

## Global 21-cm workshop 2024

30 September	
<b>8:30 am - 9:15 am</b>	<b>Breakfast</b>
9:15 am - 9:30 am	Welcome address by Prof. Tarun Souradeep
9:30 am - 10:00 am (25 + 5)	<b>Andrei Mesinger</b> What does the EDGES detection really mean for physical models of the cosmic 21cm
10:00 am - 10:20 am (15 + 5)	<b>Jiten Dhandha</b> Constraining star-formation efficiency in the early Universe using JWST and the cosmic 21-cm signal?
10:20 am - 10:40 am (15 + 5)	<b>Janakee Raste</b> Revisiting Lyman- $\alpha$ Heating and Cooling during the Cosmic Dawn
<b>10:40 am - 11:00 am</b>	<b>Coffee break</b>
11:00 am - 11:20 am (15 + 5)	<b>Tianyang Liu (remote)</b> Detecting Cosmic 21 cm global signal using an improved polynomial fitting algorithm
11:20 am - 11:40 am (15 + 5)	<b>Will Handley</b> PolySwyft: a sequential simulation-based nested sampler
11:40 am - 11:55 am	<b>Lightning talks [posters] (3 min each)</b>
<b>12:00 pm - 1:00 pm</b>	<b>Discussion 1 (moderated)</b>
<b>1:00 pm - 2:00 pm</b>	<b>Lunch break</b>
2:00 pm - 2:30 pm (25 + 5)	<b>Eloy de Lera Acedo</b> REACH – a project update after the start of observations
2:30 pm - 2:50 pm (15 + 5)	<b>Dominic Anstey</b> Update on REACH Data Collection and Processing
<b>2:50 pm - 3:30 pm</b>	<b>Coffee break/Poster viewing</b>
3:30 pm - 3:50 pm (15 + 5)	<b>Samuel Alan Kossoff Leeney</b> Data analysis for calibration of the REACH pipeline
3:50 pm - 4:10 pm (15 + 5)	<b>Saurabh Pegwal</b> In situ circuit modelling of the REACH front-end receiver calibration sources
4:10 pm - 4:30 pm (15 + 5)	<b>Anchal Saxena</b> Simulation-Based Inference of the sky-averaged 21-cm signal from CD-EoR with REACH
<b>4:30 pm - 5:30 pm</b>	<b>Discussion 2 (moderated)</b>
<b>6:30 pm - 8:00 pm</b>	<b>Dinner</b>

## Global 21-cm workshop 2024

1 October	
<b>8:30 am - 9:30 am</b>	<b>Breakfast</b>
9:30 am-10:00 am (25 + 5)	<b>Emilie Storer</b> Probing Radio Intensity at high-Z from Marion (PRIZM) - An Update
10:00 am-10:30 am (25 + 5)	<b>Yash Agrawal</b> Direction-dependent effects in SARAS and its latest deployment
10:30 am-10:50 am (15 + 5)	<b>Yogen Pranesh</b> STARFIRE2- Detecting the redshifted Global 21-cm signal in Earth orbit
<b>10:50 am-11:10 am</b>	<b>Coffee break</b>
11:10 am-11:30 am (15 + 5)	<b>Adarsh Kumar Dash</b> In-situ measurement of antenna return loss for 21-cm cosmology experiments
11:30 am-11:50 am (15 + 5)	<b>Hugh Garsden</b> RHINO: Observing the 21cm global signal with a large horn antenna
11:50 am-12:10 pm	<b>Lightning talks [posters] (3 min each)</b>
<b>12:10 pm - 1:00 pm</b>	<b>Discussion 1 (moderated)</b>
<b>1:00 pm - 2:00 pm</b>	<b>Lunch break</b>
2:00 pm-2:30 pm (25 + 5)	<b>Anastasia Fialkov (remote)</b> 21-cm Cosmology: First stars and beyond
2:30 pm-2:50 pm (15 + 5)	<b>Sudipta Sikder</b> Constraining the clustering and 21-cm signature of radio galaxies at cosmic dawn
<b>2:50 pm - 3:30 pm</b>	<b>Coffee break/Poster viewing</b>
3:30 pm-3:50 pm (15 + 5)	<b>Peter Sims</b> Predicting the global-21-cm signal using other Epoch of Reionization observables
3:50 pm-4:10 pm (15 + 5)	<b>Shikhar Mittal</b> Foregrounds due to extragalactic point sources
4:10 pm-4:30 pm (15 + 5)	<b>Emma Shen (remote)</b> Polarised Foregrounds in Global 21-cm Experiments
<b>4:30 pm - 5:30 pm</b>	<b>Discussion 2 (moderated)</b>
<b>6:30 pm - 8:00 pm</b>	<b>Dinner</b>

