John R. Weaver

Postdoctoral Research Associate at the University of Massachusetts Amherst

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0000-0003-1614-196X ◇ UAT: high-redshift galaxies, redshift surveys, stellar mass functions

Research Interests

Observational galaxy formation and evolution: stellar mass assembly, massive galaxies, dark matter halo connection, mass functions, spatially-resolved properties, quenching, first galaxies, catalogs, photometric and statistical methods

Highlights

100+ publications in top journals, 7 first-author publications, 3 800+ total citations, co-lead of Euclid Consortium high-z galaxy team, PI of JWST Cycle 1 Program

Education

Ph.D. in Astrophysics, University of Copenhagen (October 2022)
COSMOS2020: Insights into Galaxy Assembly and Evolution Over the First Ten Billion Years
Advisors: Sune Toft, Peter Capak, & David Sanders

MPhys (Honours) in Astrophysics, University of St Andrews (2013–2018)
The Origins of Bimodality: Post-starburst Galaxies at $z < 0.1$
First Class Honours | Advisor: Vivienne Wild

BSc Scholar in Astronomy, Connecticut College (2012–2013)
Two accredited courses in astronomy taken alongside high school

Positions

Postdoctoral Research Associate, University of Massachusetts Amherst	2022 –
Graduate Research Assistant, Institute for Astronomy	2020
Graduate Research Assistant, California Institute of Technology	2019
Graduate Research Assistant, Institut d'Astrophysique de Paris	2018
Margaret Mayall Fellow, American Assoc. of Variable Star Observers	2016-2018
Undergraduate Research Assistant, University of St Andrews	2016-2018
Summer Intern, Max Planck Institute for Astronomy	2017
LEAPS Intern, Leiden Observatory	2016
REU Intern, Maria Mitchell Observatory	2015

Honors & Awards

Best PhD Thesis Award, Instrument Center for Danish Astrophysics	2023
Outstanding PhD Thesis Prize, University of Copenhagen	2023
Best Science Course (as TA), University of Copenhagen	2021
Astrophysics MPhys Thesis Prize, University of St Andrews	2018
Margaret Mayall Fellowship, American Assoc. of Variable Star Observers	2016
International Undergraduate Scholarship, University of St Andrews	2013
New London Prize Scholarship, Connecticut College	2013

Colloquia & Invited Talks (select)

- Invited Talk, Tufts University, Boston, US (09/2024)
- Invited Review, UK National Astronomy Meeting, Hull, UK (7/2024)
- Colloquium, Institute for Astronomy, Manoa HI (4/2024)
- Invited Talk, Leiden Observatory, Leiden NL (1/2022)
- Invited Talk, California Institute of Technology, Pasadena CA (4/2021)
- Colloquium, Institut d'Astrophysique de Paris, Paris FR (03/2021)

34 additional contributed talks at professional conferences and workshops since 2018, plus 10 poster presentations since 2015. Leading SOC member of 2025 Lorentz Center meeting "Big Galaxies, Big Problems".

Research Mentorship

***Graduate Students* (8)**

- **Lauren Henson**, *Using N-body merger simulations to better understand observations of high-z galaxies*; JWST GO2659 project; PI of UC Riverside student co-supervised with Prof. Mobasher, 2023–
- **Sina Taamoli**, *Morphologies of ultra-luminous $z > 9$ galaxies with NIRSpec IFU*; JWST GO2659 project; PI of UC Riverside student co-supervised with Prof. Mobasher, 2023–
- **Negin Khosravaninezhad**, *Spatially-resolved properties of ultra-luminous $z > 9$ galaxies and NIRSpec IFU reduction*; JWST GO2659 project; PI of UC Riverside student co-supervised with Prof. Mobasher, 2023–
- **Faezeh Akhlaghimanesh**, *Star-formation histories of ultra-luminous $z > 7$ galaxies*; JWST GO2659 project; PI of UC Riverside student co-supervised with Prof. Mobasher, 2023–
- **Sam Cutler**, *Sizes of the first low-mass quiescent galaxies at cosmic noon*; UMass student co-supervised with Prof. Whitaker, 2022–
- **Natalie Allen**, *Profile-fitting photometry of JWST deep fields*; DAWN student co-supervised with Prof. Toft, 2021–2022
- **Lukas Zalesky**, *A photometric redshift catalog of 20 M galaxies in the Euclid Deep Fields and the galaxy stellar mass function*; IfA student co-supervised with Prof. Sanders, 2020-2024 (IfA 2022 Project Prize)
- **Athansios Anastasiou**, *Calibration of photometric redshifts and physical parameters in COSMOS2020*; DAWN MSc student co-supervised with Prof. Magdis, 2019-2020

