

Joel Leja

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The Pennsylvania State University
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<https://jrleja.github.io/>

RESEARCH INTERESTS

galaxy formation and evolution, stellar populations, statistics and machine learning

EDUCATION

Yale University	New Haven, CT
Ph.D in Astronomy	2016
Thesis: <i>Tracing Galaxies Through Cosmic Time</i>	
Advisor: Prof. Pieter van Dokkum	
MS in Astronomy	2012
University of California, Berkeley	
BA in Physics and Astrophysics (honors)	2010

PROFESSIONAL POSITIONS

Assistant Professor of Astronomy & Astrophysics	2020–present
<i>The Pennsylvania State University</i>	
<i>Co-hire of the Institute for Computational & Data Sciences</i>	
NSF Astronomy & Astrophysics Postdoctoral Fellow	2017–20
<i>CfA Harvard & Smithsonian</i>	
Postdoctoral Fellow	2016-17
<i>CfA Harvard & Smithsonian</i>	
<i>Mentor: Professor Charlie Conroy</i>	
Graduate Student Researcher	2010-16
<i>Yale University</i>	
<i>Advisor: Professor Pieter van Dokkum</i>	

FUNDED GRANTS

JWST GO Cycle 2 (\$102k) (CoI)	2022–2025
<i>Medium Bands, Mega Science: Resolved Photometry of Abell 2744</i>	
JWST GO Cycle 2 (\$279k) (CoI)	2022–2025
<i>RUBIES: A complete census of the rare, extreme and red</i>	
Penn State Institute for Computational & Data Sciences Seed Grant (\$29k) (PI)	2022–2023
<i>A Computational Moonshot for Modern Galaxy Surveys</i>	
JWST GO Cycle 1 (\$221k) (CoI)	2022–2025
<i>UNCOVER: Ultra-deep NIRC<i>am</i> and NIRS<i>pec</i> Observations Before the Epoch of Reionization</i>	
JWST GO Cycle 1 (\$95k) (CoI)	2022–2025
<i>The Stellar and Gas Content of Galaxies at Cosmic Noon</i>	
JWST Archival (\$239k) (PI)	2022–2025
<i>Preventing the Slit-Loss Catastrophe Using Flexible, Spatially Resolved Galaxy Models</i>	
HST Archival (\$133k) (CoI)	2020–2023
<i>Pirate: Walking the Plank to Spatially Resolved Stellar Populations in CANDELS</i>	

Harvard Supercomputing Grant (1.5M CPU Hours) (PI) <i>Observational Galaxy Evolution with Odyssey</i>	2017
NSF Astronomy & Astrophysics Fellowship (\$300k) (PI) <i>Bringing Galaxy Evolution into Focus by Pushing SED Models to the Limit</i>	2017–2020

HONORS AND AWARDS

Brouwer Prize, Yale University <i>awarded to a student for a contribution of unusual merit to astronomy during their PhD thesis.</i>	2019
Physics & Astrophysics Commencement Speaker, UC Berkeley	2010
Departmental Citation in Astrophysics, UC Berkeley <i>outstanding scholarship by a graduating senior in Astrophysics</i>	2010
Regents and Chancellors Scholar, UC Berkeley <i>most prestigious UC Berkeley scholarship awarded to undergraduates</i>	2006
Robert C. Byrd Scholar <i>federally funded merit-based scholarship for exceptional high-school seniors</i>	2006

MENTORING & OUTREACH

NASA / Webb Community Subject Matter Expert <i>Presentations and Q&A sessions at STEM community events in central PA about JWST.</i>	2021–
Coordinator of the Flipped Science Fair <i>Coordinated, directed, and planned events wherein professional astronomers present their research to panels of middle school judges, reaching ~150 students per session</i>	2018–2020
Guest Scientist at URJ 6 Points Sci-Tech Academy <i>Shared my research with middle-schoolers through presentations and in-classroom, interactive Q&A sessions</i>	2017

I have served as the research advisor for the following grads & post-grads:

Emilie Burnham , Penn State graduate student	2023–
Kanishk Pandey , Penn State graduate student	2023–
Bingjie Wang , Penn State postdoctoral researcher	2022–
Gautam Nagaraj , Penn State graduate student	2021–2023
Will Bowman , Penn State graduate student (now postdoc at Yale)	2021–2022
Elijah Mathews , Penn State graduate student	2020–
Yijia Li , Penn State graduate student	2020–
Imad Pasha , Yale University graduate student	2019–2020
Jonathan Cohn , graduate student at Texas A&M	2017–2018

and the following undergraduate students:

Nathan Cristello , Penn State undergraduate	2023–
Junyu Zhang , Penn State undergraduate, published in ApJ	2021–
Liam Schwartz , Penn State undergraduate	2021
Leah Zuckerman , Brown undergraduate, published in ApJ	2020–2021
Yuxin Dong , Brown undergraduate, published in ApJ	2019–2021
Evan Haze Nunez , Smithsonian Astrophysical Observatory REU, poster at the AAS	2018
Michael Bueno , Banneker Institute undergraduate research, poster at the AAS	2017
Christopher Bradshaw , Yale undergraduate thesis	2014–2015

HIGH PERFORMANCE COMPUTING EXPERIENCE

Extensive experience in high-performance computing (> 20 million CPU hours) in a variety of cluster environ-

ments: The Roar Supercomputer (PSU), the Odyssey Cluster (CfA), and LSU/SuperMIC + TACC Stampede (XSEDE).

OBSERVING EXPERIENCE

Palomar/TripleSpec (5m): 6 nights	2018
Keck/MOSFIRE (10m): 5 nights	2013
WIYN/HYDRA (4m): 2 nights	2011
Nickel/Photometry (1m): ~20 nights	2009–2010

SELECTED SCIENCE TALKS

Astronomers Speak Statistics, Joint Statistical Meeting – Toronto (invited)	2023
Galaxy Transformation Across Time & Space – Australian National University (invited review)	2023
Astronomy Colloquium – UC Davis	2023
Astronomy Colloquium – University of Washington	2023
Astronomy & Astrophysics Colloquium – UC Berkeley	2023
Astronomy Colloquium – Yale University	2023
Astronomy Colloquium – Penn State University	2022
Review talk on Galaxy Star Formation Histories – JWST Pan-SED fitting forum (invited)	2022
The LEGA-C Spectroscopic Galaxy Survey Meeting – University of Ghent	2022
Astronomy Colloquium – University of Pittsburgh	2022
Astronomy Colloquium – Tufts University	2022
Astronomy Colloquium – UMass Amherst	2022
Galread – Princeton University	2021
Astrophysics Seminar — Purdue University	2019
ITC Luncheon — Harvard-Smithsonian CfA	2019
GOGREEN Spectral Survey Workshop — York University (invited)	2019
Uncovering galaxy evolution in the ALMA and JWST era – IAU Symposium 352 (contributed)	2019
Lunch Talk — Leiden University	2019
LEGA-C Spectral Survey Workshop — Ghent University (invited)	2019
Challenges in Panchromatic Galaxy Modeling – IAU Symposium 314 (contributed)	2018
The Art of Measuring Physical Parameters in Galaxies – CANDELS Collaboration (invited)	2018
NSF AAPF Symposium — 231st AAS Meeting	2018
Astronomy Seminar — University of Connecticut	2017
Plumbing Star Formation Rates in the Age of JWST — Texas A&M (invited)	2017
Advances in Galaxy Evolution — Ringberg Castle (invited)	2017
Astronomy Seminar — Tufts University	2017
Lunch Talk — Carnegie Observatories	2016
Astronomy Tea Talk — Caltech	2016
Astrophysics Brown Bag Lunch — MIT Kavli Institute	2016
Galaxies and Cosmology seminar — Harvard-Smithsonian CfA	2016
Linking Observations & Theory with New-Generation Spectral Models — IAP Paris (contributed)	2016
3D-HST Physics, Evolution, Census Conference — Yale (invited)	2015
A Fitting Conference — Harvard (invited)	2015

TEACHING EXPERIENCE

Assistant Professor, Penn State University	2020–
ASTR 502: Radiative Processes in Astrophysics	

ASTR 504: Extragalactic Astronomy	
ASTR 589: Seminar in Current Astronomical Research	
Astroinformatics Summer School: Bayesian Hierarchical Modeling	
Teaching Fellow, Yale University	2010–2016
ASTR 110: Planets and Stars	
ASTR 160: Frontiers and Controversies in Astrophysics (3x)	
ASTR 210: Stars and Their Evolution	
Residential College Mathematics & Science Tutor, Yale University	2011
<i>Drop-in physics tutoring for Yale undergraduates (~5 hours / week)</i>	
Graduate Student Instructor, UC Berkeley	2010
ASTRO W12: The Planets	
Physics Tutor and Student Lecturer (UC Berkeley)	2008–2010
<i>Weekly lectures on topics in introductory physics, drop-in tutoring (~6 hours/week)</i>	
<i>Course coordinator; trained other physics tutors</i>	

