# Bingjie Wang

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#### RESEARCH INTERESTS

Galaxy formation and evolution, stellar populations, reionization; Bayesian inference, machine learning

#### EDUCATION

# Johns Hopkins University

Baltimore, MD

Ph.D. in Astronomy & Astrophysics

2016-2021

- Thesis: "Implications for the Epoch of Reionization in the Local Universe"
- Advisor: Prof. Timothy Heckman

#### University of Pittsburgh

Pittsburgh, PA

B.A. in Philosophy, B.Phil. in Physics with honors, Magna Cum Laude

2012-2016

- Thesis: "Evaluating the Standard Model of Cosmology in Light of Large-scale Anomalies in the Cosmic Microwave Background"
- Advisor: Prof. Arthur Kosowsky

## Professional Positions

## NASA Hubble Fellow, Princeton University

2025-present

- Faculty host: Prof. Jenny Greene

Assistant Research Professor, The Pennsylvania State University

2024 - 2025

Postdoctoral Scholar, The Pennsylvania State University

2022-2024

- Main focus: spectral energy distribution modeling of high redshift galaxies and little red dots
- Mentor: Prof. Joel Leja

## **PUBLICATIONS**

13 as first author, 84 in total (as of 08/2025).

For first-author only: h-index = 11, citations > 660; ADS.

For all publications: h-index = 41, citations > 5430; these are listed in a separate section at the end; <u>ADS</u>.

#### First Author

- <sup>1</sup>B. Wang, J. Leja, et al., "The Missing Hard Photons of Little Red Dots: Their Incident Ionizing Spectra Resemble Massive Stars", arXiv e-prints, arXiv:2508.18358 (2025).
- <sup>2</sup>B. Wang, J. Leja, et al., "Population Models for Star Formation Timescales in Early Galaxies: The First Step toward Solving Outshining in Star Formation History Inference", ApJ 987, 184 (2025).
- <sup>3</sup>B. Wang, A. de Graaff, et al., "RUBIES: JWST/NIRSpec Confirmation of an Infrared-luminous, Broad-line Little Red Dot with an Ionized Outflow", ApJ 984, 121 (2025).

- <sup>4</sup>B. Wang, J. Leja, et al., "RUBIES: Evolved Stellar Populations with Extended Formation Histories at  $z \sim 7-8$  in Candidate Massive Galaxies Identified with JWST/NIRSpec", ApJL **969**, L13 (2024).
- <sup>5</sup>B. Wang, J. Leja, et al., "Quantifying the Effects of Known Unknowns on Inferred High-redshift Galaxy Properties: Burstiness, IMF, and Nebular Physics", ApJ 963, 74 (2024).
- <sup>6</sup>B. Wang, J. Leja, et al., "The UNCOVER Survey: A First-look HST+JWST Catalog of Galaxy Redshifts and Stellar Population Properties Spanning  $0.2 \le z \le 15$ ", ApJS **270**, 12 (2024).
- <sup>7</sup>B. Wang, S. Fujimoto, et al., "UNCOVER: Illuminating the Early Universe—JWST/NIRSpec Confirmation of z > 12 Galaxies", ApJL 957, L34 (2023).
- <sup>8</sup>B. Wang, J. Leja, V. A. Villar, and J. S. Speagle, "SBI<sup>++</sup>: Flexible, Ultra-fast Likelihood-free Inference Customized for Astronomical Applications", ApJL **952**, L10 (2023).
- <sup>9</sup>B. Wang, J. Leja, et al., "Inferring More from Less: Prospector as a Photometric Redshift Engine in the Era of JWST", ApJL **944**, L58 (2023).
- <sup>10</sup>B. Wang, J. Leja, A. Villar, and J. S. Speagle, "Monte Carlo Techniques for Addressing Large Errors and Missing Data in Simulation-based Inference", ML4PS, NeurIPS (2022).
- <sup>11</sup>B. Wang, T. M. Heckman, et al., "The Low-redshift Lyman-continuum Survey: [S II] Deficiency and the Leakage of Ionizing Radiation", ApJ 916, 3 (2021).
- <sup>12</sup>B. Wang, T. M. Heckman, G. Zhu, and C. A. Norman, "A Systematic Study of Galactic Outflows via Fluorescence Emission: Implications for Their Size and Structure", ApJ 894, 149 (2020).
- <sup>13</sup>B. Wang, T. M. Heckman, et al., "A New Technique for Finding Galaxies Leaking Lyman-continuum Radiation: [S II] Deficiency", ApJ 885, 57 (2019).

