Nikko J. Cleri

Eberly Postdoctoral Fellow
The Pennsylvania State University

Summary

Research:	Galaxy Evolution, High-Redshift Galaxies, Emission-Line Galaxies, Interstellar Medium, Active Galactic Nuclei, Black Hole Seeds, Population III Stars, Star Formation, Dust Attenuation
Techniques:	UV/Optical/Near-IR Spectroscopy, Photoionization Modeling
Proposals:	As PI/Co-PI: 1 *JWST*, 1 *HST*, >300k USD awarded As Co-I: 11 *JWST*, 1 Gemini, >700 hours total awarded
Publications:	4 first author, 5 significant author, 67 coauthor, 4084 citations, 35 H-index
Presentations:	18 research, 12 outreach and professional development

Academic and Professional Appointments

2024-	Eberly Postdoctoral Fellow	Penn State
2021-24	Graduate Student (Advisor: Prof. Casey Papovich)	Texas A&M
2019-21	Graduate Student (Advisor: Prof. Jonathan Trump)	UConn
2017-20	Research Assistant (Advisor: Prof. Gerald Dunne)	UConn
2018	NSF REU Student (Advisor: Prof. Louis Strigari)	Texas A&M

Education

Ph.D. Astronomy — Texas A&M University — 2021 - 2024

Advisor: Casey Papovich

Thesis: *Spectroscopic Studies of Stars and Black Holes Across Cosmic Time*

M.S. Physics — University of Connecticut — 2019 - 2021

Advisor: Jonathan R. Trump

Thesis: *CLEAR: Paschen-β Star Formation Rates and Dust Attenuation in Low Redshift Galaxies*

B.S. Physics | *Mathematics Minor* — University of Connecticut — 2015 - 2019

Advisor: Gerald V. Dunne

Undergraduate Research: *Resurgent trans-series for generalized Hastings-McLeod solutions*

Awarded Proposals and Grants

Principal Investigator — 2

2024	JWST-AR-5558: *A Census of Optical Diagnostics of Ionizing Sources Across Cosmic Time*	~\$174k
2021	HST-AR-16609: *Peering Through the Dust: Paschen-beta Indicators of Star Formation and Dust Attenuation*	~\$136k

Co-Investigator 12

2025	JWST-GO-8047: *Extremely massive galaxies in the early universe? Confirming the nature of the most model-breaking object by hunting for stellar absorption features* (PI: B. Wang and E. Nelson)	19.6 hours
2025	JWST-GO-7488: *Echoes of Silence: Absorption Line Spectroscopy of a Massive Quiescent Galaxy at z=7.3* (PI: A. Weibel)	14.1 hours
2025	JWST-GO-8559: *SPAM: Star-formation from Photometry through the Addition of Medium-bands* (PI: K. Davis and R. Larson)	62.8 hours
2025	JWST-GO-8410: *A Census of Galaxy Kinematics and Outflows to $z \sim 7$* (PI: R. Simons)	110.0 hours
2025	JWST-GO-8204: *Give me a break: the search for stars in a prototypical Little Red Dot* (PI: J. Greene and I. Labbe)	17.4 hours
2024	JWST-GO-5718: *A Spectroscopic Census of Faint, Broad-Line AGN at z>5* (PI: D. Kocevski and J. Guo)	20.49 hours
2024	JWST-GO-5943: *What really are the Physical Properties of Galaxies in the Epoch of Reionization?* (PI: C. Papovich and W. Hu, T. Hutchison)	61.83 hours
2024	JWST-GO-5407: *MEOW: The MIRI Early Obscured-AGN Wide Survey* (PI: G. Leung and R. Endsley, S. Finkelstein)	73.95 hours
2024	JWST-GO-5507: *Deep Spectroscopy of Galaxies at z=4-14: Uncovering Drivers of Early Galaxy Formation and Black Hole Growth* (PI: T. Hutchison and R. Larson)	23.29 hours
2024	JWST-GO-6368: *The CANDELS-Area Prism Epoch of Reionization Survey (CAPERS)* (PI: M. Dickinson)	293.21 hours
2023	JWST-GO-3703: *Breaking the z=10 barrier with MIRI: redshift confirmation and detection of rest-frame optical emission lines* (PI: J. Zavala)	24.33 hours
2023	GS-2023A-Q-136: *Optical Spectroscopy of JWST ERO Galaxies* (PI: B. Backhaus)	20 hours