PROFESSIONAL EXPERIENCE

Referee for <i>The Astrophysical Journal</i> , <i>The Astrophysical Journal Letters</i> , <i>Monthly Notices of the Royal Astronomical Society</i> , <i>Monthly Notices of the Royal Astronomical Society Letters</i> , <i>Astronomy & Astrophysics</i> , <i>Astronomy & Computing</i>	
Committees: Graduate Program Committee (2x), Qualifying Exam Committee (3x), Admissions Committee (1x), Eberly Prize Postdoctoral Committee (2x), Institute for Computational & Data Sciences Coordinating Committee (1x), IGC fellowship selection committee (1x)	
JWST Cycle 3 Expert Reviewer	2023
Reviewer for NASA Astrophysical Data Analysis grants	2023
HST Large/Treasury TAC	2023
PSU Center for Astrostatistics Lunch Talk Organizer	2023
STFC Astronomy Grants Panel reviewer (UK)	2022
PFS Survey: Working Group Lead, Low-Redshift Continuum Galaxy Evolution Science	2022–
Science Organizing Committee for ‘Statistical Challenges in Modern Astronomy VIII	2021–2023
Member of the Institute for Gravitation & the Cosmos at PSU	2020–
Reviewer for Polish National Science Centre	2020
FINESST (Future Investigators in NASA Earth and Space Science and Technology) reviewer	2019-2020
Referee for HST Mid-Cycle Proposals	2018–2019
Webmaster for the NSF AAPF	2018–2020
Galaxy Lunch Board at Yale	2015–2016
Panel Member for Yale Telescope Time Allocation Committee	2014

PRESS

Featured in NHK’s ‘Cosmic Front’ July 2023 Documentary on JWST	2023
ICDS Feature Story, “Machine learning takes starring role in exploring the universe”	2023
NASA/Nature/PSU Release, “Massive early galaxies defy prior understanding of the universe”	2023
<i>NPR, the Guardian, the Atlantic, CNN, BBC Radio, New Zealand Radio, multiple TV interviews</i>	
NASA/STScI/PSU Release, “JWST uncovers new details in Pandora’s Cluster”	2023
NASA/STScI/PSU Release, “Bright light from early universe ‘opens new chapter in astronomy”	2022
Keck/Northwestern/PSU Press Release, “Tracing the origins of rare, cosmic explosions”	2022
STScI/ALMA/PSU Press Release, “Early, massive galaxies running on empty”	2021
Yale GSAS Profile, “Tracing the History of the Universe”	2014

STScI Press Release, “Hubble Reveals First Scrapbook Pictures of Milky Way’s Formative Years” 2013
Yale Press Release, “Watching the Milky Way Grow Up” 2013

PUBLICATIONS

I am an author of 120 publications in total including 19 still undergoing review, of which 10 are first author works and another 27 are second/third author. As of Aug 2023, these works have 8,809 citations with an h-index of 43. A curated online list is available [HERE](#). In the list below, my name is **bolded** and authors under my direct supervision are underlined.

First Author

1. *A New Census of the $0.2 < z < 3.0$ Universe, Part II: The Star-Forming Sequence*
Leja, Joel et al., 2022, ApJ, 936, 165L
2. *A New Census of the $0.2 < z < 3.0$ Universe, Part I: The Stellar Mass Function*
Leja, Joel et al., 2020, ApJ, 893, 111L
3. *Beyond UVJ: More Efficient Selection of Quiescent Galaxies with Ultraviolet/Mid-infrared Fluxes*
Leja, Joel et al., 2019, ApJ, 880L, 9L
4. *An Older, More Quiescent Universe from Panchromatic SED Fitting of the 3D-HST Survey*
Leja, Joel et al., 2019, ApJ, 877, 140L
5. *How to measure galaxy star formation histories II: Nonparametric models*
Leja, Joel et al., 2019, ApJ, 876, 3L
6. *Hot dust in Panchromatic SED Fitting: Identification of AGN and improved galaxy properties*
Leja, Joel et al., 2018, ApJ, 854, 62L
7. *Deriving Physical Properties from Broadband Photometry with Prospector: Description of the Model and a Demonstration of its Accuracy Using 129 Galaxies in the Local Universe*
Leja, Joel et al., 2017, ApJ, 837, 170L
8. *Reconciling the Observed Star-forming Sequence with the Observed Stellar Mass Function*
Leja, Joel et al., 2015, ApJL, 798, 115L
9. *Exploring the Chemical Link between Local Ellipticals and Their High-redshift Progenitors*
Leja, Joel et al., 2013, ApJL, 778L, 24L
10. *Tracing Galaxies Through Cosmic Time with Number Density Selection*
Leja, Joel et al., 2013, ApJ, 766, 33L

