



Second Global 21cm Workshop, McGill 2019

Agenda (v1.2)



Location: Bell Room, Rutherford Physics Building (3600 Rue University, Montréal)

Time	Oct 7 th	Oct 8 th	Oct 9 th
8:50 – 9:00	Announcements	Announcements	Announcements
	Session 1 Chair: Aaron Ewall-Wice	Session 5 Chair: Gianni Bernardi	Session 8 Chair: Jordan Mirocha
9:00 – 9:20	Vera Gluscevic	Julian Muñoz	Robert Brandenberger
9:20 – 9:40	Adam Lidz	Aaron Ewall-Wice	Bryce Cyr
9:40 – 10:00	Jordan Mirocha	Alexander Kaurov	Oscar Hernández
10:00 – 10:20	Girish Kulkarni	Discussion	Ricardo Bustos
10:20 – 10:40	Discussion	Coffee	Discussion
10:40 – 11:00	Coffee	Coffee	Coffee
	Session 2 Chair: Judd Bowman	Session 6 Chair: Eloy de Lera Acedo	Session 9 Chair: Abhirup Datta
11:00 – 11:20	Saurabh Singh	H. Cynthia Chiang	Eloy de Lera Acedo
11:20 – 11:40	Ravi Subrahmanyan	José Miguel Jáuregui	Nima Razavi-Ghods
11:40 – 12:00	Discussion	Jonathan Sievers	Dominic Anstey
12:00 – 12:20	Discussion	Discussion	Discussion
12:20 – 1:40	Lunch	Lunch	Lunch
	Session 3 Chair: Jeff Peterson	Session 7 Chair: Saurabh Singh	Session 10 Chair: Matt Dobbs
1:40 – 2:00	Judd Bowman	Olga Navros	Marta Spinelli
2:00 – 2:20	Nivedita Mahesh	Jeff Peterson	Bang Nhan
2:20 – 2:40	Raul Monsalve	Discussion	Mayuri S. Rao
2:40 – 3:00	Alan E. E. Rogers	Gianni Bernardi	Ben McKinley
3:00 – 3:20	Discussion	Discussion	Discussion
3:20 – 3:40	Coffee	Coffee	Coffee
	Session 4 Chair: Nima Razavi-Ghods	MSI Astro Seminar 3:30–4:30 Brian Metzger	Session 11 Chair: Raul Monsalve
3:40 – 4:00	Steven Murray		Matt Dobbs
4:00 – 4:20	Peter Sims		Adam Lidz
4:20 – 4:40	Keith Tauscher		Colin Lonsdale
4:40 – 5:00	David Rapetti		Discussion
5:00 – 5:20	Abhirup Datta		Seth Siegel
	Dinner on your own		Dinner on your own
6:30		Dinner at Brutopia	

Talk Titles

Session 1, Chair: Aaron Ewall-Wice

Vera Gluscevic: Dark matter throughout cosmic history
Adam Lidz: The 21 cm signal and fuzzy dark matter
Jordan Mirocha: The global 21-cm signal in the context of high-z galaxy surveys
Girish Kulkarni: Hints of a concordant reionization model from the Lyman- α forest

Session 2, Chair: Judd Bowman

Saurabh Singh: SARAS: evolution of system design and related challenges
Ravi Subrahmanyam: SARAS 3: towards a firm cosmic dawn signal

Session 3, Chair: Jeff Peterson

Judd Bowman: Overview of EDGES
Nivedita Mahesh: Verification of EDGES beam models and comparison to actual data
Raul Monsalve: EDGES Mid-Band analysis
Alan Rogers: Update on EDGES-3

Session 4, Chair: Nima Razavi-Ghods

Steven Murray: A fully bayesian analysis for EDGES
Peter Sims: The impact of calibration errors on 21 cm global experiments: a bayesian case study with EDGES
Keith Tauscher: Moving away from analytical a priori foreground models in signal extraction
David Rapetti: Rigorously extracting and constraining global 21-cm signal model parameters
Abhirup Datta: Global signal estimation using neural networks

Session 5, Chair: Gianni Bernardi

Julian Muñoz: Cosmology with the 21-cm global signal
Aaron Ewall-Wice: Explaining the EDGES detection with radio loud black holes
Alexander Kurov: Implication of the shape of the global 21 cm signal at cosmic dawn for its power spectrum

Session 6, Chair: Eloy de Lera Acedo

H. Cynthia Chiang: Observing the <100 MHz radio sky from the sub-Antarctic and Arctic
Jose Miguel Jauregui: HIBiscus and Mango-Peel antennas
Jonathan Sievers: Beam analysis for global signal experiments

Session 7, Chair: Saurabh Singh

O. Navros: High-Z calibration
Jeff Peterson: Interaction of ground plane wires with the soil
Gianni Bernardi: LEDA status update

Session 8, Chair: Jordan Mirocha

Robert Brandenberger: Signature of cosmic strings in high redshift 21-cm intensity maps
Bryce Cyr: Cosmic string cusps and the 21cm signal at cosmic dawn
Oscar Hernández: Wouthuysen-Field effect in cosmic string
Ricardo Bustos: MIST: Mapper of the IGM spin temperature

Session 9, Chair: Abhirup Datta

Eloy de Lera Acedo: REACH: The Radio Experiment for the Analysis of Cosmic Hydrogen
Nima Razavi-Ghods: Bayesian techniques for the calibration of 21cm global experiments
Dominic Anstey: Bayesian data analysis for REACH

Session 10, Chair: Matt Dobbs

Marta Spinelli: On the contamination of the global 21cm signal from polarized foregrounds
Bang Nhan: Applications of dynamical projection-induced polarimetry in global 21-cm measurement
Mayuri S. Rao: PRATUSH: gearing towards space based 21-cm experiment
Ben McKinley: Detecting the global signal with a short-spacing interferometer

Session 11, Chair: Raul Monsalve

Matt Dobbs, Adam Lidz, Colin Lonsdale: Summary talks
Seth Siegel: Measuring the 21cm power spectrum at low redshift with CHIME: status and present challenges