Honors and Awards

2024	Dean's Climate and Diversity Award (Group)	Penn State
2022	Texas Space Grant Consortium Graduate Fellow - $5K	Texas A&M
2018	NSF REU - $5K	Texas A&M
2016	Dean's List - College of Liberal Arts and Sciences	UConn
2015-19	Governor's Scholarship - $8.5K/yr	UConn
2015	Community Service Scholarship - $1K	UConn

Teaching Experience

Instructor of Record

ASTRO 6: Stars, Galaxies, and the Universe	Penn State

Teaching Assistant/Course Assistant

PHYS 1501: Physics for Engineers I	UConn
PHYS 1025: Introduction to Astronomy	UConn

Service

Physics & Astronomy Community

Referee – Astronomy & Astrophysics (A&A)
Referee – Astrophysical Journal (ApJ)

College

Astronomy Representative – Eberly College of Science Postdoctoral Council	Penn State

Department

Member – Climate and Diversity Committee	Penn State
Graduate Representative	Texas A&M
Organizer – Astronomy Journal Club	Texas A&M

Mentoring

Students Supervised

Primary mentor for 2 undergraduates at Penn State	2024-

Other Mentoring Activities

Primary Mentor – Penn State-Nanjing Exchange Program	Penn State
Coordinator – Mentoring and Advising Graduates in an Inclusive Community (MAGIC)	Texas A&M
Mentor – Mentoring and Advising Graduates in an Inclusive Community (MAGIC)	Texas A&M
Mentor – UConn Undergraduate Peer Mentoring	UConn

Outreach

Volunteer – Gateway to Graduate School	Texas A&M
Demonstrator – Physics and Engineering Festival	Texas A&M
High School Research Reviewer – Lumiere	Texas A&M
Presenter – Astronomy on Tap BCS 'In the News'	Texas A&M
Treasurer – Astronomy on Tap BCS	Texas A&M
Pen-Pal – Letters to a Pre-Scientist	Texas A&M
Volunteer – Mitchell Institute Star Party Group	Texas A&M

Technical Skills and Programming Languages

Programming	Fluent: Python, LaTeX
	Familiar: SQL, Julia, C, C++, R, IDL, perl, Mathematica, MATLAB, HTML, CSS
Software	Fluent: Cloudy, PyNeb, LiMe
	Familiar: grizli, DS9, IRAF, sbatch, slurm

Collaborations and Survey Membership

Co-Investigator

SPAM: Star-formation from Photometry through the Addition of Medium-bands	JWST
CAPERS: The CANDELS-Area Prism Epoch of Reionization Survey	JWST

Contributing Member

LEGGOS: Lensing and Galaxy Growth: Observing Subtructures	JWST
POPPIES: The Public Observation Pure Parallel Infrared Emission-Line Survey	JWST
RUBIES: Red Unknowns: Bright Infrared Extragalactic Survey	JWST
NGDEEP: The Next Generation Deep Exploratory Public Survey	JWST
CEERS: The Cosmic Evolution Early Release Science Survey	JWST
CLEAR: The CANDELS Lyα Emission at Reionization Survey (inactive)	HST

Website Architect

Personal Website: njcleri.github.io
Mentoring and Advising Graduates in an Inclusive Community (MAGIC) (co-author): tx.ag/tamumagic

Publications

Lead/Co-Lead Author

4. **Cleri, N. J.**, Olivier, G. M., Hutchison T. A., et al. 2023, *Using [Ne V]/[Ne III] to Understand the Nature of Extreme-Ionization Galaxies*, ApJ, 953, 10
3. **Cleri, N. J.**, Yang, G., Papovich, C, et al. 2023, *CLEAR: High-Ionization [Ne V] λ3426 Emission-line Galaxies at* $1.4 < z < 2.3$, ApJ, 948, 112
2. **Cleri, N. J.**, Trump, J. R., Backhaus, B. E., et al. 2022, *CLEAR: Paschen-β Star Formation Rates and Dust Attenuation of Low Redshift Galaxies*, ApJ, 929, 3
1. **Cleri, N. J.**, Dunne, G. V., 2020, *Resurgent trans-series for generalized Hastings-McLeod solutions*, Journal of Physics A: Mathematical General, 53, 355203