# Second/Third Author

- $^{14}$ P. van Dokkum, G. Brammer, **B. Wang**, J. Leja, and C. Conroy, "A Massive Compact Quiescent Galaxy at z=2 with a Complete Einstein Ring in JWST Imaging", Nature Astronomy **8**, 119–125 (2024).
- <sup>15</sup>S. Fujimoto, **B. Wang**, et al., "UNCOVER: A NIRSpec Census of Lensed Galaxies at z = 8.50 13.08 Probing a High-AGN Fraction and Ionized Bubbles in the Shadow", ApJ **977**, 250 (2024).
- <sup>16</sup>H. Atek, I. Chemerynska, **B. Wang**, et al., "JWST UNCOVER: Discovery of z > 9 Galaxy Candidates Behind the Lensing Cluster Abell 2744", MNRAS **524**, 5486–5496 (2023).
- <sup>17</sup>D. J. Watts, B. Wang, et al., "A Projected Estimate of the Reionization Optical Depth Using the CLASS Experiment's Sample Variance Limited E-mode Measurement", ApJ 863, 121 (2018).
- <sup>18</sup>S. Aiola, **B. Wang**, et al., "Microwave Background Correlations from Dipole Anisotropy Modulation", PRD **92**, 063008 (2015).
- <sup>19</sup>S. Aiola, A. Kosowsky, and **B. Wang**, "Gaussian Approximation of Peak Values in the Integrated Sachs-Wolfe Effect", PRD **91**, 043510 (2015).

# Proposals

Engines?

- ALMA Cycle 12 (Co-I): Dust and Cold Gas Emission in a Massive Quenched Galaxy Candidate at z=7.3 MUSE P116 (Co-I): The Lyman-alpha Halos of Little Red Dots: Does Dense Gas Fully Cover the Central
- JWST GO Cycle 4 (PI): Extremely Massive Galaxies in the Early Universe? Confirming the Nature of the Most Model-breaking Object by Hunting for Stellar Absorption Features
- JWST GO Cycle 4 (Co-I): MINERVA: Unlocking the Hidden Gems of the Distant Universe and Completing HST and JWST's Imaging Legacy with Medium Bands

JWST GO Cycle 4 (Co-I): Echoes of Silence: Absorption Line Spectroscopy of a Massive Quiescent Galaxy at z=7.3

JWST GO Cycle 4 (Co-I): Give Me a Break: the Search for Stars in a Prototypical Little Red Dot

JWST GO Cycle 4 (Co-I): Studying Cosmic Noon at 200 parsec Scales: Resolved Spectroscopy of a Magnified Dusty Quiescent Galaxy

NOEMA (Co-I): Extremely Compact Galaxies at Cosmic Dawn: Ultra-massive Galaxies or AGN?

ALMA Cycle 11 (Co-I): Of Dust and Dots: ALMA's View of the Brightest of JWST's Little Red Dots

HST GO Cycle 32 (Co-I): Fulfilling the UV Legacy of the Hubble and Webb Deep Public Frontier Field

HST GO Cycle 32 (Co-I): Mg II Maps to Reveal How Ionizing Photons Escape Local LyC-emitting Galaxies

JWST GO Cycle 3 (Co-I): Clumpy Relics: The First Spectroscopic Confirmation of Globular Clusters at  $z\sim3$ 

HST GO Cycle 31 (Co-I): The Optical Emission of the Highest Redshift Lens System

JWST GO Cycle 2 (Co-I): Medium Bands, Mega Science: Spatially-resolved Spectrophotometry of 50,000 sources at z=0.3-12

JWST GO Cycle 2 (Co-I): Extremely Massive Galaxies in the Early Universe: A Challenge to ΛCDM?

HST GO Cycle 30 (Co-I): Are There Two Classes of Lyman-leaky Galaxies?

