Joel Leja

Assistant Professor, Astronomy and Astrophysics **1-530-410-3077**
The Pennsylvania State University **joel.leja@psu.edu**
515 Davey Lab **http://www.personal.psu.edu/jql6565/**
University Park, PA, 16802

RESEARCH INTERESTS

galaxy formation and evolution, stellar populations, astrostatistics

EDUCATION

Yale University New Haven, CT
Ph.D in Astronomy 2016
Thesis: *Tracing Galaxies Through Cosmic Time*
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
The Pennsylvania State University
NSF Astronomy & Astrophysics Postdoctoral Fellow 2017–20
CfA | Harvard & Smithsonian
Postdoctoral Fellow 2016-17
CfA | Harvard & Smithsonian
Mentor: Professor Charlie Conroy
Graduate Student Researcher 2010-16
Yale University
Advisor: Professor Pieter van Dokkum

FUNDED GRANTS

Penn State Institute for Computational & Data Sciences Seed Grant ($29k) (**PI**) 2022–2023
A Computational Moonshot for Modern Galaxy Surveys
JWST GO Cycle 1 ($221k received, $800k total) (**Co-I**) 2022–2025
UNCOVER: Ultra-deep NIRCam and NIRSpec Observations Before the Epoch of Reionization
JWST GO Cycle 1 ($95k received, $509k total) (**Co-I**) 2022–2025
The Stellar and Gas Content of Galaxies at Cosmic Noon
JWST Archival ($239k received, $256k total) (**PI**) 2022–2025
Preventing the Slit-Loss Catastrophe Using Flexible, Spatially Resolved Galaxy Models
HST Archival ($133k received, $370k total) (**CoI**) 2020–2023
Pirate: Walking the Plank to Spatially Resolved Stellar Populations in CANDELS
Harvard Supercomputing Grant (1.5M CPU Hours) (**PI**) 2017
Observational Galaxy Evolution with Odyssey
NSF Astronomy & Astrophysics Fellowship ($300k) (**PI**) 2017–2020
Bringing Galaxy Evolution into Focus by Pushing SED Models to the Limit

HONORS AND AWARDS

Brouwer Prize, Yale University 2019
awarded to a student for a contribution of unusual merit to astronomy during their PhD thesis.

Physics & Astrophysics Commencement Speaker, UC Berkeley 2010

Departmental Citation in Astrophysics, UC Berkeley 2010
outstanding scholarship by a graduating senior in Astrophysics

Regents and Chancellors Scholar, UC Berkeley 2006
most prestigious UC Berkeley scholarship awarded to undergraduates

Robert C. Byrd Scholar 2006
federally funded merit-based scholarship for exceptional high-school seniors

MENTORING & OUTREACH

NASA / Webb Community Subject Matter Expert 2021–
Presentations and Q&A sessions at STEM community events in central PA about JWST.

Coordinator of the Flipped Science Fair 2018–2020
Coordinated, directed, and planned events wherein professional astronomers present their research to panels of middle school judges, reaching ∼150 students per session

Guest Scientist at URJ 6 Points Sci-Tech Academy 2017
Shared my research with middle-schoolers through presentations and in-classroom, interactive Q&A sessions

I have served as the research advisor for the following graduate students:

Gautam Nagaraj, Penn State graduate student 2021–
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, published in ApJ 2019–2020
Jonathan Cohn, graduate student at Texas A&M, published in ApJ 2017–2018

and the following undergraduate students:

Junyu Zhang, Penn State undergraduate, work in progress 2021–
Liam Schwartz, Penn State undergraduate 2021
Leah Zuckerman, Brown undergraduate, submitted to ApJ 2020–2021
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 environments: 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