Significant Author

5. Backhaus, B.E., **Cleri, N.J.**, et al. 2025, *Emission-Line Diagnostics at z>4: [OIII]λ4363/Hγ*, arXiv e-prints, arXiv:2502.03519
4. Larson, R.L., Finkelstein, S.L., Kocevski, D.D., Hutchison, T.A., Trump, J.R., Arrabal Haro, P., Bromm, V., **Cleri, N.J.**, et al. 2023, *A CEERS Discovery of an Accreting Supermassive Black Hole 570 Myr after the Big Bang: Identifying a Progenitor of Massive z > 6 Quasars*, ApJL, 953, L29
3. Backhaus, B.E., Bridge J.S., Trump, J.R., **Cleri, N.J.**, et al. 2023, *CLEAR: Detecting Low-Luminosity Active Galactic Nuclei at* $0.6 < z < 1.3$ *via Spatially Resolved Hubble Space Telescope Grism Emission Line Ratios*, ApJ, 943, 37
2. Prescott, M.K.M., Finlator, K.M., **Cleri, N.J.**, et al. 2022, *Using Multiple Emission Line Ratios to Constrain the Slope of the Dust Attenuation Law*, ApJ, 928, 71
1. Backhaus, B.E., Trump, J.R., **Cleri, N.J.**, et al. 2022, *CLEAR: Emission Line Ratios at Cosmic High Noon*, ApJ, 926, 161

Co-Author: Published

52. Finkelstein, S.L., et al. 2025, *The Cosmic Evolution Early Release Science Survey (CEERS)*, ApJL, 983, L4
51. Cooper, O.R., et al. 2024, *RUBIES: JWST/NIRSpec resolves evolutionary phases of dusty star-forming galaxies at* $z \sim 2$, ApJ, 982, 125
50. de Graaff, A., et al. 2024, *Efficient formation of a massive quiescent galaxy at redshift 4.9*, Nature Astronomy 9, 280
49. Shen, L., et al. 2024, *NGDEEP: The Star Formation and Ionization Properties of Galaxies at* $1.7 < z < 3.4$, ApJL, 980, L45
48. Cole, J.W., et al. 2025, *CEERS: Increasing Scatter along the Star-forming Main Sequence Indicates Early Galaxies Form in Bursts*, ApJ, 979, 193
47. Zavala, J., et al. 2024, *A luminous and young galaxy at z = 12.33 revealed by a JWST/MIRI detection of Hα and [O III]*, Nature Astronomy, 9, 155
46. Cheng, Y., et al. 2024, *Unveiling the Dark Side of UV/Optical Bright Galaxies: Optically Thick Dust Absorption*, ApJ, 979, 71
45. Bisigello, L., et al. 2024, *Spectroscopic confirmation of a dust-obscured, metal-rich dwarf galaxy at z$\sim$5*, A&A, 693, L18

44. Rose, C., et al. 2024, *CEERS Key Paper. IX. Identifying Galaxy Mergers in CEERS NIRCam Images Using Random Forests and Convolutional Neural Networks*, ApJL, 976, L8

43. Llerena, M., et al. 2024, *Physical properties of extreme emission-line galaxies at $z \sim 4-9$ from the JWST CEERS survey*, A&A, 691, A59

42. Gupta, A.R., et al. 2024, *Emission-Line Ratios and Ionization Conditions of CEERS Star-Forming Galaxies with JWST/NIRSpec*, Research Notes of the American Astronomical Society, 8, 266

41. Calabró, A., et al. 2024, *The evolution of the star formation rate and Σ_{SFR} of galaxies in cosmic morning ($4 < z < 10$)*, A&A, 690, A290

40. Davis, K., et al. 2024, *A Census from JWST of Extreme Emission-line Galaxies Spanning the Epoch of Reionization in CEERS*, ApJ, 974, 42

