The Reionization Epoch: New Insights and Future Prospects
Program

Sunday 3/6/2016

5-7 pm	Reception at Aspen Center for Physics
7pm to ?	no-host dinner at the Hickory House

Monday 3/7/2016

Session Chair: Marijn Franx

8:00-8:15	G. Illingworth, J. Kelly	Welcome and Logistics
8:15-8:30	Pascal Oesch	Conference Motivation
8:30-8:45	Adriano Fontana	Observing galaxies across the EoR boundary
8:45-9:00	Stuart Wyithe	Modelling galaxy formation and reionization with DRAGONS
9:00-9:15	Ivo Labbe	The Build-up of Galaxies During the Epoch of Reionization with HST+Spitzer

Coffee

Session Chair: Desika Narayanan

9:45-10:00	Rebecca Bowler	The abundance and properties of the brightest z = 7 galaxies
10:00-10:15	Charlotte Mason	The first galaxies through a magnifying GLASS
10:15-10:30	Daniel Stark	Spectroscopy of Reionization-Era Galaxies
10:30-10:45	Gabriel Brammer	Spectroscopic redshift confirmation of a remarkably luminous galaxy at z=11.1
10:45-11:00	David Sobral	Out of this world: the first 1-2 Gyrs of cosmic time with the widest Lyman-alpha surveys

Lunch Break

Session Chair: Fabian Walter

4:30-4:45	Masafusa Onoue	Searching for z>6 Quasars with Subaru / Hyper Suprime-Cam Survey
4:45-5:00	Eduardo Banados	Quasars within the first gigayear of the universe
5:00-5:15	Jarrett Johnson	How High Redshift Quasars Form
5:15-5:30	Daniel Whalen	How Supermassive Black Holes Form by z ~ 7
5:30-5:45	Ruth Daly	Spin Properties of Supermassive Black Holes with Powerful Outflows

Coffee

Session Chair: Rosie Wyse

6:15-6:30	Mark Dijkstra	Observational Signatures of Supermassive Black Hole Formation via Direct Collapse
6:30-6:45	Muhammad Latif	Direct collapse BHs formation and their role in EoR
6:45-7:00	Kohei Inayoshi	Hyper-Eddington accretion flows onto massive black holes
7:00-7:15	Antonino Cucchiara	GRBs at z>6: an inside view of "re-ionizing" galaxies

Tuesday 3/8/2016

Session Chair: Jen Lotz

8:00-8:15	Fabian Walter	[CII] emission as a diagnostic tool of the earliest galaxies
8:15-8:30	Desika Narayanan	Molecular Gas and [CII] Emission during the First Billion Years
8:30-8:45	Miroslava Dessauges-Zavadsky	Molecular gas properties of a strongly lensed star-forming galaxy at z~3.6 and their implications
8:45-9:00	Sunil Golwala	A 30m Survey Telescope to Probe Dusty, Star-Forming Galaxies into the Epoch of Reionization
9:00-9:15	Daniel Wolf Savin	Atomic, Molecular, and Optical Physics in the Early Universe

Coffee

Session Chair: Marusa Bradac

9:45-10:00	Sara Heap	A Template for the Sources of Reionization of the Universe
10:00-10:15	Peter Senchyna	Stellar Populations at Low-Metallicity via Nearby Star-Forming Galaxies
10:15-10:30	Andrew Graus	The Local Group as a time machine: studying the high-redshift Universe with nearby galaxies
10:30-10:45	Rosemary Wyse	Reionization and the High-Redshift Galaxy UV Luminosity Function with Axion Dark Matter
10:45-11:00	Daniel Kelson	Galaxy Formation from First Principles: Quasistatic Equilibrium and Stochasticity