***Undergraduate Students* (9)**

- **Zachary Webb**, *New Insight into the radial distribution of globular clusters in Abell 2744 Using JWST*; UMass BSc Honors Thesis, co-supervised with Prof. Whitaker, 2023-2024 (Outstanding Thesis Prize, Oustanding Astronomy Senior Award)
- **Scott Barrow**, *Investigating a Galaxy Protocluster in Euclid Deep Field Fornax*; UMass BSc Honors Thesis, co-supervised with Prof. Calzetti, 2023-2024 (Fullbright Fellowship Winner)
- **Ananya Sreeklekha**, *Exploring non-parametric galaxy morphologies in JWST*; UMass BSc Thesis, co-supervised with Prof. Whitaker, 2022-2023
- **Rasmus Damgaard Nielsen**, *Identifying outlier populations with machine learning in COSMOS2020*; DAWN BSc Thesis, co-supervised with Prof. Steinhardt, 2021-2022
- **Tommy Clark**, *The effect of temperature dependent star-formation on galaxy evolution*; DAWN-Caltech SURF Summer Student, co-supervised with Prof. Steinhardt, 2021
- **Christian Kragh Jespersen**, *Measurement of spatially-varying point spread functions in Subaru/SC imaging*; DAWN Summer Student, 2020
- **Jonas Vinther**, *Measurement of spatially-varying point spread functions in Subaru/SC imaging*; DAWN Summer Student, 2020
- **Julia Tiller**, *Searching for extreme high-redshift galaxies in slitless grism data from HST*; NSF REU DAWN Summer Student, 2019
- **Albert Sneppen**, *Application of machine learning to distinguish stars from galaxies*; DAWN Summer Student, co-supervised with Prof. Steinhardt, 2019

Teaching

Research Topics in Astrophysics, UMass Amherst
Fall 2023, BSc level, 12 students, co-taught with Prof. Yun

Nordic Optical Telescope Summer School, University of Copenhagen
Summer 2021 – Grad level, 12 students, TA under Prof. Fynbo

Applied Statistics: From Data to Results, University of Copenhagen
Fall 2020 – Grad level, 160 students, senior TA under Prof. Petersen
Fall 2019 – Grad level, 140 students, TA under Prof. Petersen

Teaching Awards:

- Best Science Course at the University of Copenhagen, TA Team, Fall 2020

Outreach (select)

- Co-founder, *Astronomy on Tap! Copenhagen* (2019-2022; website)
- Writer and editor, *Astrobites* (2019-2021; articles)
- Associate Observer, *Frosty Drew Observatory*, regularly 200+ guests on summer Friday nights, talks and 10–16" telescope observing (2014-2018; website)
- Student Observering Assistant, *University of St Andrews* (2013-2018)
- Writer and astro section lead, *SciNote*, student science magazine (2013-2014)
- Columnist for *Heavens Above!*, *Sci@StAnd*, student science magazine (2013-2014)
- Observing Docent, bi-annual Open Nights, Connecticut College (2013-2014)

50+ additional presentations at universities, astro clubs, and taprooms (2013–)

Professional Service (select)

Service to the Scientific Community

- *Review Panelist*: Large Millimeter Telescope (2024), NASA Astrophysics Roman Review (2023), Hubble Space Telescope (2023)
- *Ad-hoc Referee*: ApJ(S), MNRAS, A&A (14 since 2018)

Service to University Communities

- Five Colleges Astro Colloquium Organizer (UMass, 2022-2024)
- Postdoctoral Representative (UMass, 2023)
- University Academic Council (St Andrews, 2017-2018)
- University Education Committee (St Andrews, 2016-2018)
- Science & Medicine Faculty President (St Andrews, 2017-2018)
- Physics School President (St Andrews, 2016-2017)
- *Student Society roles*: Astronomy Society President, Observing Director, Academic Lecture Convener, Publicity Officer (St Andrews, 2013-2018)