39. Chworowsky, K., et al. 2024, *Evidence for a Shallow Evolution in the Volume Densities of Massive Galaxies at $z = 4$ to 8 from CEERS*, AJ, 168, 113

38. Seillé, L.-M., et al. 2024, *Physical properties of strong 1 < z < 3 Balmer and Paschen lines emitters observed with JWST*, A&A, 689, A102

37. Hu, W., et al. 2024, *Characterizing the Average Interstellar Medium Conditions of Galaxies at $z \sim$ 5.6-9 with UV and Optical Nebular Lines*, ApJ, 971, 21

36. Napolitano, L., et al. 2024, *'Peering into cosmic reionization: the Lyα visibility evolution from galaxies at z = 4.5-8.5 with JWST*, A&A, 688, A106

35. Ronayne, K., et al. 2024, *CEERS: 7.7 μm PAH Star Formation Rate Calibration with JWST MIRI*, ApJ, 970, 61

34. Wang, B., et al. 2024, *RUBIES: Evolved Stellar Populations with Extended Formation Histories at $z \sim 7-8$ in Candidate Massive Galaxies Identified with JWST/NIRSpec*, ApJL, 969, L13

33. Finkelstein, S.L., et al. 2024, *The Complete CEERS Early Universe Galaxy Sample: A Surprisingly Slow Evolution of the Space Density of Bright Galaxies at $z \sim 8.5-14.5$*, ApJL, 969, L2

32. Pirzkal, K., et al. 2024, *The Next Generation Deep Extragalactic Exploratory Public Near-Infrared Slitless Survey Epoch 1 (NGDEEP-NISS1): Extra-Galactic Star-formation and Active Galactic Nuclei at 0.5 < z < 3.6*, ApJ, 969, 90

31. Jung, I., et al. 2024, *CEERS: Diversity of Lyman-Alpha Emitters during the Epoch of Reionization*, ApJ, 967, 73

30. Mascia, S. et al. 2024 *New insight on the nature of cosmic reionizers from the CEERS survey* A&A, 685, A3

29. Morales, A.M., et al. 2024, *Rest-Frame UV Colors for Faint Galaxies at $z \sim 9-16$ with the JWST NGDEEP Survey*, ApJL, 964, L24

28. Cheng, Y., et al. 2024, *Exploring the Gas-Phase Metallicity Gradients of Star-forming Galaxies at Cosmic Noon*, ApJ, 964, 94

27. Shen, L., et al. 2024, *NGDEEP Epoch 1: Spatially Resolved Hα Observations of Disk and Bulge Growth in Star-Forming Galaxies at $z \sim$ 0.6-2.2 from JWST NIRISS Slitless Spectroscopy*, ApJL, 963, L49

26. Barro, G., et al. 2023, *Extremely Red Galaxies at z = 5–9 with MIRI and NIRSpec: Dusty Galaxies or Obscured Active Galactic Nuclei?*, ApJ, 963, 128

25. Backhaus, B.E., et al. 2023, *CEERS Key Paper. VIII. Emission-line Ratios from NIRSpec and NIRCam Wide-Field Slitless Spectroscopy at z > 2*, ApJ, 962, 195

24. Kirkpatrick, A., et al. 2023, *CEERS Key Paper VII: JWST/MIRI Reveals a Faint Population of Galaxies at Cosmic Noon Unseen by Spitzer*, ApJL, 959, L7

23. Calabró, A, et al. 2023, *Near-infrared emission line diagnostics for AGN from the local Universe to redshift 3*, A&A, 679, A80

22. Fujimoto, S., et al. 2023, *ALMA FIR View of Ultra High-redshift Galaxy Candidates at $z \sim$ 11-17: Blue Monsters or Low-z Red Interlopers?*, ApJ, 955, 130

21. Kocevski, D.D., et al. 2023, *Hidden Little Monsters: Spectroscopic Identification of Low-Mass, Broad-Line AGN at $z > 5$ with CEERS*, ApJL, 954, L4

20. Arrabal Haro, P., et al. 2023, *Spectroscopic confirmation of CEERS NIRCam-selected galaxies at $z \simeq 8 - 10$*, ApJL, 951, L22