Lunch Break

Session Chair: Stuart Wyithe

4:30-4:45	Rachel Webster	MWA EoR Experiment: latest Results
4:45-5:00	Tejaswi V Nerella	Interferometry and the global 21cm signal
5:00-5:15	Joshua Dillon	It's Always Darkest Before the Cosmic Dawn: Statistical Techniques and Results from First Generation Interferometers
5:15-5:30	Daniel Jacobs	New results from PAPER and HERA
5:30-5:45	Jack Burns	Detecting the First Galaxies with the Global 21-cm Signal: The Dark Ages Radio Explorer (DARE)

Coffee

Session Chair: Eli Visbal

6:15-6:30	Nithyanandan Thyagarajan	High precision wide-field instrument and foreground simulations for EoR experiments
6:30-6:45	Raul Monsalve	Latest Constraints on the Global Redshifted 21-cm EoR Signal from the EDGES Experiment
6:45-7:00	Adrian Liu	Combining CMB and 21cm observations to probe astrophysics and cosmology
7:00-7:15	Katherine Mack	What Reionization and the SKA Can Tell Us About Dark Matter

Wednesday 3/9/2016

Session Chair: Michele Trenti

8:00-8:15	Michael Zemcov	Statistical Measurements of Faint Reionizing Sources with Emission Line Intensity Mapping
8:15-8:30	Caroline Heneka	Cross-correlation of Ly-alpha and 21-cm fluctuations
8:30-8:45	Anne Hutter	Exploiting 21cm-LAE synergies: constraints on reionization
8:45-9:00	Anastasia Fialkov	The effect of first X-ray sources on Reionization and the 21-cm signal
9:00-9:15	Aaron Ewall-Wice	X-ray heating during the pre-reionization epoch: Predictions and First Power Spectrum Limits with the MWA.

Coffee

Session Chair: Dan Whalen

9:45-10:00	Britton Smith	Where did the first Pop II Stars come from?
10:00-10:15	Simon Mutch	Modelling galaxy formation and the Epoch of Reionization with DRAGONS
10:15-10:30	Gregory Poole	The Dynamical Lives of High Redshift Galaxies
10:30-10:45	Michael Norman	Contribution of the Smallest Galaxies to Reionization: A Qualitatively Different Picture
10:45-11:00	*Poster Presentations**	

4:30-5:30 Aspen Physics Cafe (Katie Mack, Mark Dijkstra) at Wheeler Opera House
5:30-6:30 Public Talk (Rachel Webster) at Wheeler Opera House

***Posters**

Yusra AlSayyad	The z~4 Quasar Luminosity Function for -26.5 < M_1450 < -24.0
Rhys Barnett	Probabilistic selection of z > 8 quasars
Bradford Holden	Galaxies in the Middle of Reioinization
Myoungwon Jeon	Feedback-regulated first galaxy formation and their observability
Hooshang Nayyeri	Populations of Passively Evolving Galaxies at z>5
Hyunbae Park	The Hydrodynamic Feedback of Cosmic Reionization on Small-Scale Structure and its Impact on Photon Consumption During the Epoch of Reionization

Thursday 3/10/2016

Session Chair: Rachael Livermore

8:00-8:15	Jean-Loup Puget	Constraints on reionization from Planck
8:15-8:30	Martin Haehnelt	Probing the end of hydrogen reionization with Lyman-alpha absorption
8:30-8:45	Anson D'Aloisio	Large opacity variations in the z~5.5 Lyman-alpha forest: implications for cosmological reionization
8:45-9:00	Rychard Bouwens	Galaxies as Driving Cosmic Reionization: The Lyman-Continuum Production Efficiency and Faint z>3 Galaxies from the Hubble Frontier Fields
9:00-9:15	Brian Siana	Using Gravitational Lensing to Quantify Dwarf Galaxy Star Formation and Escape Fractions