Second/Third Author

11. *SBI++: Flexible, Ultra-fast Likelihood-free Inference Customized for Astronomical Applications*
Wang, Bingjie; **Leja, Joel** et al., 2023, ApJ, 952L, 10W
12. *As Simple as Possible but No Simpler: Optimizing the Performance of Neural Net Emulators for Galaxy SED Fitting*
Mathews, Elijah; **Leja, Joel** et al., 2023, ApJ accepted, in press
13. *Inferring More from Less: Prospector as a Photometric Redshift Engine in the Era of JWST*
Wang, Bingjie; **Leja, Joel** et al., 2023, ApJ, 944L, 58W

14. *REQUIEM-2D: A diversity of formation pathways in a sample of spatially-resolved massive quiescent galaxies at $z \sim 2$*
Akhshik, Mohammad; Whitaker, Katherine E.; **Leja, Joel** et al., 2023, ApJ, 943, 179A
15. *Beyond UVJ: Color Selection of Galaxies in the JWST Era*
Antwi-Danso, Jacqueline; Papovich, Casey; **Leja, Joel**, 2023ApJ, 943, 166A
16. *A simple spectroscopic technique to identify rejuvenating galaxies*
Zhang, Junyu; Li, Yijia; **Leja, Joel** et al., 2022, accepted to ApJ, in press
17. *Monte Carlo Techniques for Addressing Large Errors and Missing Data in Simulation-based Inference*
Wang, Bingjie; **Leja, Joel** et al., 2022, NeurIPS, arXiv:2211.03747
18. *Flexible Models for Galaxy Star Formation Histories Both Shift and Scramble the Optical Color-M/L Relationship*
Li, Yijia; **Leja, Joel**, 2022, ApJ, 940, 88L
19. *A Bayesian Population Model for the Observed Dust Attenuation in Galaxies*
Nagaraj, Gautam; Forbes, John C.; **Leja, Joel** et al., 2022, ApJ, 932, 54N
20. *How Well Can We Measure Galaxy Dust Attenuation Curves? The Impact of the Assumed Star-dust Geometry Model in Spectral Energy Distribution Fitting*
Lower, Sidney; Narayanan, Desika; **Leja, Joel** et al., 2022, ApJ, 931, 14L
21. *Empirical Dust Attenuation Model Leads to More Realistic UVJ Diagram for TNG100 Galaxies*
Nagaraj, Gautam; Forbes, John C.; **Leja, Joel** et al., 2022, ApJ, 939, 29N
22. *Physical Properties of the Host Galaxies of Ca-rich Transients*
Dong, Yuxin; Milisavljevic, Dan; **Leja, Joel** et al., 2022, ApJ, 927, 199D
23. *Recovering the star formation histories of recently-quenched galaxies: the impact of model and prior choices*
Suess, Katherine A.; **Leja, Joel** et al., 2022, ApJ, 935, 146S
24. *Reproducing the UVJ Color Distribution of Star-forming Galaxies at $0.5 < z < 2.5$ with a Geometric Model of Dust Attenuation*
Zuckerman, Leah; Belli, Sirio; **Leja, Joel**; Tacchella, Sandro, 2021, ApJ, 923, 18M
25. *Stellar Population Inference with Prospector*
Johnson, Benjamin D.; **Leja, Joel** et al., 2021, ApJS, 254, 22J
26. *Chronicling the Host Galaxy Properties of the Remarkable Repeating FRB 20201124A*
Fong, Wen-fai; Dong, Yuxin; **Leja, Joel**, et al., 2021, ApJ, 919L, 23F
27. *Recent Star Formation in a Massive Slowly Quenched Lensed Quiescent Galaxy at $z = 1.88$*
Akhshik, Mohammad; Whitaker, Katherine E.; **Leja, Joel** et al., 2021, ApJL, 907L, 8A
28. *The GOGREEN survey: post-infall environmental quenching fails to predict the observed age difference between quiescent field and cluster galaxies at $z > 1$*
Webb, Kristi; Balogh, Michael L.; **Leja, Joel** et al., 2020, MNRAS, 498, 5317W
29. *How Well Can We Measure the Stellar Mass of a Galaxy: The Impact of the Assumed Star Formation History Model in SED Fitting*
Lower, Sidney; Narayanan, Desika; **Leja, Joel** et al., 2020, ApJ, 904, 33L
30. *Brackett- γ as a Gold-standard Test of Star Formation Rates Derived from SED Fitting*
Pasha, Imad; **Leja, Joel** et al., 2020, ApJ, 898, 165P

