# David J. Setton

Curriculum Vitae

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Research focus: observational galaxy formation and evolution through cosmic time

### Education

June 2023 Ph.D in Physics, University of Pittsburgh.

Advisor: Professor Rachel Bezanson

Thesis: The When and How of Rapid Quenching at Intermediate Redshift

May 2019 M.S. in Physics, University of Pittsburgh.

May 2017 B.S. in Physics and Astronomy, University of Arizona.

Advisor: Professor Gurtina Besla

Thesis: Characterizing the Bow Shock of the Large Magellanic Cloud

### Research Positions

Sep. 2023 - Brinson Prize Fellow.

Present Department of Astrophysical Sciences, Princeton University

Aug. 2017 - Aug. Zaccheus Daniel Fellow; PITT PACC Graduate Fellow.

2023 Department of Physics and Astronomy, University of Pittsburgh

# Accepted Telescope Programs/Observing

## James Webb Space Telescope

2 as Principal Investigator, 9 as Co-Investigator

Co-Principal 19.6 hours, Cycle 4: 8607.

Investigator "Studying cosmic noon at 200 parsec scales: resolved spectroscopy of a magnified dusty quiescent

galaxy"

Principal JWST: 4.7 hours (Joint w/ ALMA), Cycle 3: 6719.

Investigator "Mapping Cold Gas and Star Formation in Gas Rich Post-Starburst Galaxies Near Cosmic Noon"

Approved budget: \$128,878

Co-Investigator 259.8 hours, Cycle 4: 7814.

"MINERVA: Unlocking the Hidden Gems of the Distant Universe and Completing HST and JWST's

Imaging Legacy with Medium Bands"

Co-Investigator 17.0 hours, Cycle 4: 8204.

"Give me a break: the search for stars in a prototypical Little Red Dot"

Co-Investigator 14.1 hours, Cycle 4: 8047.

"Extremely massive galaxies in the early universe? Confirming the nature of the most model-breaking

object by hunting for stellar absorption features"

Co-Investigator **14.1 hours**, Cycle 4: 8915.

"Echoes of Silence: Absorption Line Spectroscopy of a Massive Quiescent Galaxy at z=7.3"

Co-Investigator 4.2 hours, Cycle 4: 8915.

"In Search of Siblings: Spectroscopic Follow-Up of a Candidate Massive Quiescent Galaxy at  $z\sim 7$ "

Co-Investigator **20.5 hours**, Cycle 3: 6405.

"Clumpy Relics: The First Spectroscopic Confirmation of Globular Clusters at  $z\sim 3$ "

Co- Investigator 48 hours, Cycle 2: 4111.

"Medium bands, Mega Science: spatially-resolved R 15 spectrophotometry of 50,000 sources at

z=0.3-12"

Co- Investigator 11.2 hours, Cycle 2: 4318.

"Is there Evidence of alpha-Enhancement in Massive Quiescent Galaxies at z > 3?"

Co- Investigator 47.9 hours, Cycle 2: 4233.

"A complete census of the rare, extreme and red: a NIRCam-selected extragalactic community survey with  $\mathsf{JWST/NIRSpec}$ "

## Atacama Large Millimeter/submillimeter Array

5 as Principal Investigator, 11 as Co-Investigator

Principal 15.5 hours (Joint w/ JWST), Cycle 11: 2024.1.01064.S.

Investigator "Mapping Cold Gas and Star Formation in Gas Rich Post-Starburst Galaxies Near Cosmic Noon"

Principal **12.1 hours**, Cycle 10: 2023.1.01012.S.

Investigator "Does Molecular Gas Survive Quenching Near Cosmic Noon?"

Principal **27.9 hours**, Cycle 9: 2022.1.00604.S.

Investigator "Timing the Disappearance of Molecular Gas in Post-Starburst Galaxies"

Principal **37.6 hours**, Cycle 8: 2021.1.01535.S.

Investigator "Timing the Disappearance of Molecular Gas in Post-Starburst Galaxies"

Principal **14.4 hours**, Cycle 8: 2021.1.00988.S.

