



Preliminary Program

Reionization in the Red Centre: New windows on the high redshift Universe

Sunday 14th – Thursday 18th July, 2013, Ayers Rock Resort

Day 1: Sunday 14th

- 3pm** Registration Desk opens
Sails in the Desert Voyages Hotel, Conference Area

- 5pm** Welcome Drinks
Sails in the Desert Voyages Hotel, Pool area

- 6pm** BBQ Dinner by the Pool
Sails in the Desert Voyages Hotel, Pool area

Day 2: Monday 15th

Session 1: What have we learned about reionization from the CMB?

- 9.15-9.25: Welcome
- 9.25-10.05: Christian Reichardt (Invited Review)
What have we learned about reionization from the CMB?
- 10.05-10.30: Andrei Mesinger (Invited)
The kinetic Sunyaev-Zel'dovich signal from inhomogeneous reionization
- 10.30-11.00: Morning Tea**
- 11.00-11.25: Kyungjin Ahn
Impact of the First Stars on Cosmic Reionization and Probing Their Existence through Planck

Session 2: What do we know about the history of the IGM?

- 11.25-12.05: Matt McQuinn (Invited Review)
What do we know about the history of the IGM?
- 12.05-12.30: Michael Shull
Probing the He II Epoch of Reionization and QSO Proximity
- 12.30-2.00: Lunch**
- 2.00-2.25: Luca Graziani
The cosmic UV background fluctuations at $z = 3$ as traced by metal ions: the effects of radiative transfer.
- 2.25-2.50: Girish Kulkarni
Chemical enrichment of damped Lyman-alpha (DLA) systems as a direct constraint on Population III star formation
- 2.50-3.20: Poster short presentations

- 3.20-4.00: Afternoon Tea**
- 4.10-4.35: Akila Jeesson-Daniel
Clumping factors of H and He from EoR simulations
- 4.35-4.50: Gabor Worseck
Mapping the Inside-Out Morphology of Hell Reionization over 800 Million Years of Cosmic Time
- 4.50-5.15: Emma Ryan-Webber
Intergalactic metals at the conclusion of Reionization
- 6:30pm Dinner – Marquee Pizza, Pasta and Salad Bar**

Day 3: Tuesday 16th

Session 3: What do we know about early stars and galaxies?

- 9.00-9.40: Richard Ellis (Invited Review)
Observing Star-Forming Galaxies in the Heart of the Reionization Era
- 9.40-10.05: Anna Frebel (Invited)
Extremely metal-poor stars in the ultra-faint dwarf galaxies and their relation to the first galaxies
- 10.05-10.30: Emma Curtis-Lake
Stellar populations and morphological evolution of LBG's.
- 10.30-11.00: Morning Tea**
- 11.00-11.25: Rychard Bouwens
Characterizing the Physical Properties, Colors, and Specific Star-formation Rates of the Ultra-Faint Galaxies that Reionized the Universe
- 11.25-11.50: Pascal Oesh
Probing the Dawn of Galaxies at $z \sim 9-12$
- 11.50-12.15: Andreas Pawlik,
The first galaxies: radiative feedback from the first stars
- 12.15-12.40: Linhua Jiang
Physical Properties of Spectroscopically Confirmed Galaxies at $z \geq 6$
- 12.40-2.00: Lunch**
- 2.05-2.30 Fuyan Bian
Lyman alpha fraction in $z \sim 7$ galaxies: a LBT spectroscopic survey
- 2.30-2.55: Jeff Cooke
Not the usual suspects: Uncovering key contributors to cosmic reionization

Session 4: What do we know about early black-holes and quasars?

- 2.55-3.35 Daniel Mortlock (Invited Review)
What do we know about the first quasars and black holes?
- 3.35-4.00: Afternoon Tea**
- 4.00-4.25: Xiaohui Fan
Quasar Host Galaxies at $z \sim 6$: an ALMA view
- 4.25-4.50: Zoltan Haiman
Rapid Formation of $\sim 10^6 M_{\text{sun}}$ Seed Black Holes in High-Redshift Halos
- 4.50-5.15: Simona Gallerani
Far infrared emission lines in $z \sim 6$ quasars and galaxies
- 6:30pm Dinner at the Outback Pioneer BBQ**

Day 4: Wednesday 17th

Session 5: What are 21cm studies teaching us about reionization?

- 9.00-9.30: Judd Bowman (Invited)
Reionization with the MWA
- 9.30-10.00: Jonathan Pober (Invited)
Recent Results on Cosmic Reionization from PAPER
- 10.00-10.30: Leon Koopmans (Invited)
Reionization with LOFAR
- 10.30-11.00: Morning Tea**
- 11.00-11.25: Josh Dillon
Big Data from Big Telescopes: Scaling up to Precision 21 cm Cosmology
- 11.25-11.50: Hanseek Kim
Understanding the Epoch of Reionization using hierarchical galaxy formation models
- 11.50-12.15: Adrian Liu
Foreground subtraction versus foreground avoidance: how robust is the EoR window?
- 12.15-12.40: Ron Ekers
Global EoR experiments
- 12.40-1:45: Lunch**
- 1:00 – 2:00: Indigenous Australian Astronomy Public Talk
- 2.00-5.00: Uluru excursion**
Including some walking
- 6:00pm Sounds of Silence Conference Dinner**
There will be a pick-up from each hotel

Day 5: Thursday 18th

Session 6: How well has theory confronted observations in the realm of reionization?

- 9.00-9.25: Kristian Finlator (Invited)
Understanding Galaxies and Hydrogen Reionization Together
- 9.25-9.50: Qingjuan Yu
Probing the baryonic processes and the reionization at high redshifts from the local dwarf galaxies
- 9.50-10.15: Edoardo Tescari
Properties of simulated galaxies at $z \sim 4-7$
- 10.15-10.45: Morning Tea**
- 10.45-11.10: Mark Dijkstra
Lyman Alpha Emitting Galaxies as a Probe of Reionization
- 11.10-11.35: Matthew Schenker
First results from MOSFIRE: high-redshift, near-IR spectroscopy
- 11.35 – 12.30 Facilitated discussion (Zoltan Haiman)
- 12.30-1.30: Lunch**

Session 7: What are the key future observations for understanding reionization?

- 1.30-2.10: Rogier Windhorst (Invited Review)
The key future observations for understanding reionization
- 2.10-2.25: Katherine Mack
Dark Matter Particle Physics, Structure Formation, and Reionization
- 2.25-2.50: Massimo Stiavelli
First Light and Reionization with the James Webb Space Telescope

2.50-3.15: Jeremy Mould
The Dark Energy Camera Deep Field

3.15-3.45: Afternoon Tea

3.45-5.00: Facilitated discussion (Xiaohui Fan)

5.00-5.10: Close