Contribution to Diversity, Equity, and Inclusion

- Equality & Diversity Committee (St Andrews School of Physics, 2016-2018)
- *Award*: Institute of Physics Project Juno Champion *recognizes physics departments that have addressed gender equality and a more inclusive working environment* (St Andrews DEI committee student lead, co-author of application)
- *Award*: Athena Swan Charter Silver *recognizes a commitment to gender equity in STEM fields, academic freedom, and fair working practices* (St Andrews DEI committee student lead, co-author of application)

Successful Grants & Proposals

Total Funding (2019–present): $355k

- James Webb Space Telescope Cycle 1 GO-2659 *"Beasts in the Bubbles: Characterizing ultra-luminous Galaxies at Cosmic Dawn"* (14.4 hours; PI; $241k, 01/01/24–12/31/26)
- DIM ACAV+ Grants *"Expansion of the CANDIDE Cluster at the Institut d'Astrophysique de Paris"* (co-I; $40k 2019, $65k 2021)
- Society of Physics Students Travel Award ($1k, 2018)
- Margaret Mayall Fellowship, AAVSO ($4k, 5/1/2016–5/1/2018)
- International Undergraduate Fellowship, University of St Andrews ($4k, 09/01/2013–05/01/2018)

Media & Press Releases (select)

- *Media feature*: Searching for Luminous High-Redshift Galaxies with Euclid (Euclid Consortium, 06/2024)
- *Press release* NASA Webb's Deepest Ever View of the Pandora Cluster (NASA, 02/2023)
- *Interview*: New image from Webb Telescope, processed by UMass astronomers (Boston Globe, 02/2023)
- *Interview*: Black Holes Lurk in Literal Rings of Fire (SYFY Wire, 02/2022)
- *Interview*: A Golden Guiding Star (Weekendavisen, 12/2021)
- *Magazine article*: NGC 7252: capturing a cosmic car crash (BBC Sky at Night, 04/2018)
- *Web article*: ESO's Very Large Telescope Observes Galaxy-Galaxy Merger Remnant (Sci-News, 03/2018)
- *Media feature*: ESO, Mapping a Merger (02/2018)

Skills & Computing

Languages

Python (numpy/matplotlib/scipy/astropy; expert)
Fortran (77/95; proficient)
Web development: Python-Django, MySQL, HTML, CSS

Software

The Farmer, aperpy, pygappy | Github

Data Handling

photometry – processing (Swarp, PSFEx, grizli), profile-fitting photometry (own software: The Farmer), aperture photometry (SourceExtractor, aperpy), SED fitting (EAzY, Le Phare), morphologies (The Tractor, statmorph), quasar time-series
spectroscopy – long-slit, grism, and integral field; line fluxes (msaexp), kinematics (pPFX, PyParadise), stellar populations (Bagpipes, Prospector)

Facilities

CANDIDE Cluster: 312 cores, IAP, FR (priority user, 1M+ hours)
H20 Cluster: 312 cores, IfA, HI (priority user, 1M+ hours)
Perlmutter, US National Energy Research Scientific Computing Center

Teams & Memberships

Surveys and Large Collaborations

- UNIONS Survey (2024–)
- UNCOVER Survey (2022–; Photometric Catalog lead)
- Euclid Consortium (2018–, LBG Work Package co-lead, US Primeval Univ. lead)
- Cosmic DAWN Survey (2018–, Photometric Catalog lead)
- Hawaii Two-0 Survey (2018–)
- Cosmic Evolution Survey COSMOS (incl. COSMOS-Web, 2018–)
- BUFFALO Survey (2018–2022)

Professional Memberships

- American Astronomical Society (2015–)
- UK Institute of Physics (2015–)
- UK Royal Astronomical Society (Fellow, 2015–)
- European Astronomical Society (2015–)
- Astronomers without Borders (2014–)

Recent Observing Programs (select)

Total Time (2019–present): 1000+ hours

In addition to large programs on CFHT (17N), Subaru (28N), and Keck (25N):