Investigator "Tracing the molecular gas in tidal tails of recently quenched galaxies"

Co- Investigator **31.9 hours**, Cycle 12: 2025.1.01579.S.

"Are the earliest dead galaxies dead?"

Co- Investigator **12.7 hours**, Cycle 12: 2025.1.01006.S.

"What's Left Behind: A Census of the Cold ISM in the First Massive Quiescent Galaxies"

Co- Investigator **8.3 hours**, Cycle 12: 2025.1.00092.S.

"Dust and cold gas emission in a massive quenched galaxy candidate at z=7.3"

Co- Investigator **7.2 hours**, Cycle 11: 2024.1.01599.S.

"Revealing the connection between massive cores and quenching with ALMA"

Co- Investigator **8.4 hours**, Cycle 11: 2024.1.01252.S.

"Diffuse or Dense: Probing the Physical State of Massive Gas Reservoirs in z 0.7 Quenched Galaxies"

Co- Investigator **9.7 hours**, Cycle 11: 2024.1.01197.S.

"First Dynamical and FIR Characterizations of an X-ray luminous AGN host galaxy at z>10"

Co- Investigator ALMA: 19.0 hours/JWST: 1.3 hours, Cycle 11: 2024.1.00826.S.

"Of Dust and Dots: ALMA's View of the Brightest of JWST's Little Red Dots"

Co- Investigator 44.8 hours, Cycle 11: 2024.1.00551.S.

"Probing the Host Galaxies of 45 Broad-line Little Red Dots at  $z_{spec}=4.13-8.50$  with ALMA"

Co- Investigator 13.1 hours, Cycle 11: 2024.1.00216.S.

"Timing the Onset of Unexpected Dust Destruction using High-Redshift Post-Starburst Galaxies"

Co- Investigator **13.1 hours**, Cycle 10: 2023.1.00948.S.

"Timing the Onset of Unexpected Dust Destruction using High-Redshift Post-Starburst Galaxies"

Co- Investigator **14.5 hours**, Cycle 8: 2021.1.00761.S.

"Quantifying the molecular gas reservoirs of post-starburst AGN hosts"

## Hubble Space Telescope

1 as Principal Investigator, 2 as Co-Investigator

Principal SNAP (409 Orbits), Cycle 30: 17110.

Investigator "Post-starbursts from DESI: Timing quenching and morphological transformation at 1 < z < 1.3"

Approved budget: \$202,893

Co- Investigator GO (25 Orbits), Cycle 33: 18038.

"Unravel the Puzzles of Little Red Dots: HST View on Local Analogs"

Co- Investigator GO (72 Orbits), Cycle 32: 17730.

"Fulfilling the UV Legacy of the Hubble and Webb Deep Public Frontier Field"

#### Other facilities

4 as Co-Investigator

Co- Investigator 5 hours, NOEMA, W24EE.

"Unveiling the formation of an extreme, quiescent galaxy at z=5 with JWST and NOEMA"

Co- Investigator 48 hours, CHANDRA, Cycle 24: 24700092.

"A CHANDRA View of Massive Post-Starburst Galaxies"

Co- Investigator 21 hours, VLA, Semester 2024B: VLA/24B-451.

"Timing the Onset of Radio-Mode Feedback with High-z Post-starbursts"

Co- Investigator 45 hours, VLA, Semester 2022A: VLA/22A-362.

"Measuring Jet Ages to Test Radio AGN Feedback with Massive  $z\sim0.7$  Post-Starbursts"

# Observing Experience

6.5 Nights Magellan/FIRE.

1 Night Keck/NIRES.

# Scholarships, Honors, and Grants

2025-Present **JWST-GO #6719 Grant**, \$128,878.

Summer 2023 **Zaccheus Daniel Fellow**,  $\sim $13,000$ .

Spring 2023 PITT PACC Graduate Fellow,  $\sim $13,000$ .

2023-2025 **HST-GO #17110 Grant**, \$202, 893.

Fall 2022 ALMA Student Observing Support,  $\sim $35,000$ .

Fall 2021 PITT PACC Graduate Fellow,  $\sim $12,000$ .