19. Estrada-Carpenter, V., et al. 2023, *CLEAR: The Morphological Evolution of Galaxies in the Green Valley*, ApJ, 951, 115

18. Yang, G., et al. 2023, *CEERS Key Paper VI: JWST/MIRI Uncovers a Large Population of Obscured AGN at High Redshifts*, ApJL, 950, L5

17. Papovich, C., et al. 2023, *CEERS Key Paper IV: Galaxies at $4 < z < 9$ are Bluer than They Appear – Characterizing Galaxy Stellar Populations from Rest-Frame ~ 1 micron Imaging*, ApJL, 949, L18

16. Simons, R.C., et al. 2023, *CLEAR: Survey Overview, Data Analysis and Products*, ApJS, 266, 13

15. Constantin, L. et al. 2023, *Expectations of the size evolution of massive galaxies at $3 \leq z \leq 6$ from the TNG50 simulation: the CEERS/JWST view*, ApJ, 946, 71

14. Perez-Gonzalez, P.G.. et al. 2022, *CEERS Key Paper V: A triality on the nature of HST-dark galaxies*, ApJL, 946, L16

13. Kocevski, D.D., et al. 2023, *CEERS Key Paper II: The Resolved Host Properties of AGN at 3 < z < 5 with JWST*, ApJL, 946, L14

12. Finkelstein, S.L.. et al. 2023, *CEERS Key Paper I: An Early Look into the First 500 Myr of Galaxy Formation with JWST*, ApJL, 946, L13

11. Guo, Y. et al. 2023, *First Look at z > 1 Bars in the Rest-Frame Near-Infrared with JWST Early CEERS Imaging*, ApJL, 945, L10

10. Trump, J.R. et al. 2023, *The Physical Conditions of Emission-Line Galaxies at Cosmic Dawn from JWST/NIRSpec Spectroscopy in the SMACS 0723 Early Release Observations*, ApJ, 945, 35

9. García-Argumánez, A. et al. 2023, *Probing the earliest phases in the formation of massive galaxies with simulated HST+JWST imaging data from Illustris*, ApJ, 944, 3

8. Zavala, J. et al. 2023, *Dusty starbursts masquerading as ultra high redshift galaxies in JWST observations*, ApJL, 943, L9

7. Rose, C. et al. 2023, *Identifying Galaxy Mergers in Simulated CEERS NIRCam Images using Random Forests*, ApJ, 942, 54

6. Finkelstein, S.L. et al. 2022, *A Long Time Ago in a Galaxy Far, Far Away: A Candidate $z \sim$ 14 Galaxy in Early JWST CEERS Imaging*, ApJL, 940, L55

5. Papovich, C. et al. 2022, *CLEAR: The Ionization and Chemical-Enrichment Properties of Galaxies at $1.1 < z < 2.3$* ApJ, 937, 22

4. Matharu, J. et al. 2022, *CLEAR: The Evolution of Spatially Resolved Star Formation in Galaxies between $0.5 \leq z \leq 1.7$ using Hα Emission Line Maps*, ApJ, 937, 16

3. Jung, I. et al. 2022, *CLEAR: Boosted Lyα Transmission of the Intergalactic Medium in UV bright Galaxies*, ApJ, 933, 87

2. Simons, R. C. et al. 2021, *CLEAR: The Gas-Phase Metallicity Gradients of Star-Forming Galaxies at $0.6 < z < 2.6$*, ApJ, 923, 203

1. Estrada-Carpenter, V. et al. 2020, *CLEAR II: Evidence for Early Formation of the Most Compact Quiescent Galaxies at High Redshift*, ApJ, 880, 2

Co-Author: Submitted

15. Burgarella, D., et al. 2025, *CEERS: Forging the First Dust Grains in the Universe? A Population of Galaxies with spectroscopically-derived Extremely Low Dust Attenuation (GELDA) at 4.0<z<11.4*, arXiv e-prints, arXiv:2504.12504.13118

14. Kokorev, V., et al. 2025, *CAPERS Observations of Two UV-Bright Galaxies at z>10. More Evidence for Bursting Star Formation in the Early Universe*, arXiv e-prints, arXiv:2504.12504

