

6th Annual Science at Low Frequencies

Arizona State University
Tempe, Arizona

Meeting Agenda

Talks are 12 minutes + 3 minutes for questions. You may use your own laptop (HDMI connector).

Time	Monday December 9, 2019	Tuesday December 10, 2019	Wednesday December 11, 2019
	Session 1 Chair: Danny Jacobs	Session 5 Chair: Tessa Vernstrom	Session 9 Chair: Bart Pindor
9:00	Opening Remarks	Emil Polisensky -- Hunting Meter-wavelength Transients with VLITE	REMOTE: Sarah White -- The GLEAM 4-Jy (G4Jy) Sample -- the brightest radio-sources in the southern sky
9:15	Joseph Callingham -- The low-frequency population of stellar systems	Kristina Nyland -- Commensal VLITE Meter-wavelength Imaging in and around the Hubble Ultra Deep Field	Gregg Hallinan -- FARSIDE: A Probe-Class Mission to Place a Radio Telescope on the Lunar Farside
9:30	Harish Vedantham -- Radio signatures of star-planet interaction	Frank Schinzel -- Karl G. Jansky Very Large Array sub-GHz observing capabilities	Nick Seymour (on behalf of Guillaume Drouart) -- The GLEAMing of the first supermassive black holes
9:45	Jake Turner -- The tentative detection of radio emissions from the exoplanetary system Tau Bootis using LOFAR beamformed observations	Savin Shynu Varghese -- Studying meteor radio afterglows with the Long Wavelength Array	Stefan Duchesne (presented by Melanie Johnston-Hollitt) -- Revealing diffuse, non-thermal galaxy cluster emission with the Murchison Widefield Array Phase II
10:00	Andrew Zic -- Multi-wavelength space weather monitoring of Proxima Centauri	Poster lightning talks - Round 1 (1 slide, 1 minute per speaker)	Ralf-Juergen Dettmar -- Cosmic Ray Electron Transport in Halos of Star Forming Disk Galaxies
10:15	Jason Ling -- Characterizing the Low-Frequency Radio Environments around Nearby Stars and Exoplanets		Sarvesh Seethapuram Sridhar -- Magnetising the universe with dwarf galaxies: A new low-frequency radio continuum perspective
10:30	BREAK (30 minutes)		
	Session 2 Chair: Nivedita Mahesh	Session 6 Chair: Marin Anderson	Session 10 Chair: Matt Kolopanis
11:00	Greg Taylor -- Observations of Flare Stars and Exoplanets with the LWA	Raul Monsalve -- An absorption feature in the EDGES Mid-Band spectrum	Chris Riseley -- The Evolutionary History of the Giant Radio Galaxy ESO422-G028
11:15	Marin Anderson -- The OVRO-LWA: Science Results & Upgrade	Nivedita Mahesh -- Beam Chromaticity of the EDGES Low-Band Blade Dipole	Andrew Romero-Wolf -- Prospects for Low Frequency Radio Astronomy with the Sun Radio Interferometer Space Experiment
11:30	Yuping Huang -- A Non-Targeted Survey for Radio Transients with the OVRO-LWA	Christopher DiLullo -- Using the Long Wavelength Array to Search for Cosmic Dawn	Xuelei Chen -- Discovering Sky at the Longest wavelength: a lunar orbit interferometer array
11:45	Kathryn Plant -- High Energy Cosmic Rays with the OVRO-LWA	Eloy de Lera Acedo -- REACH: The Radio Experiment for the Analysis of Cosmic Hydrogen	Mike Wilensky -- Characterizing Radio Frequency Interference Contamination in Epoch of Reionization Power Spectra
12:00	Masoud Rafiei-Ravandi -- Fast radio burst science with CHIME/FRB	Nima Razavi-Ghods -- Instrumentation and Calibration for Global 21cm Experiments	Adam Beardsley -- Reliability and Repeatability with Community Developed Software for Low Frequency Astronomy
12:15	Tomas Cassanelli -- FRB localization with VLBI	Jeff Peterson -- The High-Z All-sky Spectrum Experiment	Adam Lanman -- pyvsim: A comprehensive radio interferometry simulator in Python
