

SAZERAC SIPS

Early Galaxy Formation Near and Far

--- Preparing for a Long Journey with JWST ---

<http://sazerac-conference.org/SIPS2122/2.html>

November 29 - December 3, 2021

at Zoom, Slack, and YouTube (to be announced)

Program ver. 1.1

Invited Talk: 25 min (20 min talk + 5 min Q&A)

Contributed Talk: 15 min (10 min talk + 5 min Q&A)

Poster Lightning Talk: 1 min (~50 sec talk + 10 sec for speaker change)

*** Time in UTC ***

----- Monday Nov. 29 -----

13:00 Welcome

Session 1--- Local Dwarf Galaxies

13:05 Ricardo Amorín (Universidad de La Serena) - Probing early galaxy evolution through detailed observational studies of low-redshift extreme emission-line dwarf galaxies [Invited Talk]

13:30 Kristen McQuinn (Rutgers University) - The Properties and Evolutionary Pathways of Extremely Metal-Poor Galaxies

13:45 Yuki Isobe (University of Tokyo) - Excessively high Fe/O in extremely metal-poor galaxies suggestive of hypernovae and/or pair-instability supernovae

14:00 Poster Lightning Talks (up to 8 talks)

14:10 Break, Interaction, and Posters

14:30 Peter Senchyna (Carnegie Observatories) - Towards a detailed picture of the massive star populations in metal-poor CIV emitters in the local Universe

14:45 Sabrina Stierwalt (Occidental College) - Star Cluster Populations in Interacting Dwarf Galaxies

15:00 Sophia Flury (University of Massachusetts) - New Constraints on Lyman Continuum Escape Diagnostics with the LzLCS

15:15 Alberto Saldana-Lopez (University of Geneva) - Unveiling the ISM properties of low- z Lyman Continuum emitters

15:30 Rohan Naidu (Harvard University) - Solving Reionization with Resolved Lyman Alpha: The Physics of Ionizing Photon Escape Revealed by the X-SHOOTER Lyman-alpha Survey at $z=2$

15:45 Break, Interaction, and Posters

16:05 Adjourn: One can continue discussion in the breakout rooms

----- Tuesday Nov. 30 -----

13:00 Yumi Choi (STScI) - Probing the Sources of Reionization: First Measurement of the Escape Fraction of Ionizing Photons in Dwarf Galaxies Fainter than $M_{\text{uv}} = -16$

13:15 Grace Telford (Rutgers University) - Extremely Metal-Poor O Stars in Nearby Galaxies as Analogs of Ionizing Photon Producers in the Early Universe

13:30 Matthew Hayes (Stockholm University) - Spectral shapes of the Lyman alpha emission from galaxies: The influence of nebular conditions on emergent line profiles

13:45 Xinfeng Xu (Johns Hopkins University) - Tracing Lyman Alpha and Lyman Continuum Escape in Galaxies by MgII Emission Lines

14:00 Poster Lightning Talks (up to 12 talks)

14:15 Break, Interaction, and Posters

14:35 Yuri Izotov (National Academy of Sciences of Ukraine) - Local compact star-forming galaxies as analogs of high-redshift galaxies

14:50 Yuichi Harikane (University of Tokyo) - Early Galaxy Formation probed with the Most Extreme Line Emitters at $z \sim 0.8$

15:05 Kristan Boyett (U. Melbourne/U. Oxford) - The [OIII] equivalent width distribution at $z \sim 2$: The redshift evolution of the extreme emission line galaxies abundance

15:20 Mattia Sirressi (Stockholm University) - Haro 11: a local window on the star-formation in the young Universe

15:35 Yi Xu (University of Tokyo) - Outflows of Low-Mass Galaxies with $M^* = 10^4 - 10^7 M_{\text{sun}}$: Unexpectedly Weak Feedback?

15:50 Break, Interaction, and Posters

16:10 Adjourn: One can continue discussion in the breakout rooms

----- Wednesday Dec. 1 -----

13:00 Andrea Ferrara (Scuola Normale Superiore) - The Interstellar Medium of High Redshift Galaxies [Invited Talk]

13:25 Joohyun Lee (UT Austin) - Dark Matter Deficient Dwarf Galaxies and Their Member Star Clusters Form Simultaneously during High-velocity Galaxy Collisions at High-redshift

13:40 Lise Ramambason (CEA/AIM) - Inferring the escape fractions of ionizing photons from HII regions in the Dwarf Galaxy Survey