31. *SPECULATOR: Emulating Stellar Population Synthesis for Fast and Accurate Galaxy Spectra and Photometry*
Alsing, Justin; Peiris, Hiranya; **Leja, Joel** et al., 2020, *ApJS*, 249, 5A
32. *Predicting fully self-consistent satellite richness, galaxy growth and star formation rates from the STastical sEmi-Empirical modeL STEEL*
Grylls, Philip J.; Shankar, F.; **Leja, J.** et al., *MNRAS*, 491, 634G
33. *How to measure galaxy star-formation histories I: Parametric models*
Carnall, A. C.; **Leja, J.** et al., 2019, *ApJ*, 873, 44C
34. *Measuring the Delay Time Distribution of Binary Neutron Stars. III. Using the Individual Star Formation Histories of Gravitational-wave Event Host Galaxies in the Local Universe*
Safarzadeh, Mohammadtaher; Berger, Edo; **Leja, Joel** et al, 2019, *ApJ*, 878L, 14S
35. *ZFOURGE: Extreme 5007 Emission May Be a Common Early-lifetime Phase for Star-forming Galaxies at $z > 2.5$*
Cohn, Jonathan H.; **Leja, Joel** et al., 2018, *ApJ*, 869, 141C
36. *Constraining the Low-mass Slope of the Star Formation Sequence at $0.5 < z < 2.5$*
Whitaker, Katherine E.; Franx, Marijn; **Leja, Joel**, et al., 2014, *ApJ*, 795, 104W
37. *The Assembly of Milky Way-like Galaxies Since $z \sim 2.5$*
van Dokkum, Pieter G.; **Leja, Joel** et al., 2013, *ApJ*, 771L, 35V

Co-Author

38. *JWST Observations of the Extraordinary GRB 221009A Reveal an Ordinary Supernova Without Signs of r-Process Enrichment in a Low-Metallicity Galaxy*
Blanchard, P. et al., including **Leja, Joel**, 2023, submitted to *Nature Astronomy*, arXiv:2308.14197
39. *UNCOVER: JWST Spectroscopy of Three Cold Brown Dwarfs at Kiloparsec-scale Distances*
Burgasser, A.J. et al., including **Leja, Joel**, 2023, submitted to *ApJ*, arXiv:2308.12107
40. *UNCOVER: A NIRSpec Identification of a Broad Line AGN at $z = 8.50$*
Kokorev, V. et al., including **Leja, Joel**, 2023, submitted to *ApJ*, arXiv:2308.11610
41. *UNCOVER: A NIRSpec Census of Lensed Galaxies at $z=8.50-13.08$ Probing a High AGN Fraction and Ionized Bubbles in the Shadow*
Fujimoto, S. et al., including **Leja, Joel**, 2023, submitted to *ApJ*, arXiv:2308.11609
42. *First spectroscopic observations of the galaxies that reionized the Universe*
Atek, H. et al., including **Leja, Joel**, 2023, submitted to *Nature*, arXiv:2308.08540
43. *Massive and Multiphase Gas Outflow in a Quenching Galaxy at $z=2.445$*
Belli, S. et al., including **Leja, Joel**, 2023, submitted to *Nature*, arXiv:2308.05795
44. *A supermassive black hole in the early universe growing in the shadows*
Furtak, L. et al., including **Leja, Joel**, 2023, submitted to *ApJ*, arXiv:2308.05735
45. *UNCOVER: Illuminating the Early Universe – JWST/NIRSpec Confirmation of $z > 12$ Galaxies*
Wang, B. et al., including **Leja, Joel**, 2023, submitted to *ApJ*, arXiv:2308.03745
46. *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, A. et al., including **Leja, Joel**, 2023, submitted to *ApJ*, arXiv:2308.02750