Mar. 2021 Thomas-Lain Fund Scholarship Essay Competition, \$2000.

Feb. 2020 Martin and Beate Block Winter Award, \$500.

Acad. Year 16-17 **Cubic Corporation Scholarship**,  $\sim $2000$ .

Acad. Year 16-17 Krane Scholarship,  $\sim $2000$ .

Acad. Year 16-17 **Phi Beta Kappa Travel Grant**,  $\sim $1000$ .

Acad. Year 16-17 **Glenn C. Purviance Scholarship**,  $\sim \$3500$ .

Acad. Year 15-16 **Galileo Circle Scholarship**,  $\sim $5000$ .

& 16-17

Acad. Year 14-15 **Angelos C. Langadas Scholarship**,  $\sim $2000$ .

Acad. Year 14-15 **Arizona Space Grant Internship**,  $\sim $3500$ .

## Talks and Presentations

- August 2025 Galaxy memoirs: inferring their past from their present, Speaker, Buzios, Brazil.
  - July 2025 **New Data that Challenge Underlying Assumptions in Galaxy Evolution**, *Speaker*, Bar Harbor, ME.
  - May 2025 PRIMA and the Future of Far-Infrared Astronomy, Invited Speaker, Padadena, CA.
  - May 2025 RUBIES Team Meeting, Invited Speaker, Bergen, NL.
  - April 2025 Big Galaxies, Big Problems Lorentz Center Meeting, Organizer, Leiden, NL.
- March 2025 UW ALMA Workshop, Invited Speaker, Seattle, WA.
- March 2025 Princeton Thunch, Invited Speaker, Princeton, NJ.

- March 2025 University of Pennsylvania AstroLunch, Invited Speaker, Philadelphia, PA.
- February 2025 Bahcall Lunch Talk, Invited Speaker, Princeton, NJ.
- November 2024 York University Seminar, Invited Speaker, Toronto, Ontario.
- November 2024 University of Toronto TASTY Seminar, Invited Speaker, Toronto, Ontario.
  - October 2024 Galaxies and Black Holes in the Early Universe, Speaker, New Haven, Connecticut.
    - April 2024 Extreme Galaxies Conference, Poster, Reykjavik, Iceland.
    - April 2024 JHU/STScI Galaxy+AGN Journal Club, Invited Speaker, Baltimore, Maryland.
  - January 2024 Yale Galaxy Lunch, Invited Speaker, New Haven, Connecticut.
  - January 2024 St. Francis Xavier University Colloquium, Invited Speaker, Antigonish, Nova Scotia.
  - October 2023 UW AstroLunch, Invited Speaker, Seattle, Washington.
  - October 2023 Bahcall Lunch Talk, Invited Speaker, Princeton, NJ.
    - May 2023 AstroPGH Data Science Bootcamp, Guest Lecturer, University of Pittsburgh.
    - April 2023 ASTR 0413 Graduate Research Series, Invited Guest Lecturer, University of Pittsburgh.
  - January 2023 **241st Meeting of the American Astronomical Society**, *Thesis Talk*, Seattle, Washington.
- December 2022 **DESI Collaboration Meeting**, *Invited Plenary Speaker*, Cancun, Mexico.
- November 2022 **DESI Research Forum**, *Invited Speaker*, Online.
- November 2022 NOIRLab FLASH Talk, Invited Speaker, Tucson, Arizona.
  - October 2022 **HSC+PFS+Rubin Meeting**, *Invited Speaker*, Princeton University.
  - October 2022 Extragalactic Seminar, Invited Speaker, Texas A&M.
- October 2022 Extragalactic Seminar, Invited Speaker, University of Texas Austin.
- September 2022 Galaxy Group Seminar, Invited Speaker, University of Michigan.
- September 2022 Epoch of Galaxy Quenching 2022, Speaker, Cambridge, U.K..
  - July 2022 A Holistic View of Stellar Feedback and Galaxy Evolution, Speaker, Collegio Papio, Ascona, Switzerland.
  - May 2022 **AstroPGH Data Science Bootcamp**, *Guest Lecture*, University of Pittsburgh.
  - Nov 2021 KooGiG-Junior Workshop, Speaker, Kavli Institute for Astronomy and Astrophysics.
  - May 2021 STSci Multi-Object Spectroscopy Workshop, Speaker, Space Telescope Institute.
  - April 2021 Galaxy Lunch, Invited Speaker, UMass Amherst.
  - March 2021 McWilliams Computing Seminar, Invited Speaker, Carnegie Mellon University.
  - October 2020 Intro to Astronomy Seminar Series, Invited Speaker, Bridgewater State University.
- May+June 2020 AstroPGH Data Science Bootcamp, Guest Lectures, University of Pittsburgh.
  - Feb. 2020 **Aspen Galaxy Quenching Workshop**, *Poster*, Aspen Center for Physics. **Awarded "Martin and Beate Block Winter Award for Promising Young Physicists"**
  - Feb. 2020 **3 Minute Thesis Competition**, *Talk*, University of Pittsburgh. **Department Competition Winner**
  - Jan. 2017 **229th Meeting of the American Astronomical Society**, *Poster*, Grapevine, TX.
  - May 2016 Lucy Engal Undergraduate Physics Symposium, Talk, University of Arizona.
  - Mar. 2016 **2nd Magellanic Clouds Workshop**, *Talk*, University of Arizona.
  - May 2015 Lucy Engal Undergraduate Physics Symposium, Talk, University of Arizona.