13. Setton, D.J., et al. 2025, *A confirmed deficit of hot and cold dust emission in the most luminous Little Red Dots*, arXiv e-prints, arXiv:2503.02059

12. Mascia, S., et al. 2025, *Little impact of mergers and galaxy morphology on the production and escape of ionizing photons in the early Universe*, arXiv e-prints, arXiv:2501.08268

11. Leung, G.C.K., et al. 2024, *Exploring the Nature of Little Red Dots: Constraints on AGN and Stellar Contributions from PRIMER MIRI Imaging*, arXiv e-prints, arXiv:2411.12005

10. Setton, D.J., et al. 2024, *Little Red Dots at an Inflection Point: Ubiquitous “V-Shaped” Turnover Consistently Occurs at the Balmer Limit*, arXiv e-prints, arXiv:2411.03424

9. Brooks, M., et al. 2024, *Here There Be (Dusty) Monsters: High Redshift AGN are Dustier Than Their Hosts*, arXiv e-prints, arXiv:2410.07340

8. Brooks, M., et al. 2024, *Here There Be (Dusty) Monsters: High Redshift AGN are Dustier Than Their Hosts*, arXiv e-prints, arXiv:2410.07340

7. Taylor, A.J., et al. 2024, *Broad-Line AGN at $3.5 < z < 6$: The Black Hole Mass Function and a Connection with Little Red Dots*, arXiv e-prints, arXiv:2409.06772

6. de Graaff, A., et al. 2024, *RUBIES: a complete census of the bright and red distant Universe with JWST/NIRSpec*, arXiv e-prints, arXiv:2409.05948

5. Weibel, A., et al. 2024, *RUBIES Reveals a Massive Quiescent Galaxy at z=7.3*, arXiv e-prints, arXiv:2409.03829

4. Katz, H., et al. 2024, *21 Balmer Jump Street: The Nebular Continuum at High Redshift and Implications for the Bright Galaxy Problem, UV Continuum Slopes, and Early Stellar Populations*, arXiv e-prints, arXiv:2408.03189

3. Kocevski, D.D., et al. 2024, *The Rise of Faint, Red AGN at $z > 4$: A Sample of Little Red Dots in the JWST Extragalactic Legacy Fields*, arXiv e-prints, arXiv:2404.03576

2. Wang, B., et al. 2024a, *RUBIES: JWST/NIRSpec Confirmation of an Infrared-luminous, Broad-line Little Red Dot with an Ionized Outflow*, arXiv e-prints, arXiv:2403.02304

1. Jung, I, et al. 2022, *New $z > 7$ Lyman-alpha Emitters in EGS: Evidence of an Extended Ionized Structure at* $z \sim 7.7$, arXiv e-prints, arXiv:2212.09850