- Fulfilling the UV Legacy of the Hubble and Webb Deep Public Frontier Field; HST Cycle 32, 72 orbits, PI: K. Whitaker, 2024
- Clumpy Relics: The First Spectroscopic Confirmation of Globular Clusters at $z \approx 3$; JWST/NIRSpec IFU Cycle 3, 20h, PI: S. Cutler, 2024
- Mirage or Miracle? Spectroscopic Confirmation of Remarkably Luminous Galaxies at $z > 10$; JWST/NIRSpec Cycle 3, 33.4h, PIs: R. Naidu & P. Oesch, 2024
- [OIII] Confirmation for Intrinsically Luminous z 12 Galaxy Candidates that Test Early Stellar Mass Assembly; ALMA, 23.1h, PI: C. Casey, 2023
- On the formation of cosmic DUNES: The first dusty galaxies of the universe; ALMA, 36.4h, PI: J. Zavala, 2023
- Caught in the Web: ALMA Data for Every Sub-Millimeter Galaxy Over the COSMOS-Web Survey Field; ALMA, 6.7h, PI: J. McKinney, 2023
- Medium bands, Mega Science: spatially-resolved $R \sim 15$ spectrophotometry at $z = 0.3 - 12$; JWST/NIRCam Cycle 2, 50.1h, PI: W. Suess, 2023
- MAGNIF: Medium-band Astrophysics with the Grism of NIRCam in Frontier Fields; JWST/NIRCamWFSS Cycle 2, 38.8h, PI: F. Sun, 2023
- A deep dive into the physics of the first massive quiescent galaxies in the Universe; JWST/NIRCam/NIRSpec Cycle 2, 47.6h, PI: F. Valentino, 2023
- A comprehensive study of the most massive proto-cluster in COSMOS; ALMA, 23.3h, PI: J. Zavala, 2022
- WERLS: Webb Epoch of Reionization Lyman-alpha Survey; NASA Key Strategic Mission Support, Keck/MOSFIRE+LRIS, 29N, PI: C. Casey & J. Kartaltepe, 2022
- Beasts in the Bubbles: Characterizing ultra-luminous Galaxies at Cosmic Dawn; JWST/NIRSpec IFU Cycle 1, 14.4h, PI: **J. Weaver**, 2022
- Galaxy Protoclusters as Drivers of Cosmic Reionization; JWST/NIRCam/NIRSpec Cycle 1, 25.2/9.7h, PI: C. Martin, 2022

and 25 other programs on JWST, ALMA, Subaru, Keck, VLT, and NOEMA.

103 total, 7 as first author, h-index: 33, i10-index: 73, citations: 3,803

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Link to a regularly updated list on Astrophysical Data Service (ADS):
https://ui.adsabs.harvard.edu/public-libraries/ZLE6-g9VSRK43Gm-HPLh2A

Lead Author (7)

2024 [1] **Weaver, J. R.**, Taamoli, S., McPartland, C. J. R., et al. May 2024. "Euclid: ERO – NISP-only sources and the search for luminous $z = 6 - 8$ galaxies". In: *arXiv e-prints*, arXiv:2405.13505.

[2] **Weaver, J. R.**, Cutler, S. E., Pan, R., et al. Jan. 2024. "The UNCOVER Survey: A First-look HST + JWST Catalog of 60,000 Galaxies near A2744 and beyond". In: *ApJS* 270.1, 7.

2023 [3] **Weaver, J. R.**, Zalesky, L., Kokorev, V., et al. Nov. 2023. "The Farmer: A Reproducible Profile-fitting Photometry Package for Deep Galaxy Surveys". In: *ApJS* 269.1, 20.

[4] **Weaver, J. R.**, Davidzon, I., Toft, S., et al. Sept. 2023. "COSMOS2020: The galaxy stellar mass function. The assembly and star formation cessation of galaxies at $0.2 < z \leq 7.5$". In: *A&A* 677, A184.

2022 [5] **Weaver, J. R.** and Horne, K. May 2022. "Dust and the intrinsic spectral index of quasar variations: hints of finite stress at the innermost stable circular orbit". In: *MNRAS* 512.1.

[6] **Weaver, J. R.**, Kauffmann, O. B., Ilbert, O., et al. Jan. 2022. "COSMOS2020: A Panchromatic View of the Universe to z∼10 from Two Complementary Catalogs". In: *ApJS* 258.1, 11.

2018 [7] **Weaver, J.**, Husemann, B., Kuntschner, H., et al. June 2018. "History and destiny of an emerging early-type galaxy. New IFU insights on the major-merger remnant NGC 7252". In: *A&A* 614, A32.