    Awarded "Best Undergraduate Talk"
  - Apr. 2015 Arizona Space Grant Symposium, Talk, Arizona State University.

# Teaching Experience

Summer 2024 **Princeton Prison Teaching Institute Summer Internship**, *Princeton*, *NJ*. Instructor: Coding Foundations of Research Statistics Module

Acad. Year 19-20 AP Physics C: Mechanics + Electricity & Magnetism, Tutor.

Acad. Year 18-19 Deitrich School of Arts and Sciences Teaching Assistant Mentor, Pitt.

Spring 2018 ASTRON 0089: Stars, Galaxies, and Cosmos, Teaching Assistant, Pitt.

Received Myron P. Garfunkel Excellence in Graduate Student Teaching Award

Fall 2017 ASTRON 0088: Stonehenge to Hubble, Teaching Assistant, Pitt.

Fall 2017 ASTRON 0087: Basics of Spaceflight, Teaching Assistant, Pitt.

Spring 2017 PHYS 141: Introduction to Mechanics, Preceptor, U.Arizona.

Spring 2017 PHYS 241: Introduction to Electricity & Magnetism, Preceptor, U.Arizona.

# Students Supervised

Mar. 2020-Aug. Maggie Verrico, University of Pittsburgh Undergraduate.

2022 Studying the Sizes and Structures of z $\sim$ 0.7 Post-Starburst Galaxies Now a graduate student at the University of Illinois Urbana-Champaign

Publication in the Astrophysical Journal

May 2022-Present **Anika Kumar**, *University of Pittsburgh Undergraduate*.

Studying the Source Properties of the Gas Rich Companions of Post-Starburst Galaxies

Now a graduate student at the Rochester Institute of Technlology

June 2022-Present Yunchong Zhang, University of Pittsburgh Graduate Student.

Morphology of  $z \sim 1$  post-starburst galaxies/number density of high-z quiescent galaxies

Publication in the Astrophysical Journal

Accepted ALMA Cycle 12 Program (A Priority)

July 2022-Present **Erin Stumbaugh**, *University of Pittsburgh Undergraduate*.

Studying the Environments of Post-Starburst Galaxies Using HSC Imaging

Fall 2023-Summer Belinda Wu, Princeton University Undergraduate Junior Project.

2024 JWST UNCOVER: Star Formation Histories of Low-Mass Galaxies

Dec. 2023-Present Jared Siegel, Princeton University Graduate Student.

The Spatially Resolved Stellar Populations of z>2 Quiescent Galaxies with JWST

Publication in the Astrophysical Journal Joint PI of JWST Cycle 4 Program 8607

Dec. 2023-Present Yilun Ma, Princeton University Graduate Student.

