergers with deep radio imaging	Mousumi Das
1030 − 1050	AGN science interests from deep radio surveys	Veeresh Singh
1050 − 1110	Clustering of radio sources in COSMOS survey	Catherine Hale

1110 − 1130	Tea break	

1130 − 1145	Alignments of radio galaxy jets	Russ Taylor
1145 − 1200	Results from ELAIS–N1 field	Emmanuel Ocran/Russ Taylor
1200 − 1215	Deep band–3 observations of XMM–LSS field	Ishwara-Chandra
1215 − 1230	On the prospect of discovering galaxy groups through radio waves	Surajit Paul
1230 − 1245	Dynamical evolution of CR in galaxy clusters and possible connection to radio emission	Reju Sam John
1245 − 1300	Polarisation science	Russ Taylor

1300 − 1400	Lunch break	

Future projects

1400 − 1600	Future projects - I	Russ Taylor and Dharam Lal (Moderators)

1600 − 1630	Tea break	

Project planning

1630 − 1800	Future projects - II	Russ Taylor and Dharam Lal (Moderators)

1900 − 2030	Dinner	

**uGMRT–MIGHTEE: Joint exploration of the deep radio sky
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PROGRAMME SCHEDULE

Thursday, 5 April 2018

uGMRT beam–shapes and high dynamic range imaging

$0930 - 0950$	Beam–shapes for the upgraded GMRT	Santaji Katore
$0950 - 1010$	Wide–band beam corrections for the uGMRT	Biny Sebastian
$1010 - 1030$	Residual fringe subtraction to mitigate direction dependent errors	Srikrishna Sekhar
$1030 - 1050$	Total intensity wide field imaging	Russ Taylor

$1050 - 1130$	Tea break	

$1130 - 1150$	Polarisation efforts using uGMRT	Preeti Kharb/Dharam Lal
$1150 - 1210$	Wide–band polarisation and A–projection	Preshanth Jagannathan/Russ Taylor
$1210 - 1230$	Closing remarks	Russ Taylor

$1300 - 1400$	Lunch break	

Thank you!