Major Contributions (12)

2024 [8] Treiber, H., Greene, J., **Weaver, J. R.**, et al. Sept. 2024. "UNCOVERing the High-Redshift AGN Population Among Extreme UV Line Emitters". In: *arXiv e-prints*, arXiv:2409.12232.

[9] Cutler, S. E., Whitaker, K. E., **Weaver, J. R.**, et al. June 2024. "Two Distinct Classes of Quiescent Galaxies at Cosmic Noon Revealed by JWST PRIMER and UNCOVER". In: *ApJL* 967.2, L23.

[10] Atek, H., Gavazzi, R., **Weaver, J. R.**, et al. May 2024. "Euclid: Early Release Observations – A preview of the Euclid era through a galaxy cluster magnifying lens". In: *arXiv e-prints*, arXiv:2405.13504.

[11] Suess, K. A., **Weaver, J. R.**, Price, S. H., et al. Apr. 2024. "Medium Bands, Mega Science: a JWST/NIRCam Medium-Band Imaging Survey of Abell 2744". In: *arXiv e-prints*, arXiv:2404.13132.

[12] Wright, L., Whitaker, K. E., **Weaver, J. R.**, et al. Mar. 2024. "Remarkably Compact Quiescent Candidates at $3 < z < 5$ in JWST-CEERS". In: *ApJL* 964.1, L10.

2023 [13] Leung, G. C. K., Finkelstein, S. L., **Weaver, J. R.**, et al. Dec. 2023. "The Spitzer-HETDEX Exploratory Large-Area Survey. IV. Model-based Multiwavelength Photometric Catalog". In: *ApJS* 269.2, 46.

[14] Fujimoto, S., Wang, B., **Weaver, J.**, et al. Aug. 2023. "UNCOVER: A NIRSpec Census of Lensed Galaxies at z=8.50-13.08 Probing a High AGN Fraction and Ionized Bubbles in the Shadow". In: *arXiv e-prints*, arXiv:2308.11609.

[15] Furtak, L. J., Zitrin, A., **Weaver, J. R.**, et al. Aug. 2023. "UNCOVERing the extended strong lensing structures of Abell 2744 with the deepest JWST imaging". In: *MNRAS* 523.3.

[16] Scoville, N., Faisst, A., **Weaver, J.**, et al. Feb. 2023. "Cosmic Evolution of Gas and Star Formation". In: *ApJ* 943.2, 82.

[17] Brinch, M., Greve, T. R., **Weaver, J. R.**, et al. Feb. 2023. "COSMOS2020: Identification of High-z Protocluster Candidates in COSMOS". In: *ApJ* 943.2, 153.

2022 [18] Kauffmann, O. B., Ilbert, O., **Weaver, J. R.**, et al. Nov. 2022. "COSMOS2020: UV-selected galaxies at $z \geq 7.5$". In: *A&A* 667, A65.

2020 [19] Steinhardt, C. L., **Weaver, J. R.**, Maxfield, J., et al. Mar. 2020. "A Method to Distinguish Quiescent and Dusty Star-forming Galaxies with Machine Learning". In: *ApJ* 891.2, 136.

Supporting Contributions (84)

2024 [20] Arango-Toro, R. C., Ilbert, O., Ciesla, L., et al. Oct. 2024. "A history of galaxy migrations over the Stellar Mass - SFR plane from the COSMOS-Web survey". In: *arXiv e-prints*, arXiv:2410.05375.

[21] Bezanson, R., Labbe, I., Whitaker, K. E., et al. Oct. 2024. "The JWST UNCOVER Treasury Survey: Ultradeep NIRSpec and NIRCam Observations before the Epoch of Reionization". In: *ApJ* 974.1, 92.

[22] Setton, D. J., Khullar, G., Miller, T. B., et al. Oct. 2024. "UNCOVER NIRSpec/PRISM Spectroscopy Unveils Evidence of Early Core Formation in a Massive, Centrally Dusty Quiescent Galaxy at z $_{spec}$ = 3.97". In: *ApJ* 974.1, 145.

[23] Ma, Y., Greene, J. E., Setton, D. J., et al. Oct. 2024. "UNCOVER: 404 Error – Models Not Found for the Triply Imaged Little Red Dot A2744-QSO1". In: *arXiv e-prints*, arXiv:2410.06257.