Modeling the spectra and number density of Little Red Dots

Multiple publications in the Astrophysical Journal

Summer 2024 **Hy Troung**, Princeton University Undegraduate Summer Research Project.

"Seeing New Colors: What Gradients Reveal About Massive Galaxies at z>2"

Now a graduate student at the San Diego State University

Sep. 2024-Present **Abby Mintz**, Princeton University Graduate Student.

Star Formation Burstiness at Cosmic Noon with JWST/PRISM Spectroscopy

Publication submitted to the Astrophysical Journal

May. 2025-Present Helena Treiber, Princeton University Graduate Student.

Selection and Characterization of Non-LRD AGN With JWST

June. Kaitlyn Shavelle, Princeton University Graduate Student.

2025-Present Star Forming Properties of IR-Luminous Type II Quasars

#### Service

Reviewer: HST Distributed Review, Proposal Reviewer.

ALMA Distributed TAC, Proposal Reviewer.

The Astrophysical Journal, Referee.

**Astronomy & Astrophysics**, *Referee*.

Nature Astronomy, Referee.

The Open Journal of Astrophysics, Referee.

May 2025-Present **Princeton Astronomy Colloquium**, Co-Chair of Selection Committee.

May 2024-Present Princeton Galread Seminar, Head Organizer.

Aug. 2019-July **Association of Physics and Astronomy Graduate Students**, *Co-President*. 2021

Summers 19, 20, Pitt Galaxy Journal Club, Founding Organizer.

21 Graduate student led journal club focused on seminal galaxy papers

## Outreach and Science Communication

December 2024 **Guest on WPRB The Pidgin**, WPRB News and Culture.

"little red dots"

November 2024 Communities Without Walls Speaker, Princeton Center for Modern Aging.

"Peering into the distant Universe with the new James Webb Space Telescope"

March 2023 Continuing Education Speaker, Sherwood Oaks Retirement Community.

"Peering into the distant Universe with the new James Webb Space Telescope"

Apr. 2022 ACCelerate Festival Presenter, Smithsonian National Museum of American History.

Presenter: "Making the Largest Maps of the Universe"

Apr. 2019 & 2020 Pittsburgh Public School Research Symposium Judge, Taylor Allderdice High School.

2020: Chair of Judging Committee

Nov. 2018 Astronomy on Tap Pittsburgh, Franktuary, Speaker.

"The Puzzling Counter Intuitiveness of Special Relativity"

Aug. 2015 - May College of Science Ambassador, University of Arizona.

2017 Recruitment and outreach events to recruit STEM undergraduates from Arizona high schools

Sep. 2014 - May Steward Observatory Telescope Operator, University of Arizona.

2017 Operated the 21" telescope on campus for undergraduate classes and public visit nights

## References

Postdoc Mentor Jenny E. Greene, Professor, Princeton University.

jgreene@astro.princeton.edu

Graduate Thesis Rachel Bezanson, Associate Professor, University of Pittsburgh.

Advisor rachel.bezanson@pitt.edu

Bruce Draine, Emeritus Professor, Princeton University.

draine@astro.princeton.edu

Undergraduate Gurtina Besla, Associate Professor, University of Arizona.

Thesis Advisor gbesla@email.arizona.edu

## Publications

Publications in each are listed in reverse chronological order in each section. Papers led by a student under close supervision by D.S. indicated with an asterisk (\*)

#### First and Second Author:

Seven first author, six second author (four with students supervised by D.S. as primary author)

13. \*Taking a Break at Cosmic Noon: Continuum-selected Low-mass Galaxies Require Long Burst Cycles Mintz, Abby; **Setton, David J.**; Greene, Jenny E.; Leja, Joel; Wang, Bingjie; et al. 2025

Submitted to the Astrophysical Journal (arXiv: 2506.16510)

- 12. A confirmed deficit of hot and cold dust emission in the most luminous Little Red Dots **Setton, David J.**; Greene, Jenny E.; Spilker, Justin S.; Williams, Christina C.; Labbe, Ivo; et al. 2025 *Submitted to the Astrophysical Journal (arXiv: 2503.02059)*
- 11. Little Red Dots at an Inflection Point: Ubiquitous "V-Shaped" Turnover Consistently Occurs at the Balmer Limit