Review talk on Galaxy Star Formation Histories – JWST Pan-SED fitting forum (**invited**) 2022
Astronomy Colloquium – University of Pittsburgh (**invited**) 2022
Astronomy Colloquium – Tufts University (**invited**) 2022
Astronomy Colloquium – UMass Amherst (**invited**) 2022
Galread – Princeton University (**invited**) 2021
Lunch Talk – Penn State University (**invited**) 2020
Galaxy Crawl – University of Arizona (**invited**) 2020
Astrophysics Seminar — Purdue University (**invited**) 2019
ITC Luncheon — Harvard-Smithsonian CfA (**contributed**) 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 (**invited**) 2019
LEGA-C Spectral Survey Workshop — Ghent University (**invited**) 2019
Coffee Talk — Royal Observatory of Edinburgh (**invited**) 2019
Battlestar Galactica talk series — Harvard-Smithsonian CfA (**invited**) 2019
NSF AAPF Symposium — 233rd AAS Meeting (**invited**) 2019
Challenges in Panchromatic Galaxy Modeling – IAU Symposium 314 (**contributed**) 2018
The Art of Measuring Physical Parameters in Galaxies – CANDELS Collaboration (**invited**) 2018
Quasar Tea – Harvard-Smithsonian CfA (**invited**) 2018
NSF AAPF Symposium — 231st AAS Meeting (**invited**) 2018
Astronomy Seminar — University of Connecticut (**invited**) 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 (**invited**) 2017
Lunch Talk — Carnegie Observatories (**contributed**) 2016
FLASH Talk — UC Santa Cruz (**contributed**) 2016
Astronomy Seminar — UC Riverside (**contributed**) 2016
Astrophysics Seminar — UC Irvine (**contributed**) 2016
Astronomy Tea Talk — Caltech (**contributed**) 2016
Astrophysics Brown Bag Lunch — MIT Kavli Institute (**contributed**) 2016
Galaxies and Cosmology seminar — Harvard-Smithsonian CfA (**invited**) 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
Santa Cruz Galaxy Workshop — UCSC (**contributed**) 2014
Early Galaxy Formation in LCDM Cosmology — Jerusalem Winter School (**contributed talk**) 2013
"The Intriguing Lives of Massive Galaxies" — IAU Beijing (**poster**) 2012

TEACHING EXPERIENCE

Assistant Professor, Penn State University 2020–
- ASTR 504: Extragalactic Astronomy
- ASTR 502: Radiative Processes in Astrophysics
- 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
Drop-in physics tutoring for Yale undergraduates (∼5 hours / week)

Graduate Student Instructor, UC Berkeley 2010
ASTRO W12: The Planets (Professors Geoff Marcy, Burkhard Militzer)

Physics Tutor and Student Lecturer (UC Berkeley) 2008–2010
Weekly lectures on topics in introductory physics, drop-in tutoring (∼6 hours/week)
Course coordinator; trained other physics tutors

PROFESSIONAL EXPERIENCE

Referee for *The Astrophysical Journal, The Astrophysical Journal Letters, Monthly Notices of the Royal Astronomical Society, Monthly Notices of the Royal Astronomical Society Letters, Astronomy & Astrophysics, Astronomy & Computing*

STFC Astronomy Grants Panel reviewer (UK) 2022
PFS Survey: Working Group Lead, First-Year Galaxy Evolution Continuum Science 2022–
Science Organizing Committee for 'Statistical Challenges in Modern Astronomy VIII' 2021–
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 A&B

PRESS

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 90 publications in total, of which 10 are first author works and 16 are still undergoing review. As of August 2022, these works have 6,580 citations with an h-index of 34.

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, accepted to ApJ, arXiv:2110.04314

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 Author

11. *Flexible Models for Galaxy Star Formation Histories Both Shift and Scramble the Optical Color-M/L Relationship*
Li, Yijia; **Leja, Joel**, 2022, submitted to ApJ, arXiv:2208.12295

12. *Recovering the star formation histories of recently-quenched galaxies: the impact of model and prior choices*
Suess, Katherine A.; **Leja, Joel** et al., 2022, submitted to ApJ, arXiv:2207.02883

13. *Stellar Population Inference with Prospector*
Johnson, Benjamin D.; **Leja, Joel** et al., 2021, ApJS, 254, 22J

14. *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

15. *How to measure galaxy star-formation histories I: Parametric models*
Carnall, A. C.; **Leja, J**. et al., 2019, ApJ, 873, 44C

16. *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

17. *The Assembly of Milky Way-like Galaxies Since z∼2.5*
van Dokkum, Pieter G.; **Leja, Joel** et al., 2013, ApJ, 771L, 35V

Co-Author

18. *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, submitted to ApJL, arXiv:2208.05938

19. *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

20. *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., 2022, submitted to ApJ, arXiv:2208.01630

21. *A very early onset of massive galaxy formation*
Labbe, Ivo; van Dokkum, Pieter; Nelson, Erica; Bezanson, Rachel; Suess, Katherine; **Leja, Joel** et al., 2022, submitted to Nature, arXiv:2207.12446