HST GO Cycle 30 (Co-I): Resolving Lyman Alpha Emission in a Complete Sample of Lyman Continuum Leakers and Non-leakers

HST GO Cycle 30 (Co-I): The Lyman-alpha and Continuum Origins Survey

JWST GO Cycle 1 (Co-I): LyC22—Deep Spectroscopic Insights on Star-forming Galaxies 2.2 Gyr After the Big Bang

# SCIENCE TALKS (SELECTED)

Astronomy seminar, Texas A&M University (invited)	11/25
NASA Hubble Fellowship Program symposium, Space Telescope Science Institute	10/25
Workshop on neural simulation-based inference, Statistical Methods for the Physical Sciences Resear Center, Carnegie Mellon University (invited)	ch 10/25
Center for Theory and Computation seminar, University of Maryland (invited)	09/25
Physics and Astronomy colloquium, York University	09/25
Astronomy seminar, University of Toronto	09/25
Galaxy origins in the JWST era, Toledo, Spain	05/25
Big galaxies big problems, Lorentz Center	04/25
Special session on harnessing AI for advanced statistical inference in astrophysics, 245th meeting of tamerican Astronomical Society (invited)	the 01/25
Astronomy colloquium, Kavli Institute for Astronomy and Astrophysics, Peking University (invited)	) 12/24
Astronomy colloquium, Tsung-Dao Lee Institute, Shanghai Jiao Tong University	12/24
40th symposium, Institut d'Astrophysique de Paris	12/24
HEP-Astro seminar, University of Michigan (invited)	10/24
Galaxies journal club, Space Telescope Science Institute (invited)	10/24
Thunch, Galread, Princeton University	10/24

Galaxy lunch, Yale University	09/24
Astronomy colloquium, Pennsylvania State University	09/24
PHYSTAT–simulation based inference in fundamental physics, Max Planck Institute for Physics (inv	$\mathbf{rited},$
declined due to a temporary visa issue)	05/24
SED fitting for JWST data, Pan-survey SED-fitting Forum (invited)	01/24
ELT science in light of JWST, University of California at Los Angeles	12/23
Statistical challenges in modern astronomy VIII, Pennsylvania State University	06/23
Modern statistics of galaxies, Ludwig-Maximilians-Universität (invited)	06/23
Cosmic connections: a ML $\times$ astrophysics symposium, Simons Foundation	05/23
Astronomy seminar, University of Pittsburgh (invited)	03/23
Astrostatistics seminar, University of Toronto (invited)	03/23
Astronomy seminar, University of Connecticut (invited)	03/22
Dissertation talk, 237th meeting of the American Astronomical Society	01/21
Lunch talk, University of California at Berkeley	10/20
First light, University of São Paulo	08/19
Annual Sanielevici lecture, University of Pittsburgh	02/15
Workshop on large-scale anomalies, Case Western Reserve University	09/14
DAAD RISE scholarship holder meeting, Heidelberg, Germany	07/14
Neighborhood workshop, Pennsylvania State University	04/14
Press	
Based on lead-author works:	
"Trio of early galaxies test our ideas of cosmic evolution"; Sky & Telescope	2024
"JWST discovery of ancient stellar populations in little red dots"; PSU release (Space.com, Universe Today, The Independent,)	2024
"Too many stars, too fast?"; AAS NOVA research highlights also featured in AAS Journal Series Author Series.	2024
"JWST discovery of the second- and fourth-most distant galaxies"; PSU release (Space.com, Newsweek, Daily Mail,)	2023
"JWST uncovers new details in Pandora's Cluster"; NASA/STScI/PSU release	2023
"[S II] deficiency and the leakage of ionizing radiation"; AAS journal author series	2021
"Tracing gas flows out of star-forming galaxies"; AAS NOVA research highlights	2020
Expert comments for:	
BBC, New Scientist, Sky & Telescope	
Selected other press releases:	
"NASA telescopes discover record-breaking black hole"; NASA release (CNN,)	2023
"Massive early galaxies defy prior understanding of the universe"; NASA/Nature/ANU/PSU release (CNN, The Guardian, NPR,)	2023

# Professional Experience

Proposal review panelist for James Webb Space Telescope, Nancy Grace Roman Space Telescope

Reviewer for JWST Director's Discretionary proposal

Reviewer for Astronomy & Astrophysics, The Astrophysical Journal, The Astrophysical Journal Letters,
Nature, Nature Astronomy

# MENTORING, TEACHING & OTHER SERVICE

Research advisor for:

Kanishk Pandey (graduate student, Penn State, 2024), Emilie Burnham (graduate student, Penn State, 2023–), Nathan Cristello (undergraduate student, Penn State, 2023)

Invited nominator for The Shaw Prize in Astronomy

Organizing committee for Neighborhood Workshop on Astrophysics and Cosmology, Penn State

Guest Lecturer, Penn State University

2023-2024

2025

Graduate level: extragalactic astronomy

Undergraduate level: introduction to astronomy for non-majors

Graduate Teaching Assistant, Johns Hopkins University

2016-2018

Graduate level: astrophysical dynamics, radiative astrophysics

Undergraduate level: cosmology, general physics for biological science majors, general physics for physical science majors, general physics labs

Climate and diversity committee, Penn State

2024

# Honors and Awards

Rodger Doxsey Travel Prize, American Astronomical Society	2020
First-prize poster, First Light at University of São Paulo	2019
$\Sigma\Pi\Sigma$ physics honors society initiate	2016
Thompson award for excellence in scientific writing, Physics & Astronomy, UPitt	2016
Halliday award for excellence in undergraduate research, Physics & Astronomy, UPitt	2015
Thomas-Lain fund scholarship, Physics & Astronomy, UPitt	2015
Research Internship in Science & Engineering, Deutschen Akademischen Austauschdienstes	2014
Sanielevici undergraduate research scholarship, Physics & Astronomy, UPitt	2014

# OPEN-SOURCE SOFTWARE

sbi\_pp: simulation-based inference customized for astronomical applications 🔾

Prospector: bayesian inference of stellar population properties from photometric and/or spectroscopic data (contributor)  $\bigcirc$ 

blast: a web application for characterizing the host galaxies of astrophysical transients (contributor)  $\mathbf{Q}$ 

#### Peer-reviewed

- $^{20}$ R. Pan, K. A. Suess, et al., "UNCOVER/MegaScience: No Evidence of Environmental Quenching in a z  $\sim$  2.6 Protocluster", ApJL 990, L24, L24 (2025).
- $^{21}\mathrm{A.}$  de Graaff, H.-W. Rix, et al., "A remarkable ruby: Absorption in dense gas, rather than evolved stars, drives the extreme Balmer break of a little red dot at z = 3.5", A&A **701**, A168 (2025).
- $^{22}$ T. B. Miller, K. A. Suess, et al., "JWST UNCOVERs the Optical Size–Stellar Mass Relation at 4 < z < 8: Rapid Growth in the Sizes of Low-mass Galaxies in the First Billion Years of the Universe", ApJ **988**, 196 (2025).
- <sup>23</sup>B. Lorenz, K. A. Suess, et al., "Measuring Emission Lines with JWST MegaScience Medium Bands: A New Window into Dust and Star Formation at Cosmic Noon", ApJL 988, L20 (2025).
- <sup>24</sup>S. Fujimoto, R. Bezanson, et al., "DUALZ—Deep UNCOVER-ALMA Legacy High-Z Survey", ApJS 278, 45 (2025).
- <sup>25</sup>L. J. Furtak, A. R. Secunda, et al., "Investigating photometric and spectroscopic variability in the multiply imaged little red dot A2744-QSO1", A&A 698, A227 (2025).
- <sup>26</sup>S. R. Flury, A. E. Jaskot, et al., "The Low-redshift Lyman Continuum Survey: The Roles of Stellar Feedback and Interstellar Medium Geometry in LyC Escape", ApJ 985, 128 (2025).
- <sup>27</sup>J. C. Siegel, D. J. Setton, et al., "UNCOVER: Significant Reddening in Cosmic Noon Quiescent Galaxies", ApJ 985, 125 (2025).
- <sup>28</sup>H. Treiber, J. E. Greene, et al., "UNCOVERing the High-redshift AGN Population among Extreme UV Line Emitters", ApJ 984, 93 (2025).
- <sup>29</sup>A. de Graaff, G. Brammer, et al., "RUBIES: A complete census of the bright and red distant Universe with JWST/NIRSpec", A&A **697**, A189 (2025).
- $^{30}\mathrm{A}.$  Weibel, A. de Graaff, et al., "RUBIES Reveals a Massive Quiescent Galaxy at z = 7.3", ApJ 983, 11 (2025).
- $^{31}\mathrm{S.}$  H. Price, R. Bezanson, et al., "The UNCOVER Survey: First Release of Ultradeep JWST/NIRSpec PRISM Spectra for  ${\sim}700$  Galaxies from  $z\sim0.3-13$  in A2744", ApJ 982, 51 (2025).
- <sup>32</sup>Y. Ma, J. E. Greene, et al., "UNCOVER: 404 Error—Models Not Found for the Triply Imaged Little Red Dot A2744-QSO1", ApJ 981, 191 (2025).
- <sup>33</sup>A. de Graaff, D. J. Setton, et al., "Efficient formation of a massive quiescent galaxy at redshift 4.9", Nature Astronomy 9, 280–292 (2025).
- <sup>34</sup>I. G. B. Wold, S. Malhotra, J. E. Rhoads, J. R. Weaver, and **B. Wang**, "UNCOVERing the Faint End of the  $z \sim 7$  [O III] Luminosity Function with JWST's F410M Medium Bandpass Filter", ApJ **980**, 200 (2025).
- <sup>35</sup>S. H. Price, K. A. Suess, et al., "UNCOVER: The Rest-ultraviolet to Near-infrared Multiwavelength Structures and Dust Distributions of Submillimeter-detected Galaxies in A2744", ApJ 980, 11 (2025).
- $^{36}$ I. Labbé, J. E. Greene, et al., "UNCOVER: Candidate Red Active Galactic Nuclei at 3 < z < 7 with JWST and ALMA", ApJ  $\bf 978,~92~(2025).$
- <sup>37</sup>J. F. W. Baggen, P. van Dokkum, et al., "The Small Sizes and High Implied Densities of "Little Red Dots" with Balmer Breaks Could Explain Their Broad Emission Lines without an Active Galactic Nucleus", ApJL 977, L13 (2024).
- $^{38}$ I. Chemerynska, H. Atek, et al., "The Extreme Low-mass End of the Mass–Metallicity Relation at  $z\sim7$ ", ApJL 976, L15 (2024).