**Setton, David J.**; Greene, Jenny E.; de Graaff, Anna; Ma, Yilun; Leja, Joel; et al 2024 Submitted to the Astrophysical Journal (arXiv: 2411.03424)

- \*UNCOVER: Significant Reddening in Cosmic Noon Quiescent Galaxies
   Siegel, Jared; Setton, David J.; Greene, Jenny; Suess, Katherine; Whitaker, Katherine; Bezanson, Rachel; et
   al. 2024
   Submitted to the Astrophysical Journal (arXiv: 2409.11457)
  - 9. \*DESI Massive Post-Starburst Galaxies at  $z\sim1.2$  have compact structures and dense cores Zhang, Yunchong; **Setton, David J.**; Bezanson, Rachel; Khullar, Gourav; Newman, Jeffrey A. et al. 2024 *The Astrophysical Journal*, 976, 36Z
- 8. Efficient formation of a massive quiescent galaxy at redshift 4.9 de Graaff, Anna; **Setton, David J.**; Brammer, Gabriel; Cutler, Sam; Suess, Katherine A.; Labbe, Ivo; Leja, Joel et al. 2024

  Nature Astronomy, 284D
- 7. UNCOVER NIRSpec/PRISM Spectroscopy Unveils Evidence of Early Core Formation in a Massive, Centrally Dusty Quiescent Galaxy at  $z_{spec}=3.97$

**Setton, David J.**; Khullar, Gourav; Miller, Tim; Bezanson, Rachel; Suess, Katherine A.; Greene, Jenny E. et al. 2024

The Astrophysical Journal, 974, 145S

- The Large Magellanic Cloud's ~30 Kiloparsec Bow Shock and its Impact on the Circumgalactic Medium Setton, David J.; Besla, Gurtina; Patel, Ekta; Hummels, Cameron; Zheng, Yong; Schneider, Evan et al. 2023 The Astrophysical Journal, 959L, 11S
- 5. DESI Survey Validation Spectra Reveal an Increasing Fraction of Recently Quenched Galaxies at  $z\sim 1$  Setton, David J.; Dey, Biprateep; Khullar, Gourav; Bezanson, Rachel; Newman, Jeffrey A.; et al. 2023 The Astrophysical Journal, 947, L31
- 4. \*Merger Signatures are Common, but not Universal, in Massive, Recently-Quenched Galaxies at  $z\sim0.7$  Verrico, Margaret; **Setton, David J.**; Bezanson, Rachel; Greene, Jenny E.; Suess, Katherine A.; Goulding, Andy; Spilker, Justin S.; Kriek, Mariska; Feldmann, Robert; Narayanan, Desika 2023 *The Astrophysical Journal*, 949, 5
- 3. The Compact Structures of Massive  $z\sim0.7$  Post-Starburst Galaxies in the SQuIGG $\vec{L}$ E Survey **Setton, David J.**; Verrico, Margaret; Bezanson, Rachel; Greene, Jenny E.; Suess, Katherine A.; Feldmann, Robert; Goulding, Andy D.; Hall-Hooper, Khalil; Kado-Fong, Erin; Kriek, Mariska; Narayanan; Desika; Spilker, Justin S. 2022

The Astrophysical Journal, 931, 51

- SQuIGGLE Survey: Massive z~0.6 Post-Starburst Galaxies Exhibit Flat Age Gradients
   Setton, David J.; Bezanson, Rachel; Suess, Katherine A.; Hunt, Qiana; Greene, Jenny E.; Kriek, Mariska;
   Spilker, Justin S.; Feldmann, Robert; Narayanan, Desika 2020
   The Astrophysical Journal, 905, 79
- 1. The Role of Active Galactic Nuclei in the Quenching of Massive Galaxies in the SQuIGG $\vec{L}$ E Survey Greene, Jenny E.; **Setton, David J.**; Bezanson, Rachel; Suess, Katherine A.; Kriek, Mariska; Spilker, Justin