22. *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, submitted to ApJ, arXiv:2207.10655

23. *Two Remarkably Luminous Galaxy Candidates at* $z \approx 11 - 13$ *Revealed by JWST*
Naidu, Rohan et al., including **Leja, Joel**, 2022, submitted to ApJL, arXiv:2207.09434

24. *Hierarchical Bayesian inference of photometric redshifts with stellar population synthesis models*
Leistedt, Boris; Alsing, Justin; Peiris, Hiranya; Mortlock, Daniel; **Leja, Joel**, 2022, submitted to ApJS, arXiv:2207.07673

25. *Beyond UVJ: Color Selection of Galaxies in the JWST Era*
Antwi-Danso, Jacqueline; Papovich, Casey; **Leja, Joel**, 2022, submitted to ApJ, arXiv:2207.07170

26. *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, submitted to ApJL, arXiv:2207.07129

27. *Forward modeling of galaxy populations for cosmological redshift distribution inference*
Alsing, Justin; Peiris, Hiranya; Mortlock, Daniel; **Leja, Joel** et al., 2022, submitted to ApJS, arXiv:2207.05819

28. *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, 2022, ApJS, 262,15Z

29. *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., 2022, submitted to ApJ, arXiv:2206.05315

30. *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 submitted, arXiv:2206.01764

31. *A Bayesian Population Model for the Observed Dust Attenuation in Galaxies*
Nagaraj, Gautam; Forbes, John C.; **Leja, Joel** et al., 2022, ApJ, 932, 54N

32. *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

33. *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

34. *Empirical Dust Attenuation Model Leads to More Realistic UVJ Diagram for TNG100 Galaxies*
Nagaraj, Gautam; Forbes, John C.; **Leja, Joel** et al., 2022, submitted to ApJ, arXiv:2204.06449

35. *REQUIEM-2D: A diversity of formation pathways in a sample of spatially-resolved massive quiescent galaxies at z∼2*
Akhshik, Mohammad; Whitaker, Katherine E.; **Leja, Joel** et al., 2022, submitted to ApJ, arXiv:2203.04979

36. *Physical Properties of the Host Galaxies of Ca-rich Transients*
Dong, Yuxin; Milisavljevic, Dan; **Leja, Joel** et al., 2022, ApJ, 927, 199D

37. *Fast, Slow, Early, Late: Quenching Massive Galaxies at z∼0.8*
Tacchella, Sandro; Conroy, Charlie; Faber, S. M.; Johnson, Benjamin D.; **Leja, Joel** et al., 2022, ApJ, 926, 134T

38. *SQuIGGLE: Studying Quenching in Intermediate-z Galaxies – Gas, AnguLar Momentum, and Evolution*
Suess, Katherine A. et al., including **Leja, Joel**, 2022, ApJ, 926, 89S

39. *Diagnosing DASH: A Catalog of Structural Properties for the COSMOS-DASH Survey*
Cutler, Sam E. et al., including **Leja, Joel**, 2022, ApJ, 925, 34C

40. *Hubble Space Telescope Observations of GW170817: Complete Light Curves and the Properties of the Galaxy Merger of NGC 4993*
Kilpatrick, Charles D.; Fong, Wen-fai; Blanchard, Peter K.; **Leja, Joel**, et al., 2022, ApJ, 926, 49K

41. *High Molecular-gas to Dust Mass Ratios Predicted in Most Quiescent Galaxies*
Whitaker, Katherine E. et al., including **Leja, Joel**, 2021, ApJ, 922L, 30W

42. *Quenching of star formation from a lack of inflowing gas to galaxies*
Whitaker, Katherine E. et al., including **Leja, Joel**, 2021, Nature, 597, 485W

43. *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

44. *Ubiquitous [OII] Emission in Quiescent Galaxies at* $z \sim 0.85$
Maseda, Michael V. et al., including **Leja, Joel**, 2021, ApJ, 923, 18M

45. *Chronicling the Host Galaxy Properties of the Remarkable Repeating FRB 20201124A*
Fong, Wen-fai; Dong, Yuxin; **Leja, Joel**, et al., 2021, ApJ, 919L, 23F

46. *The Diverse Molecular Gas Content of Massive Galaxies Undergoing Quenching at z∼1*
Belli, Sirio et al., including **Leja, Joel**, 2021, ApJL, 909L, 11B