## Global 21-cm workshop 2024

3 October	
<b>8:30 am - 9:30 am</b>	<b>Breakfast</b>
9:30 am - 10:00 am (25 + 5)	<b>Nivedita Mahesh</b> Another yearly round-up of EDGES
10:00 am - 10:20 am (15 + 5)	<b>Rigel Cappallo</b> The Calibration Accuracy of the EDGES-3 21-cm System and Recent Results
10:20 am - 10:40 am (15 + 5)	<b>Akshatha Vydula</b> Progress on EDGES-3 data analysis
<b>10:40 am - 11:00 am</b>	<b>Coffee break</b>
11:00 am - 11:20 am (15 + 5)	<b>Steven Murray (remote)</b> Improved and Open-Source analysis of EDGES-2018
11:20 am - 11:40 am (15 + 5)	<b>Harry Bevins</b> Marginal Bayesian Statistics and Post Processing of Bayesian Constraints from 21-cm Experiments
11:40 am - 11:55 am	<b>Lightning talks [posters] (3 min each)</b>
<b>12:00 pm - 1:00 pm</b>	<b>Discussion 1 (moderated)</b>
<b>1:00 pm - 2:00 pm</b>	<b>Lunch break</b>
2:00 pm - 2:30 pm (25 + 5)	<b>Ravi Subrahmanyam</b> GINAN: Global Imprints from Nascent Atoms to Now
2:30 pm - 3:00 pm (25 + 5)	<b>Raul Monsalve (remote)</b> Recent progress by the Mapper of the IGM Spin Temperature (MIST)
<b>3:00 pm - 3:30 pm</b>	<b>Coffee break/Poster viewing</b>
3:30 pm - 3:50 pm (15 + 5)	<b>Ian Hendricksen</b> Estimation of Soil Properties at MIST Observing Sites from In-Situ Measurements of the Antenna Impedance
3:50 pm - 4:10 pm (15 + 5)	<b>George Carter</b> B-GSM - The Bayesian Global Sky Model
4:10 pm - 4:30 pm (15 + 5)	<b>Christian Hellum Bye</b> The Electromagnetically Isolated Global Signal Estimation Platform
<b>4:30 pm - 5:30 pm</b>	<b>Discussion 2 (moderated)</b>
<b>6:30 pm - 8:00 pm</b>	<b>Dinner</b>

## Global 21-cm workshop 2024

4 October	
<b>8:30 am - 9:30 am</b>	<b>Breakfast</b>
9:30 am - 10:00 am (25 + 5)	<b>Leon Koopmans</b> Lunar-Based 21-cm Cosmology Experiments: Opportunities and Challenges
10:00 am - 10:30 am (25 + 5)	<b>David Rapetti (remote)</b> The Dawn of Radio Astronomy from the Moon: Current Results and Near-Term Prospects
10:30 am - 10:50 am (15 + 5)	<b>Saptarshi Bandyopadhyay</b> Modeling Science Return from the Lunar Crater Radio Telescope (LCRT) Mission Concept
10:50 am - 11:10 am	<b>Coffee break</b>
11:10 am - 11:30 am (15 + 5)	<b>Abhirup Datta</b> SEAMS: A space mission dedicated to ultra-low frequency radio observations
11:30 am - 11:50 am (15 + 5)	<b>Vishakha Pandharpure</b> Design of a Wideband Monopole Antenna for the Detection of EoR signal
11:50 am - 12:10 pm (15 + 5)	<b>Sonia Ghosh</b> Could the Moon's rough behaviour close the 21-cm EoR window? : The Dark-ages EXplorer (DEX) Study
12:10 pm - 12:25 pm	<b>Lightning talks [posters] (3 min each)</b>
<b>12:30 pm - 2:00 pm</b>	<b>Lunch break</b>
2:00 pm - 2:20 pm (15 + 5)	<b>Satyapan Munshi</b> Probing the cosmic dawn 21-cm signal with NenuFAR
2:20 pm - 2:40 pm (15 + 5)	<b>Rajorshi Sushovan Chandra</b> Updates From The HERA Interferometer : Systematics Overview
2:40 pm - 3:00 pm (15 + 5)	<b>Yordan Ignatov</b> Measuring the cosmological 21-cm dipole with 21-cm global experiments
3:00 pm - 3:20 pm (15 + 5)	<b>Anshuman Tripathi</b> ANN-Based Global 21-cm Signal Extraction from CD/EoR with Chromatic Ionospheric Effects
<b>3:20 pm - 4:00 pm</b>	<b>Coffee break/Poster viewing</b>
<b>4:00 pm - 5:00 pm</b>	<b>Discussion (moderated)</b>
<b>6:30 pm - 8:00 pm</b>	<b>Dinner</b>

Posters			
S1	Date	Name	Title
1	30 Sep	Thomas Binnie	EoR Science with Bayesian analyses.
2	30 Sep	Eeshan Beohar	Foreground Removal Techniques in 21-cm Cosmology
3	30 Sep	Suvedha Naik	Global 21 cm profile: an important probe of primordial features
4	1 Oct	Christian Kirkham	A Marginalised Bayesian Noise Wave Calibration Method for Global 21-cm Cosmology Experiments
5	1 Oct	Joe Pattison	Conquering Changing Soil Parameters with Normalising Flows
6	1 Oct	Narendra S	Global Signal Detection using Interferometers
7	1 Oct	Prateek Khanna	Hybrid approach involving statistics and machine learning for denoising 21 cm data
8	3 Oct	Iffat Nasreen	Effect of large optical depth on bispectrum of 21-cm HI signal from Cosmic Dawn
9	3 Oct	Leon Noble	Impact of the sources of Epoch of Reionization on the 21-cm bispectrum
10	3 Oct	Eishica Chand	Boosting HI-galaxy cross-clustering signal through higher-order cross-correlations
11	3 Oct	Arnab Mishra	Prospects of detecting individual ionized bubbles in HI 21-cm maps using uGMRT and SKA
12	4 Oct	Khandakar Md Asif Elahi	The Tracking Tapered Gridded Estimator for the 21-cm power spectrum from MWA drift scan observations
13	4 Oct	Rashmi Sagar	Deciphering the Reionization: deep look into ELAIS-N1 field with uGMRT Band-2 Observations
14	4 Oct	Saikat Gayen	Bias and variance in uGMRT ELAIS-N1 field power spectrum
15	4 Oct	Sauraj Bharti	HI-stacking predictions for upcoming surveys with SKA precursors
16	4 Oct	Samit Kumar Pal	Analysing the effect of calibration errors and instrumental noise on HI 21-cm maps from the EoR using the LCS