13:55 Hiroya Umeda (University of Tokyo) - Ionizing Spectrum Shapes of Extremely Metal-Poor Galaxies: Uncovering the Origins of Strong HeII

14:10 Break, Interaction, and Posters

14:30 Matilde Mingozzi (STScI) - UV ISM diagnostics in local high-z analogues with CLASSY

14:45 Suzanne Madden (CEA, Saclay) - The ISM properties of Local Universe Low Metallicity Dwarf Galaxies

15:00 Luwenjia Zhou (Nanjing University) - Extremely weak CO emission in IZw 18

15:15 Vianney Lebouteiller (CNRS/AIM, CEA/Irfu/DAP, Paris-Saclay) - Paris-Multi-phase/multi-sector ISM modeling techniques for unresolved galaxies: inferring the influence of compact objects in dwarf galaxies

15:30 Mahtab Gholami (IPM) - INT-Monitoring Survey: Star formation history of the Local group starburst galaxy IC 10

15:45 Break, Interaction, and Posters

16:05 Adjourn: One can continue discussion in the breakout rooms

----- Thursday Dec. 2 -----

Session 2 --- High-z Dwarf Galaxies and Their Connections with Low-z Dwarf Galaxies

13:00 Pratik Gandhi (University of California Davis) - Characterising the Near-Far Probe of Reionisation using FIRE Simulations

13:15 Taehwa Yoo (Yonsei University) - On the origin of low escape fractions of ionizing radiation from massive star-forming galaxies at high redshift

13:30 Harley Katz (University of Oxford) - Are Green Peas and Blueberries Truly Analogues of $z > 6$ Galaxies? Implications for Emission Line Diagnostics of LyC Escape, SFR, and Metallicity

13:45 Uros Mestric (INAF-OAS) - High redshift galaxies under the microscope: 120 strongly lensed low-mass star-forming clumps at $2 < z < 6.2$

14:00 Poster Lightning Talks (up to 15 talks)

14:20 Break, Interaction, and Posters

14:40 Floriane Leclercq (University of Texas at Austin) - A first panoramic MUSE view of the metal-enriched intragroup medium of five low-mass galaxies at $z = 1.3$

14:55 Adélaïde Claeysens (Stockholm University/ Centre de Recherche Astrophysique de Lyon) - The Lensed Lyman-Alpha MUSE Arcs Sample (LLAMAS) : Characterisation of the CGM properties for high redshift faint galaxies

15:10 Joris Witstok (University of Cambridge) - Assessing the sources of reionization: a spectroscopic case study of a $30 \times$ lensed galaxy at $z \sim 5$ with Ly α , C IV, Mg II, and [Ne III]

15:25 Aayush Saxena (University College London) - Understanding the ionising photon production and escape from galaxies using rest-UV emission

15:40 Break, Interaction, and Posters

16:00 Adjourn: One can continue discussion in the breakout rooms

----- Friday Dec. 3 -----

Session 3 --- Prospects for JWST and Forthcoming Facilities

12:30 Yuxiang Qin (University of Melbourne) - Hunting Lyman-alpha emitters during the Epoch of Reionization

12:45 Eros Vanzella (INAF - OAS) - High redshift galaxies under the microscope: waiting for JWST and extreme AO facilities

13:00 Kartheik Iyer (University of Toronto) - A Tale of Starbursts and Quenching: Star Formation Stochasticity in High-z Dwarf Galaxies with Hubble, James Webb and CANUCS

13:15 Chris Richardson (Elon University) - Mid-IR and Optical Emission Line Diagnostics for Simultaneous IMBH and Stellar Excitation in Dwarf Galaxies

13:30 Break, Interaction, and Posters

13:50 Viola Gelli (Università degli Studi di Firenze) - Dwarf satellites of high-z Lyman Break Galaxies: a free lunch for JWST

14:05 Prerak Garg (University of Florida) - Modeling nebular line emission in cosmological galaxy formation simulations: Calibrating new strong-line metallicity diagnostics for high redshift galaxies in the era

14:20 Pratika Dayal (University of Groningen) - Early galaxy formation and its large-scale effects

14:35 Emma Curtis-Lake (University of Hertfordshire) - Pushing to the dwarf regime from cosmic noon to the Epoch of Reionisation with JWST:

presenting JADES the joint NIRCам + NIRSpec GTO survey

14:50 Micaela Bagley (UT Austin) - Constraining Feedback Mechanisms in galaxies with NGDEEP

15:05 Summary Talk (TBD)

15:25 Break, Interaction, and Posters

15:45 Adjourn: One can continue discussion in the breakout rooms