[24] Weibel, A., Oesch, P. A., Barrufet, L., et al. Sept. 2024. "Galaxy build-up in the first 1.5 Gyr of cosmic history: insights from the stellar mass function at z 4-9 from JWST NIRCam observations". In: *MNRAS* 533.2.

[25] Benton, C. E., Nelson, E. J., Miller, T. B., et al. Sept. 2024. "JWST Reveals Bulge-Dominated Star-forming Galaxies at Cosmic Noon". In: *arXiv e-prints*, arXiv:2409.08328.

[26] Siegel, J., Setton, D., Greene, J., et al. Sept. 2024. "UNCOVER: Significant Reddening in Cosmic Noon Quiescent Galaxies". In: *arXiv e-prints*, arXiv:2409.11457.

[27] Clausen, M., Whitaker, K. E., Momcheva, I., et al. Aug. 2024. "3D-DASH: The Evolution of Size, Shape, and Intrinsic Scatter in Populations of Young and Old Quiescent Galaxies at 0.5 ¡ z ¡ 3". In: *ApJ* 971.1, 99.

[28] Euclid Collaboration, Zalesky, L., McPartland, C. J. R., et al. Aug. 2024. "Euclid Preparation. Cosmic Dawn Survey: Data release 1 multiwavelength catalogues for Euclid Deep Field North and Euclid Deep Field Fornax". In: *arXiv e-prints*, arXiv:2408.05296.

[29] Euclid Collaboration, McPartland, C. J. R., Zalesky, L., et al. Aug. 2024. "Euclid preparation. The Cosmic Dawn Survey (DAWN) of the Euclid Deep and Auxiliary Fields". In: *arXiv e-prints*, arXiv:2408.05275.

[30] Price, S. H., Bezanson, R., Labbe, I., et al. Aug. 2024. "The UNCOVER Survey: First Release of Ultradeep JWST/NIRSpec PRISM spectra for ~700 galaxies from z~0.3-13 in Abell 2744". In: *arXiv e-prints*, arXiv:2408.03920.

[31] Pagul, A., Sánchez, F. J., Davidzon, I., et al. July 2024. "Self-consistent Combined HST, K-band, and Spitzer Photometric Catalogs of the BUFFALO Survey Fields". In: *ApJS* 273.1, 10.

[32] Chemerynska, I., Atek, H., Dayal, P., et al. July 2024. "The Extreme Low-mass End of the Mass-Metallicity Relation at $z \sim 7$". In: *arXiv e-prints*, arXiv:2407.17110.

[33] Cooper, O. R., Casey, C. M., Akins, H. B., et al. July 2024. "The Web Epoch of Reionization Lyα Survey (WERLS). I. MOSFIRE Spectroscopy of z $\sim$ 7–8 Lyα Emitters". In: *ApJ* 970.1, 50.

[34] Wold, I. G. B., Malhotra, S., Rhoads, J. E., et al. July 2024. "UNCOVERing the Faint-End of the z=7 [OIII] Luminosity Function with JWST's F410M Medium Bandpass Filter". In: *arXiv e-prints*, arXiv:2407.19023.

[35] Chemerynska, I., Atek, H., Furtak, L. J., et al. June 2024. "JWST UNCOVER: the overabundance of ultraviolet-luminous galaxies at z ¿ 9". In: *MNRAS* 531.2.

[36] Faisst, A. L., Brinch, M., Casey, C. M., et al. May 2024. "COSMOS-Web: The Role of Galaxy Interactions and Disk Instabilities in Producing Starbursts at z¡4". In: *arXiv e-prints*, arXiv:2405.09619.

[37] Euclid Collaboration, Selwood, M., Fotopoulou, S., et al. May 2024. "Euclid preparation. Observational expectations for redshift z¡7 active galactic nuclei in the Euclid Wide and Deep surveys". In: *arXiv e-prints*, arXiv:2405.18126.

[38] Cuillandre, J. .-., Bertin, E., Bolzonella, M., et al. May 2024. "Euclid: Early Release Observations – Programme overview and pipeline for compact- and diffuse-emission photometry". In: *arXiv e-prints*, arXiv:2405.13496.

[39] Euclid Collaboration, Mellier, Y., Abdurro'uf, et al. May 2024. "Euclid. I. Overview of the Euclid mission". In: *arXiv e-prints*, arXiv:2405.13491.