47. *Spatially Resolved Star Formation and Inside-out Quenching in the TNG50 Simulation and 3D-HST Observations*
Nelson, Erica J.; Tacchella, Sandro; Diemer, Benedikt; **Leja, Joel** et al., 2021, MNRAS, 508, 219N

48. *REQUIEM-2D: Spatially Resolved Stellar Populations from HST 2D Grism Spectroscopy*
Akhshik, Mohammad et al., including **Leja, Joel**, 2020, accepted for publication in ApJ, arXiv:2008.02276

49. *Revealing the relation between black hole growth and host-galaxy compactness among star-forming galaxies*
Ni, Q.; Brandt, W. N.; Yang, G.; **Leja, J.** et al., 2021, MNRAS, 500, 4989N

50. *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

51. *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

52. *The Distant, Galaxy Cluster Environment of the Short GRB 161104A at z∼0.8 and a Comparison to the Short GRB Host Population*
Nugent, A. E.; Fong, W.; Dong, Y.; Palmese, A.; **Leja, J.** et al. 2020, ApJ, 904, 52N

53. *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

54. *REQUIEM-2D Methodology: Spatially Resolved Stellar Populations of Massive Lensed Quiescent Galaxies from Hubble Space Telescope 2D Grism Spectroscopy*
Akhshik, Mohammad et al., including **Leja, Joel**, 2020, ApJ, 900, 184A

55. *Discovery of the Optical Afterglow and Host Galaxy of Short GRB 181123B at z = 1.754: Implications for Delay Time Distributions*
Paterson, K.; Fong, W.; Nugent, A.; Escorial, A. Rouco; **Leja, J.** et al., 2020, ApJ, 898L, 32P

56. *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

57. *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

58. *Lick Observatory Supernova Search Follow-Up Program: Photometry Data Release of 93 Type Ia Supernovae*
Stahl, Benjamin E. et al., including **Joel Leja**, 2019, MNRAS, 2352S

59. *Discovery of a dark, massive, ALMA-only galaxy at z 5-6 in a tiny 3-millimeter survey*
Williams, Christina C.; Labbe, Ivo; Spilker, Justin; Stefanon, Mauro; **Leja, Joel** et al., 2019, ApJ, 884, 154W

60. *The Hubble Legacy Field GOODS-S Photometric Catalog*
Whitaker, Katherine E.; Ashas, Mohammad; Illingworth, Garth; Magee, Daniel; **Leja, Joel**, et al., 2019, ApJS, 244, 16W

61. *Model-independent constraints on the hydrogen-ionizing emissivity at $z > 6$*
Mason, Charlotte A.; Naidu, Rohan P.; Tacchella, Sandro; **Leja, Joel**, 2019, MNRAS, 489, 2669M

62. *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

63. *The tidal disruption event AT2017eqx: spectroscopic evolution from hydrogen rich to poor suggests an atmosphere and outflow*
Nicholl, M. et al., including **Leja, Joel**, 2019, MNRAS, 488, 1878N

64. *SN 2016iet: The Pulsational or Pair Instability Explosion of a Low-metallicity Massive CO Core Embedded in a Dense Hydrogen-poor Circumstellar Medium*
Gomez, Sebastian et al., including **Leja, Joel**, 2019, ApJ, 881, 87G

65. *Millimeter Mapping at $z \sim 1$: Dust-obscured Bulge Building and Disk Growth*
Nelson, Erica J. et al., including **Leja, Joel**, 2019, ApJ, 870, 130N

66. *COSMOS-DASH: The Evolution of the Galaxy Size-Mass Relation Since $z \sim 3$ from new Wide Field WFC3 Imaging Combined with CANDELS/3DHST*
Mowla, Lamiya et al., including **Leja, Joel**, 2019, ApJ, 880, 57M

67. *The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. VII. Properties of the Host Galaxy and Constraints on the Merger Timescale*
Blanchard, P. K.; Berger, E.; Fong, W.; Nicholl, M.; **Leja, J.** et al., ApJL, 2017, 848L, 22B

68. *The Superluminous Supernova SN 2017egm in the Nearby Galaxy NGC 3191: A Metal-rich Environment Can Support a Typical SLSN Evolution*
Nicholl, Matt et al., including **Leja, Joel**, ApJ, 2017, 845L, 8N