47. *An X-ray Census of Fast Radio Burst Host Galaxies: Constraints on AGN and X-ray Counterparts*
Eftekhari, T. et al., including **Leja, Joel**, 2023, submitted to ApJ, arXiv:2307.03766
48. *Mapping Obscured Star Formation in the Host Galaxy of FRB 20201124A*
Dong, Y. et al., including **Leja, Joel**, 2023, submitted to ApJ, arXiv:2307.06995
49. *A census of star formation histories of massive galaxies at $0.6 < z < 1$ from spectro-photometric modeling using Bagpipes and Prospector*
Kaushal, Yasha et al., including **Leja, Joel**, 2023, submitted to ApJ, arXiv:2307.03725
50. *Stellar Half-Mass Radii of $0.5 < z < 2.3$ Galaxies: Comparison with JWST/NIRCam Half-Light Radii*
van der Wel, Arjen et al., including **Leja, Joel**, 2023, submitted to ApJ, arXiv:2307.03264
51. *UNCOVER: Candidate Red Active Galactic Nuclei at $3 < z < 7$ with JWST and ALMA*
Labbe, Ivo et al., including **Leja, Joel**, 2023, submitted to ApJ, arXiv:2306.07320
52. *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*
Baggen, Josephine F. W. et al., including **Leja, Joel**, 2023, submitted to ApJ, arXiv:2305.17162
53. *JWST UNCOVER: Discovery of $z > 9$ Galaxy Candidates Behind the Lensing Cluster Abell 2744*
Atek, Hakim et al., including **Leja, Joel**, 2023, MNRAS, 524, 5486A
54. *The Demographics, Stellar Populations, and Star Formation Histories of Fast Radio Burst Host Galaxies: Implications for the Progenitors*
Gordon, Alexa C.; Fong, Wen-fai; Kilpatrick, Charles D.; Eftekhari, Tarraneh; **Leja, Joel** et al., 2023, MNRAS, 524, 5486A
55. *The UNCOVER Survey: A first-look HST+JWST catalog of 50,000 galaxies near Abell 2744 and beyond*
Weaver, John R. et al., including **Leja, Joel**, 2023, submitted to ApJS, arXiv:2301.02671
56. *JWST UNCOVER: A triply imaged extremely red and compact object at $z_{\text{phot}} \approx 7.7$*
Furtak, Lukas J. et al., including **Leja, Joel**, 2023, ApJ, 952, 142F
57. *UNCOVERing the extended strong lensing structures of Abell 2744 with the deepest JWST imaging*
Furtak, Lukas J. et al., including **Leja, Joel**, 2023, MNRAS, 523, 4568F
58. *The JWST UNCOVER Treasury survey: Ultradeep NIRSpec and NIRCam Observations before the Epoch of Reionization*
Bezanson, Rachel; Labbe, Ivo; Whitaker, Katherine E.; **Leja, Joel** et al., 2022, submitted to ApJ, arXiv:2212.04026
59. *The Art of Measuring Physical Parameters in Galaxies: A Critical Assessment of Spectral Energy Distribution Fitting Techniques*
Pacifici, Camilla et al., including **Leja, Joel**, 2023, ApJ, 944, 141P
60. *Rapid Quenching of Galaxies at Cosmic Noon*
Park, Minjung; Belli, Sirio; Conroy, Charlie; Tacchella, Sandro; **Leja, Joel** et al., 2023, ApJ, 953, 119P
61. *Molecular Gas Reservoirs in Massive Quiescent Galaxies at $z \sim 0.7$ Linked to Late Time Star Formation*
Woodrum, Charity; Williams, Christina C.; Rieke, Marcia; **Leja, Joel** et al., 2022, ApJ, 940, 39W
62. *Early JWST imaging reveals strong optical and NIR color gradients in galaxies at $z \sim 2$ driven mostly by dust*
Miller, Tim B. et al., including **Leja, Joel**, 2022, ApJ, 941L, 37M