12:30	LUNCH (90 minutes)		
	Session 3 Chair: Josh Dillon	Session 7 Chair: Joe Callingham	Sessions 11 Chair: Andre Offringa
2:00	Fronefield Crawford -- Arcibo 327 MHz Search for Pulsars and Fast Transients in M33	Jonathan Pober -- The Impact of Calibration Errors on 21 cm Global Experiments: A Bayesian Case Study with EDGES	Josh Dillon -- Precision Calibration and Data Analysis for 21 cm Cosmology with HERA
2:15	Nichole Barry -- Newest limits on the EoR structure from the MWA	Keith Tauscher -- A generalized analysis technique for global 21-cm signal experiments	Chris Carilli -- HERA Imaging and Modeling
2:30	Christene Lynch -- LoBES: The Long Baseline Epoch of Reionisation Survey	Torrance Hodgson -- A low(er) frequency follow-up of 28 candidate cosmic web filaments	Nithyanandan Thyagarajan -- An alternate approach to detecting HI structures in the Epoch of Reionization using Bispectrum Phase
2:45	Ruby Byrne -- Enabling Precision EoR Calibration with a Polarized Diffuse Map of the Southern Sky	Kenda Knowles -- 400 MHz uGMRT imaging of SZ clusters	John Morgan -- Understanding the low-frequency compact source population with Interplanetary Scintillation
3:00	Andre Offringa -- LOFAR EoR: Latest results	Simona Giacintucci -- An extraordinary fossil in the Ophiuchus galaxy cluster	Anish Rishi -- Observational study of H to H ₂ transition in the interstellar medium
3:15	Bharat Kumar Gehlot -- AARTFAAC Cosmic Explorer: status update and new results	Poster lightning talks - Round 2 (1 slide, 1 minute per speaker)	Charlotte Sobey -- Probing the large- and small-scale ISM using pulsars
3:30	BREAK (30 minutes)		
	Session 4 Chair: Ronny Joseph	Session 8 Chair: Bryna Hazelton	Sessions 12 Chair: Chenoa Tremblay
4:00	Jack Burns -- Investigating Dark Matter and Exotic Physics using the Redshifted 21-cm Global Signal with the Dark Ages Polarimeter Pathfinder (DAPPER)	Nicholas Kern -- Calibration and Systematic Modeling for HERA En Route to Power Spectrum Limits	Jess Broderick -- LOFAR observations of the 2019 flaring activity from Cygnus X-3
4:15	Jonathan Sievers -- HIRAX: Status and Update	André Offringa -- Improved imaging algorithms for low-frequency science	Namir Kassim -- In Search of Galactic Center Millisecond Pulsars from Steep-Spectrum, Compact Radio Sources
4:30	Emily Kuhn -- Calibration Instrumentation for the Hydrogen Intensity and Real-Time Analysis Experiment	James Kent -- Direct Imaging Radio Correlators	Sam McSweeney -- Resolving the aliasing problem for PSR B0031-07
4:45	Simon Foreman -- Packed Ultra-wideband Mapping Array (PUMA): A Radio Telescope for Cosmology and Transients	Ronny Joseph -- Bridging the Gap between Sky and Redundancy Based Calibration	Ramesh Bhat -- High-time resolution studies of southern millisecond pulsars with the MWA
5:00	H. Cynthia Chiang -- Observing the <100 MHz radio sky from the sub-Antarctic and Arctic	Luke Pratley -- Wide-field interferometric imaging and wide-band rotation measure synthesis	Closing remarks
Evening	<i>No group activity Monday evening. Suggestions will be provided for individual dinner and informal social options.</i>	Conference Happy Hour 6:00-8:00pm Pedal Haus Brewery 730 Mill Ave. <u>Light appetizers and cash bar</u>	<i>No group activity Wednesday evening. Suggestions will be provided for individual dinner and informal social options.</i>