- <sup>39</sup>K. A. Suess, J. R. Weaver, et al., "Medium Bands, Mega Science: A JWST/NIRCam Medium-band Imaging Survey of A2744", ApJ 976, 101 (2024).
- $^{40}$ D. J. Setton, G. Khullar, et al., "UNCOVER NIRSpec/PRISM Spectroscopy Unveils Evidence of Early Core Formation in a Massive, Centrally Dusty Quiescent Galaxy at  $z_{\rm spec}=3.97$ ", ApJ **974**, 145 (2024).
- <sup>41</sup>R. Bezanson, I. Labbe, et al., "The JWST UNCOVER Treasury Survey: Ultradeep NIRSpec and NIRCam Observations before the Epoch of Reionization", ApJ **974**, 92 (2024).
- <sup>42</sup>O. Bait, S. Borthakur, et al., "Low-redshift Lyman Continuum Survey (LzLCS). Radio continuum properties of low-z Lyman continuum emitters", A&A **688**, A198, A198 (2024).
- <sup>43</sup>F. Leclercq, J. Chisholm, et al., "Linking Mg II and [O II] Spatial Distribution to Ionizing Photon Escape in Confirmed LyC Leakers and Non-leakers", A&A **687**, A73 (2024).
- <sup>44</sup>I. Chemerynska, H. Atek, et al., "JWST UNCOVER: The Overabundance of Ultraviolet-luminous Galaxies at z > 9", MNRAS **531**, 2615–2625 (2024).
- <sup>45</sup>S. E. Cutler, K. E. Whitaker, et al., "Two Distinct Classes of Quiescent Galaxies at Cosmic Noon Revealed by JWST PRIMER and UNCOVER", ApJL **967**, L23 (2024).
- <sup>46</sup>L. J. Furtak, I. Labbé, et al., "A High Black-hole-to-host Mass Ratio in a Lensed AGN in the Early Universe", Nature **628**, 57–61 (2024).
- <sup>47</sup>L. Wright, K. E. Whitaker, et al., "Remarkably Compact Quiescent Candidates at 3 < z < 5 in JWST-CEERS", ApJL **964**, L10 (2024).
- <sup>48</sup>J. E. Greene, I. Labbé, et al., "UNCOVER Spectroscopy Confirms the Surprising Ubiquity of Active Galactic Nuclei in Red Sources at z > 5", ApJ **964**, 39 (2024).
- <sup>49</sup>H. Atek, I. Labbé, et al., "Most of the Photons that Reionized the Universe Came from Dwarf Galaxies", Nature **626**, 975–978 (2024).
- <sup>50</sup>A. J. Burgasser, R. Bezanson, et al., "UNCOVER: JWST Spectroscopy of Three Cold Brown Dwarfs at Kiloparsec-scale Distances", ApJ 962, 177 (2024).
- <sup>51</sup>R. O. Amorín, M. Rodríguez-Henríquez, et al., "Ubiquitous Broad-line Emission and the Relation between Ionized Gas Outflows and Lyman Continuum Escape in Green Pea Galaxies", A&A 682, L25 (2024).
- <sup>52</sup>J. R. Weaver, S. E. Cutler, et al., "The UNCOVER Survey: A First-look HST + JWST Catalog of 60,000 Galaxies near A2744 and beyond", ApJS **270**, 7 (2024).
- <sup>53</sup>A. D. Goulding, J. E. Greene, et al., "UNCOVER: The Growth of the First Massive Black Holes from JWST/NIRSpec – Spectroscopic Redshift Confirmation of an X-Ray Luminous AGN at z = 10.1", ApJL 955, L24 (2023).
- $^{54}$ J. F. W. Baggen, P. van Dokkum, et al., "Sizes and Mass Profiles of Candidate Massive Galaxies Discovered by JWST at 7 < z < 9: Evidence for Very Early Formation of the Central 100 pc of Present-day Ellipticals", ApJL **955**, L12 (2023).
- <sup>55</sup>E. P. Mathews, J. Leja, et al., "As Simple as Possible but No Simpler: Optimizing the Performance of Neural Net Emulators for Galaxy SED Fitting", ApJ 954, 132 (2023).
- $^{56}$  V. Kokorev, S. Fujimoto, et al., "UNCOVER: A NIRSpec Identification of a Broad-line AGN at z=8.50", ApJL  $\bf 957,\,L7~(2023).$
- <sup>57</sup>L. J. Furtak, A. Zitrin, et al., "UNCOVERing the Extended Strong Lensing Structures of Abell 2744 with the Deepest JWST Imaging", MNRAS 523, 4568–4582 (2023).
- <sup>58</sup>L. J. Furtak, A. Zitrin, et al., "JWST UNCOVER: Extremely Red and Compact Object at  $z_{\rm phot} \sim 7.6$  Triply Imaged by A2744", ApJ **952**, 142 (2023).
- <sup>59</sup>E. J. Nelson, K. A. Suess, et al., "JWST Reveals a Population of Ultrared, Flattened Galaxies at  $2 \lesssim z \lesssim 6$  Previously Missed by HST", ApJL **948**, L18 (2023).