S.; Goulding, Andy D.; Feldmann, Robert 2020 *The Astrophysical Journal*, 899, L9

#### Co-authored publications with major contributions:

(Three with students supervised by D.S. as primary author)

- 16. \*RUBIES spectroscopically confirms the high number density of quiescent galaxies from 2 < z < 5 Zhang, Yunchong; de Graaff, Anna; **Setton, David J.**; Price, Sedona H.; Bezanson, Rachel; et al. 2025 Submitted to the Astrophysical Journal
- 15. \*Counting Little Red Dots at z < 4 with Ground-based Surveys and Spectroscopic Follow-up Ma, Yilun; Greene, Jenny E.; **Setton, David J.**; Goulding, Andy D.; Annunziatella, Marianna et al. 2025 Submitted to the Astrophysical Journal
- 14. RUBIES: JWST/NIRSpec Resolves Evolutionary Phases of Dusty Star-forming Galaxies at  $z\sim2$  Cooper, Olivia R.; Brammer, Gabriel; Heintz, Kasper E.; Toft, Sune; Casey, Caitlin M.; **Setton, David J.** et al. 2025

The Astrophysical Journal, 982, 125C

- 13. SQuIGG $\vec{L}$ E: Observational Evidence of Low Ongoing Star Formation Rates in Gas-Rich Post-Starburst Galaxies Zhu, Pengpei.; Suess, Katherine A.; Kriek, Mariska; **Setton, David J.**; Bezanson, Rachel; et al. 2025 Accepted in the Astrophysical Journal
- 12. Discovery of Ancient Globular Cluster Candidates in The Relic, a Quiescent Galaxy at z=2.5 Whitaker, Katherine E.; Cutler, Sam E.; Chandar, Rupali; Pan, Richard; **Setton, David J.**; et al. 2024 Submitted to the Astrophysical Journal
- 11. 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

Miller, Tim B.; Suess, Katherine A.; **Setton, David J.**; Price, Sedona H.; Labbe, Ivo; Bezanson, Rachel; et al. 2024

Submitted to the Astrophysical Journal

- 10. \*UNCOVER: 404 Error Models Not Found for the Triply Imaged Little Red Dot A2744-QSO1 Ma, Yilun; Greene, Jenny E.; Setton, David J.; Marta Volonteri, Joel Leja, Bingjie Wang; et al. 2024 Submitted to the Astrophysical Journal Letters
  - RUBIES Reveals a Massive Quiescent Galaxy at z=7.3
     Weibel, Andrea; de Graaff, Anna; Setton, David J.; Miller, Tim B.; Oesch, Pascal A.; et al. 2024
     Submitted to the Astrophysical Journal Letters
- Most of the photons that reionized the Universe came from dwarf galaxies
   Atek, Hakim; Labbé, Ivo; Furtak, Lukas J.; Chemerynska, Iryna; Fujimoto, Seiji; Setton, David J.; Miller,
   Tim B.; Oesch, Pascal; Bezanson, Rachel; et al. 2024
   Nature, 626, 975–978
- UNCOVER: The growth of the first massive black holes from JWST/NIRSpec spectroscopic confirmation of an X-ray luminous AGN at z=10.1 Goulding, Andy D.; Greene, Jenny E.; Setton, David J.; Labbe, Ivo; Bezanson, Rachel; Miller, Tim B.; Atek, Hakim; Bogdan, Akos; et al. 2023 The Astrophysical Journal, 955L, 24G
- UNCOVER: Illuminating the Early Universe JWST/NIRSpec Confirmation of z>12 Galaxies
   Wang, Bingjie; Fujimoto, Seiji; Labbe, Ivo; Furtak, Lukas J.; Miller, Tim B.; Setton, David J.; et al. 2023
   The Astrophysical Journal, 957L, 34W
- 5. Schrodinger's Galaxy Candidate: Puzzlingly Luminous at  $z\sim17$ , or Dusty/Quenched at  $z\sim5$ ? Naidu, Rohan P.; Oesch, Pascal A.; **Setton, David J.**; Matthee, Jorryt; Conroy, Charlie; Johnson, Benjamin