Coffee

Session Chair: Dan Stark

9:45-10:00	Kaveh Vasei	Deep Hubble measurements of the Lyman continuum escape fraction of galaxies at z~2-3 and implications for the Reionization of the Universe
10:00-10:15	Yumi Choi	A New Method to Measure the LyC Escape Fraction from Galaxies: mapping the escape fraction for NGC 4214
10:15-10:30	Lauren Anderson	Contribution of Low Mass Galaxies to Reionization
10:30-10:45	Aparna Venkatesan	The Role of Dwarf Galaxies in Cosmic Reionization
10:45-11:00	Steven Finkelstein	Probing Galaxies in the Epoch of Reionization

Lunch Break

Session Chair: Rebecca Bowler

4:30-4:45	Jennifer Lotz	The Frontier Fields: Past, Present, and Future
4:45-5:00	Rachael Livermore	The faintest reionizing galaxies in the Frontier Fields
5:00-5:15	Derek McLeod	The z=9-10 galaxy population in the Hubble Frontier Fields and CLASH surveys
5:15-5:30	Marusa Bradac	Pushing the Frontiers of Galaxy Formation with HST, Spitzer, Alma, Keck and Cluster Lenses as Cosmic Telescopes
5:30-5:45	Naveen Reddy	The Connection between Far-UV Attenuation, Gas Covering Fraction, and the Escape of Ionizing Radiation at High Redshift

Coffee

Session Chair: Steve Finkelstein

6:15-6:30	Linhua Jiang	Stellar Populations in Spectroscopically Confirmed Galaxies at z >= 6
6:30-6:45	Nimish Hathi	Stellar Populations of Lyman Alpha Emitters at z=2-6
6:45-7:00	Max Gronke	Outflowing shells as a model for Lyman alpha profile fitting
7:00-7:15	Christopher Hayward	The implications of IMF sampling and hypernovae for galaxies in the epoch of reionization

Conference Banquet Dinner & Block Award

Friday 3/11/2016

Session Chair: Aparna Venkatesan

8:00-8:15	Marijn Franx	Studying the high redshift universe with NIRSpec on JWST
8:15-8:30	Alireza Rahmati	Introducing the Aurora project: modeling the epoch of reionization with spatially adaptive radiation-hydrodynamical simulations
8:30-8:45	Hansik Kim	A hybrid multi resolution scheme to efficiently model the structure of reionization on the largest scales
8:45-9:00	Anna Schauer	Lyman-Werner escape fractions from primordial haloes and early galaxies
9:00-9:15	Aaron Smith	Lyman-alpha radiation pressure in the reionization epoch

Coffee

Session Chair: Gabe Brammer

9:45-10:00	Eli Visbal	Formation of Massive Population III Galaxies through Photoionization Feedback: A Possible Explanation for CR7
10:00-10:15	Daniel Lam	Using cluster lensing and Spitzer/IRAC to constrain the physical properties of the z~11 candidate MACS0647-JD and other candidates seen during cosmic dawn
10:15-10:30	Stephanie Bernard	z ~ 9-10 galaxy candidates in archival data from the Brightest of Reionising Galaxies (BoRG[z8]) survey
10:30-10:45	Mauro Stefanon	The rest-frame z-band luminosity function at 4<z<7 as a proxy for stellar mass functions
10:45-11:00	Romain Thomas	New insight on high redshift galaxy formation from galaxy ages

Lunch Break

Session Chair: Naveen Reddy

4:30-4:45	Andreas Faisst	Emission Lines from Broad Band Photometry: sSFR and OIII/Hb ratio at 3<z<6
4:45-5:00	Michele Trenti	The Brightest Galaxies at Cosmic Dawn
5:00-5:15	Masafumi Ishigaki	Very Compact Dense Galaxy Overdensity with delta ~ 130 Identified at z ~ 8: Implications for Early Protocluster and Cluster-Core Formation

Short Coffee Break

5:30-5:45	Nor Pirzkal	Detecting Emission Lines Using Slitless Spectroscopic Observations
5:45-6:00	Dan Coe	RELICS: Reionization Lensing Cluster Survey
6:00-6:30	Garth Illingworth	Discussion and Closing Remarks

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