- <sup>60</sup>I. Labbé, P. van Dokkum, et al., "A Population of Red Candidate Massive Galaxies ∼600 Myr after the Big Bang", Nature **616**, 266−269 (2023).
- <sup>61</sup>J. Chisholm, A. Saldana-Lopez, et al., "The Far-ultraviolet Continuum Slope as a Lyman Continuum Escape Estimator at High Redshift", MNRAS **517**, 5104–5120 (2022).
- $^{62}$ X. Xu, A. Henry, et al., "Tracing Ly $\alpha$  and LyC Escape in Galaxies with Mg II Emission", ApJ 933, 202 (2022).
- <sup>63</sup>R. Marques-Chaves, D. Schaerer, et al., "No Correlation of the Lyman Continuum Escape Fraction with Spectral Hardness", A&A **663**, L1 (2022).
- <sup>64</sup>S. R. Flury, A. E. Jaskot, et al., "The Low-redshift Lyman Continuum Survey. I. New, Diverse Local Lyman Continuum Emitters", ApJS 260, 1 (2022).
- <sup>65</sup>W. Wang, S. A. Kassin, et al., "The Baltimore Oriole's Nest: Cool Winds from the Inner and Outer Parts of a Star-forming Galaxy at z = 1.3", ApJ **930**, 146 (2022).
- <sup>66</sup>S. R. Flury, A. E. Jaskot, et al., "The Low-redshift Lyman Continuum Survey. II. New Insights into LyC Diagnostics", ApJ 930, 126 (2022).
- <sup>67</sup>J. W. Appel, Z. Xu, et al., "On-sky Performance of the CLASS Q-band Telescope", ApJ **876**, 126 (2019).
- <sup>68</sup>F. Krauß, K. Deoskar, et al., "Fermi/LAT Counterparts of IceCube Neutrinos Above 100 TeV", A&A 620, A174 (2018).
- <sup>69</sup>K. Harrington, J. Eimer, et al., "Variable-delay Polarization Modulators for the CLASS Telescopes", SPIE, 107082M (2018).
- <sup>70</sup>J. Iuliano, J. Eimer, et al., "The Cosmology Large Angular Scale Surveyor Receiver Design", SPIE, 1070828 (2018).
- <sup>71</sup>S. Dahal, A. Ali, et al., "Design and Characterization of the Cosmology Large Angular Scale Surveyor 93 GHz Focal Plane", SPIE, 107081Y (2018).