Presentations

Research Presentations

18. Talk: *High-Redshift Diagnostics of Star Formation and Active Galactic Nuclei*, The Pennsylvania State University, State College, Pennsylvania, USA — 10 February 2025
17. Talk: *High-Redshift Diagnostics of Star Formation and Active Galactic Nuclei*, The Pennsylvania State University, State College, Pennsylvania, USA — 17 September 2024
16. Talk: *High-Redshift Diagnostics of Ionizing Sources*, University of Wisconsin, Madison, Wisconsin, USA — 17 July 2024
15. Discussion Chair: *Active Galactic Nuclei and Little Red Dots*, San Lorenzo de El Escorial, Spain — 13 May 2024
14. Talk: *Diagnostics of Ionizing Sources at High-z using Models and Observations*, San Lorenzo de El Escorial, Spain — 13 May 2024
13. Talk: *Diagnostics of AGN, Black Hole Seeds, and Population III Stars with JWST* at the AAS 243rd Meeting, New Orleans, Louisiana, USA — 10 January 2024
12. Poster: *Emission Line Ratio Diagnostics of AGN, Black Hole Seeds and Population III Stars with JWST* at the First Year of JWST Science Conference, Space Telescope Science Institute, Baltimore, Maryland, USA — 11 September 2023
11. Talk: *Diagnostics of Exotic Ionizing Sources with JWST* at Texas A&M Astrosymposium, College Station, Texas, USA — 17 August 2023
10. Talk: *Diagnostics of Exotic Ionizing Sources Across Cosmic Time - High-Ionization Emission-Line Ratios: Ne53* at University of Texas, Austin, Texas, USA — 10 May 2023
9. Poster: *High-Ionization [Ne V] Emission-Line Galaxies at Cosmic Noon and the Epoch of Reionization* at AAS 241st Meeting, Seattle, Washington, USA — 12 January 2023
8. Talk: *Using [Ne V] to Constrain the Sources of Highly-Energetic Photoionization Across Cosmic Time: Exploring the "Mystery of Neon" with HST and JWST* at Texas A&M University, College Station, Texas, USA — 2 December 2022
7. Talk: *Extreme High-Ionization Emission-Line Galaxies at Cosmic Noon and the Epoch of Reionization: Exploring the "Mystery of Neon" with HST and JWST* at Texas A&M University, College Station, Texas, USA — 18 August 2022
6. Talk: *The Evolution of Spectroscopy from HST to JWST: Implications for the Epoch of Reionization* at Texas A&M University, College Station, Texas, USA — 22 July 2022
5. Poster: *HST Grism Observations of Paschen-Line Star-Formation and Dust Attenuation: A Precursor to the JWST Era* at AAS 240th Meeting, Pasadena, California, USA — 14 June 2022
4. Talk: *Paschen-β Star Formation Rates and Dust Attenuation with HST and JWST* at Texas A&M Astrosymposium, College Station, Texas, USA — 27 August 2021
3. Poster: *CLEAR: Paschen-β Star Formation Rates and Dust Attenuation in Low Redshift Galaxies* at AAS 237th Meeting, Virtual — 13 January 2021
2. Poster: *Modeling ^{8}B Solar Neutrino Detection with CEνNS* at AAS 233rd Meeting, Seattle, Washington, USA — 9 January 2019
1. Poster: *Modeling ^{8}B Solar Neutrino Detection with CEνNS* at TAMU Undergraduate Research Poster Session, College Station, Texas, USA — 1 August 2018

Outreach Presentations

4. Talk: *Astronomy and You: The Impacts of Astronomy on Everyday Life* at Astronomy on Tap State College, State College, Pennsylvania, USA — 20 March 2025
3. Talk: *The Evolving Universe Through JWST's Eyes* at the Pennsylvania State University, State College, Pennsylvania — 1 February 2025
2. Talk: *The Origin of the Elements: Chemistry Across Cosmic Time* at Astronomy on Tap State College, State College, Pennsylvania, USA — 19 September 2024
1. Talk: *Beyond the Telescope: Unraveling Mysteries with AI in Astronomy* at Astronomy on Tap B/CS, Bryan, Texas, USA — 24 April 2024

Professional Development Presentations

9. Panel: *Applying to Postdocs* at The Pennsylvania State University, State College, Pennsylvania, USA — 24 March 2025
8. Panel: *GLASS Postdoc Panel* at Texas A&M University, College Station, Texas, USA — 8 March 2024
7. Talk: *How to Be A Referee* at Texas A&M University, College Station, Texas, USA — 10 November 2023
6. Panel: *How to Get Into Grad School* at Texas A&M University, College Station, Texas, USA — 28 July 2023
5. Talk: *Data Visualization in Astronomy: More Important than the Science Itself?* at Texas A&M University, College Station, Texas, USA — 11 November 2022
4. Panel: *How to Get Into Grad School* at Texas A&M University, College Station, Texas, USA — 29 July 2022
3. *Data Visualization in Astronomy: More Important than the Science Itself?* at Texas A&M University, College Station, Texas, USA — 2 June 2022
2. Workshop: *Matplotlib: The Champion of Plotting in Python* at Texas A&M University, College Station, Texas, USA — 2 June 2022
1. Workshop: *pandas: Your Best Friend for Data Analysis in Python* at Texas A&M University, College Station, Texas, USA — 1 June 2022

References

Postdoctoral Mentor **Prof. Joel Leja** Penn State

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PhD Advisor **Prof. Casey J. Papovich** Texas A&M

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M.S. Advisor **Prof. Jonathan R. Trump** UConn

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PhD Mentor **Prof. Robert C. Kennicutt** Texas A&M

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