- D.; Weaver, John R.; Bouwens, Rychard J.; Brammer, Gabriel B.; Dayal, Pratika; et al. 2022 Submitted to the Astrophysical Journal (arXiv:2208.02794)
- 4. Rest-frame near-infrared sizes of galaxies at cosmic noon: objects in JWST's mirror are smaller than they appeared

Suess, Katherine A.; Bezanson, Rachel; Nelson, Erica J.; **Setton, David J.**; Price, Sedona H.; van Dokkum, Pieter; Brammer, Gabriel; Labbe, Ivo; Leja, Joel; Miller, Tim B.; Robertson, Brant; et al. 2022 *The Astrophysical Journal*, 937, L33

3. Star Formation Suppression by Tidal Removal of Cold Molecular Gas from an Intermediate-Redshift Massive Post-Starburst Galaxy

Spilker, Justin S.; Suess, Katherine A.; **Setton, David J.**; Bezanson, Rachel; Feldmann, Robert; Greene, Jenny E.; Kriek, Mariska; Lower, Sidney; Narayanan, Desika; Verrico, Margaret 2022 *The Astrophysical Journal*, 936, L11

- 1. Now you see it, now you don't:  $H_2$  in massive post-starburst galaxies at  $z\sim0.6$  Bezanson, Rachel; Spilker, Justin S.; Suess, Katherine A.; **Setton, David J.**; Feldmann, Robert; Greene, Jenny E.; Kriek, Mariska; Narayanan, Desika; Verrico, Margaret 2022 *The Astrophysical Journal*, 925, 153

## Other co-authored publications:

23. MINERVA: A NIRCam Medium Band and MIRI Imaging Survey to Unlock the Hidden Gems of the Distant Universe

Muzzin, Adam; Suess, Katherine A.; Marchesini, Danilo; Robbins, Luke; Willott, Chris J.; et al 2025 (including **Setton, David J.**)

Submitted to the Astrophysical Journal

22. Unusually High Gas-to-Dust Ratios Observed in High-Redshift Quiescent Galaxies Spilker, Justin S.; Whitaker, Katherine E.; Narayanan, Desika; Bezanson, Rachel; Bodansky, Sarah; et al 2025 (including **Setton, David J.**)

Submitted to the Astrophysical Journal

21. Cold gas in a post-starburst pair at  $z\sim 1.4$ : major mergers as a pathway to quenching in the HeavyMetal survey

Suess, Katherine A.; Beverage, Aliza G.; Kriek, Mariska; Spilker, Justin S.; et al 2025 (including **Setton, David J.**)

Submitted to the Astrophysical Journal Letters

- 20. The Structure and Formation Histories of Low-Mass Quiescent Galaxies in the Abell 2744 Cluster Environment Cutler, Sam E.; Weaver, John R.; Whitaker, Katherine E.; Greene, Jenny E.; **Setton, David J.** et al. 2025 *Submitted to the Astrophysical Journal*
- 19. UNCOVER/MegaScience: No Evidence of Environmental Quenching in a  $z\sim2.6$  Proto-cluster Pan, Richard; Suess, Katherine A.; Marchesini, Danilo; Wang, Bingjie; Leja, Joel; et al. 2025 (including **Setton, David J.**)

Submitted to the Astrophysical Journal

18. 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

de Graaff, Anna; Rix, Hans-Walter; Naidu, Rohan P.; Labbe, Ivo; Wang, Bingjie; Leja, Joel; Matthee, Jorryt; et al. 2025 (including **Setton, David J.**)

Submitted

17. A "Black Hole Star" Reveals the Remarkable Gas-Enshrouded Hearts of the Little Red Dots Naidu, Rohan P.; Matthee, Jorryt; Katz, Harley; de Graaff, Anna; Oesch, Pascal; et al. 2025 (including **Setton, David J.;**)

Submitted

16. 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

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15. UNCOVERing the High-Redshift AGN Population Among Extreme UV Line Emitters

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