## **Preprints**

- <sup>72</sup>Y. Zhang, A. de Graaff, et al., "RUBIES spectroscopically confirms the high number density of quiescent galaxies from  $\mathbf{2} < \mathbf{z} < \mathbf{5}$ ", arXiv e-prints, arXiv:2508.08577 (2025).
- <sup>73</sup>A. Muzzin, K. A. Suess, et al., "MINERVA: A NIRCam Medium Band and MIRI Imaging Survey to Unlock the Hidden Gems of the Distant Universe", arXiv e-prints, arXiv:2507.19706 (2025).
- <sup>74</sup>A. Mintz, D. J. Setton, et al., "Taking a Break at Cosmic Noon: Continuum-selected Low-mass Galaxies Require Long Burst Cycles", arXiv e-prints, arXiv:2506.16510 (2025).
- <sup>75</sup>R. E. Hviding, A. de Graaff, et al., "RUBIES: A Spectroscopic Census of Little Red Dots; All V-Shaped Point Sources Have Broad Lines", arXiv e-prints, arXiv:2506.05459 (2025).
- <sup>76</sup>S. E. Cutler, J. R. Weaver, et al., "The Structure and Formation Histories of Low-Mass Quiescent Galaxies in the Abell 2744 Cluster Environment", arXiv e-prints, arXiv:2504.10572 (2025).
- <sup>77</sup>R. P. Naidu, J. Matthee, et al., "A "Black Hole Star" Reveals the Remarkable Gas-Enshrouded Hearts of the Little Red Dots", arXiv e-prints, arXiv:2503.16596 (2025).
- <sup>78</sup>D. J. Setton, J. E. Greene, et al., "A confirmed deficit of hot and cold dust emission in the most luminous Little Red Dots", arXiv e-prints, arXiv:2503.02059 (2025).
- $^{79}$ K. E. Whitaker, S. E. Cutler, et al., "Discovery of Ancient Globular Cluster Candidates in The Relic, a Quiescent Galaxy at z=2.5", arXiv e-prints, arXiv:2501.07627 (2025).
- $^{80}$ I. Labbe, J. E. Greene, et al., "An unambiguous AGN and a Balmer break in an Ultraluminous Little Red Dot at z=4.47 from Ultradeep UNCOVER and All the Little Things Spectroscopy", arXiv e-prints, arXiv:2412.04557 (2024).

- <sup>81</sup>D. J. Setton, J. E. Greene, et al., "Little Red Dots at an Inflection Point: Ubiquitous "V-Shaped" Turnover Consistently Occurs at the Balmer Limit", arXiv e-prints, arXiv:2411.03424 (2024).
- <sup>82</sup>D. O. Jones, P. McGill, et al., "Blast: a Web Application for Characterizing the Host Galaxies of Astrophysical Transients", arXiv e-prints, arXiv:2410.17322 (2024).
- <sup>83</sup>N. Roy, T. Heckman, et al., "Lyman Continuum Leakage from Massive Leaky Starbursts: A Different Class of Emitters?", arXiv e-prints, arXiv:2410.13254 (2024).
- <sup>84</sup>M. Trebitsch, P. Dayal, et al., "Reionization with Star-forming Galaxies: Insights from the Low-z Lyman Continuum Survey", arXiv e-prints, arXiv:2212.06177 (2022).