63. *Stochastic Modeling of Star Formation Histories III. Constraints from Physically-Motivated Gaussian Processes*
Iyer, Kartheik G.; Speagle, Joshua S.; Caplar, Neven; Forbes, John C.; Gawiser, Eric; **Leja, Joel** et al., 2022, accepted to ApJ, arXiv:2208.05938
64. *Schrodinger’s Galaxy Candidate: Puzzlingly Luminous at $z \approx 17$, or Dusty/Quenched at $z \approx 5$?*
Naidu, Rohan et al., including **Leja, Joel**, 2022, submitted to ApJL, arXiv:2208.02794
65. *JWST reveals a population of ultra-red, flattened disk galaxies at $2 < z < 6$ previously missed by HST*
Nelson, Erica; Suess, Katherine; Bezanson, Rachel; Price, Sedona; van Dokkum, Pieter; **Leja, Joel** et al., 2023, ApJ, 948L, 18N
66. *A population of red candidate massive galaxies 600 Myr after the Big Bang*
Labbe, Ivo; van Dokkum, Pieter; Nelson, Erica; Bezanson, Rachel; Suess, Katherine; **Leja, Joel** et al., 2023, Nature, 616, 266L
67. *Rest-frame near-infrared sizes of galaxies at cosmic noon: objects in JWST’s mirror are smaller than they appeared*
Suess, Katherine A. et al., including **Leja, Joel**, 2022, ApJ, 937L, 33S
68. *Two Remarkably Luminous Galaxy Candidates at $z \approx 11 - 13$ Revealed by JWST*
Naidu, Rohan et al., including **Leja, Joel**, 2022, ApJ, 940L, 14N
69. *Hierarchical Bayesian inference of photometric redshifts with stellar population synthesis models*
Leistedt, Boris; Alsing, Justin; Peiris, Hiranya; Mortlock, Daniel; **Leja, Joel**, 2023, ApJS, 264, 23L
70. *Monochromatic globular clusters as a critical test of formation models for the dark matter deficient galaxies NGC1052-DF2 and NGC1052-DF4*
van Dokkum, Pieter et al., including **Leja, Joel**, 2022, ApJ, 940L, 9V
71. *Forward modeling of galaxy populations for cosmological redshift distribution inference*
Alsing, Justin; Peiris, Hiranya; Mortlock, Daniel; **Leja, Joel** et al., 2023, ApJS, 264, 29A
72. *Spectral Energy Distributions in Three Deep-Drilling Fields of the Vera C. Rubin Observatory Legacy Survey of Space and Time: Source Classification and Galaxy Properties*
Zou, Fan; Brandt, W. N.; Chen, Chien-Ting; **Leja, Joel** et al., 2022, ApJS, 262, 15Z
73. *Star formation histories of UV-luminous galaxies at $z \simeq 6.8$: implications for stellar mass assembly at early cosmic times*
Whitler, Lily; Stark, Daniel P.; Endsley, Ryan; **Leja, Joel** et al., 2023, MNRAS, 519, 5859W
74. *Short GRB Host Galaxies II: A Legacy Sample of Redshifts, Stellar Population Properties, and Implications for their Neutron Star Merger Origins*
Nugent, Anya E. ; Fong, Wen-fai ; Dong, Yuxin ; **Leja, Joel** et al., 2022, ApJ, 940, 57N
75. *The Lick Observatory Supernova Search follow-up program: photometry data release of 70 SESNe*
Zheng, WeiKang et al., including **Leja, Joel**, 2022, MNRAS, 512, 3195Z
76. *Fast, Slow, Early, Late: Quenching Massive Galaxies at $z \sim 0.8$*
Tacchella, Sandro; Conroy, Charlie; Faber, S. M.; Johnson, Benjamin D.; **Leja, Joel** et al., 2022, ApJ, 926, 134T
77. *SQuIGGLE: Studying Quenching in Intermediate- z Galaxies – Gas, Angular Momentum, and Evolution*
Suess, Katherine A. et al., including **Leja, Joel**, 2022, ApJ, 926, 89S
78. *Diagnosing DASH: A Catalog of Structural Properties for the COSMOS-DASH Survey*
Cutler, Sam E. et al., including **Leja, Joel**, 2022, ApJ, 925, 34C

79. *Hubble Space Telescope Observations of GW170817: Complete Light Curves and the Properties of the Galaxy Merger of NGC 4993*
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