[40] Euclid Collaboration, Cropper, M., Al-Bahlawan, A., et al. May 2024. "Euclid. II. The VIS Instrument". In: *arXiv e-prints*, arXiv:2405.13492.

[41] Euclid Collaboration, Jahnke, K., Gillard, W., et al. May 2024. "Euclid. III. The NISP Instrument". In: *arXiv e-prints*, arXiv:2405.13493.

[42] Euclid Collaboration, Castander, F. J., Fosalba, P., et al. May 2024. "Euclid. V. The Flagship galaxy mock catalogue: a comprehensive simulation for the Euclid mission". In: *arXiv e-prints*, arXiv:2405.13495.

[43] Taamoli, S., Mobasher, B., Chartab, N., et al. May 2024. "Large-scale Structures in COSMOS2020: Evolution of Star Formation Activity in Different Environments at 0.4 ¡ z ¡ 4". In: *ApJ* 966.1, 18.
[44] Furtak, L. J., Labbé, I., Zitrin, A., et al. Apr. 2024. "A high black-hole-to-host mass ratio in a lensed AGN in the early Universe". In: *Nature* 628.8006.
[45] Casey, C. M., Akins, H. B., Shuntov, M., et al. Apr. 2024. "COSMOS-Web: Intrinsically Luminous z 10 Galaxy Candidates Test Early Stellar Mass Assembly". In: *ApJ* 965.1, 98.
[46] Ito, K., Valentino, F., Brammer, G., et al. Apr. 2024. "Size–Stellar Mass Relation and Morphology of Quiescent Galaxies at z $\geq$ 3 in Public JWST Fields". In: *ApJ* 964.2, 192.
[47] Heintz, K. E., Brammer, G. B., Watson, D., et al. Apr. 2024. "The JWST-PRIMAL Legacy Survey. A JWST/NIRSpec reference sample for the physical properties and Lyman-α absorption and emission of $\sim$ 500 galaxies at $z = 5.5 - 13.4$". In: *arXiv e-prints*, arXiv:2404.02211.
[48] Wang, B., Leja, J., Atek, H., et al. Mar. 2024. "Quantifying the Effects of Known Unknowns on Inferred High-redshift Galaxy Properties: Burstiness, IMF, and Nebular Physics". In: *ApJ* 963.1, 74.
[49] Greene, J. E., Labbe, I., Goulding, A. D., et al. Mar. 2024. "UNCOVER Spectroscopy Confirms the Surprising Ubiquity of Active Galactic Nuclei in Red Sources at z ¿ 5". In: *ApJ* 964.1, 39.
[50] Atek, H., Labbé, I., Furtak, L. J., et al. Feb. 2024. "Most of the photons that reionized the Universe came from dwarf galaxies". In: *Nature* 626.8001.
[51] Burgasser, A. J., Bezanson, R., Labbe, I., et al. Feb. 2024. "UNCOVER: JWST Spectroscopy of Three Cold Brown Dwarfs at Kiloparsec-scale Distances". In: *ApJ* 962.2, 177.
[52] Euclid Collaboration, Paltani, S., Coupon, J., et al. Jan. 2024. "Euclid preparation. XXXI. The effect of the variations in photometric passbands on photometric-redshift accuracy". In: *A&A* 681, A66.
[53] Wang, B., Leja, J., Labbé, I., et al. Jan. 2024. "The UNCOVER Survey: A First-look HST+JWST Catalog of Galaxy Redshifts and Stellar Population Properties Spanning 0.2 z 15". In: *ApJS* 270.1, 12.
[54] Dayal, P., Volonteri, M., Greene, J. E., et al. Jan. 2024. "UNCOVERing the contribution of black holes to reionization in the JWST era". In: *arXiv e-prints*, arXiv:2401.11242.
2023 [55] Kokorev, V., Fujimoto, S., Labbe, I., et al. Nov. 2023. "UNCOVER: A NIRSpec Identification of a Broad-line AGN at z = 8.50". In: *ApJL* 957.1, L7.
[56] Wang, B., Fujimoto, S., Labbé, I., et al. Nov. 2023. "UNCOVER: Illuminating the Early Universe-JWST/NIRSpec Confirmation of z ¿ 12 Galaxies". In: *ApJL* 957.2, L34.
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