69. *PS16dtm: A Tidal Disruption Event in a Narrow-line Seyfert 1 Galaxy*
Blanchard, P. K. et al., including **Leja, Joel**, ApJ, 2017, 843, 106B

70. *A New Method for Wide-Field Near-IR Imaging with the Hubble Space Telescope*
Momcheva, Ivelina G. et al., including **Leja, Joel**, PASP, 2017, Volume 129, Issue 971

71. *The Relation Between [OIII]/Hβ and Specific Star Formation Rate in Galaxies at $z \sim 2$*
Dickey, Claire Mackay et al., including **Leja, Joel**, ApJ, 828L, 11M

72. *Where Stars Form: Inside-out Growth and Coherent Star Formation from HST Hα Maps of 3200 Galaxies across the Main Sequence at $0.7< z <1.5$*
Nelson, Erica June et al., including **Leja, Joel**, ApJ, 828, 27N

73. *The 3D-HST Survey: Hubble Space Telescope WFC3/G141 Grism Spectra, Redshifts, and Emission Line Measurements for $\sim$100,000 Galaxies*
Momcheva, Ivelina G. et al., including **Leja, Joel**, ApJS, 225, 27M

74. *Leveraging 3D-HST Grism Redshifts to Quantify Photometric Redshift Performance*
Bezanson, Rachel et al., including **Leja, Joel**, ApJ, 822, 30B

75. *Evidence for Non-stellar Rest-frame Near-IR Emission Associated with Increased Star Formation in Galaxies at $z\sim1$*
Lange, Johannes U.; van Dokkum, Pieter G.; Momcheva, Ivelina G.; Nelson, Erica J.; **Leja, Joel** et al., ApJ, 819, 4L

76. *Forming Compact Massive Galaxies*
van Dokkum, Pieter G. et al., including **Leja, Joel**, ApJ, 813, 23V

77. *Galaxy Structure as a Driver of the Star Formation Sequence Slope and Scatter*
Whitaker, Katherine E. et al., including **Leja, Joel**, ApJ, 811L, 12W

78. *On the importance of using appropriate spectral models to derive physical properties of galaxies at $0.7 < z < 2.8$*
Pacifici, Camilla et al., including **Leja, Joel**, MNRAS, 447, 786P

79. *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., ApJ, 795, 104W

80. *3D-HST WFC3-selected Photometric Catalogs in the Five CANDELS/3D-HST Fields: Photometry, Photometric Redshifts, and Stellar Masses*
Skelton, Rosalind E. et al., including **Leja, Joel**, ApJS, 214, 24S

81. *A massive galaxy in its core formation phase three billion years after the Big Bang*
Nelson, Erica et al., including **Leja, Joel**, Nature, 513, 394N

82. *Dense Cores in Galaxies Out to z = 2.5 in SDSS, UltraVISTA, and the Five 3D-HST/CANDELS Fields*
van Dokkum, Pieter G. et al., including **Leja, Joel**, ApJ, 791, 45V

83. *Observations of Environmental Quenching in Groups in the 11 Gyr since z = 2.5: Different Quenching for Central and Satellite Galaxies*
Tal, Tomer et al., including **Leja, Joel**, ApJ, 789, 164T

84. *3D-HST+CANDELS: The Evolution of the Galaxy Size-Mass Distribution since z = 3*
van der Wel, A. et al., including **Leja, Joel**, ApJ, 788, 28V

85. *Tight Correlations between Massive Galaxy Structural Properties and Dynamics: The Mass Fundamental Plane was in Place by z∼2*
Bezanson, Rachel; van Dokkum, Pieter; van de Sande, Jesse; Franx, Marijn; **Leja, Joel** et al., ApJ, 779L, 21B

86. *The Structural Evolution of Milky Way-like Star Forming Galaxies since z∼1.3*
Patel, Shannon G. et al., including **Leja, Joel**, 2013, ApJ, 778L, 24L

87. *Galaxy environments over cosmic time: the non-evolving radial galaxy distributions around massive galaxies since z=1.6*
Tal, Tomer; van Dokkum, Pieter G.; Franx, Marijn; **Leja, Joel** et al., 2013, ApJ, 769, 31T

88. *The Radial Distribution of Star Formation in Galaxies at z∼1 from the 3D-HST Survey*
Nelson, E.J. et al., including **Leja, Joel**, 2013, ApJ, 763L, 16N

89. *3D-HST: A Wide-field Grism Spectroscopic Survey with the Hubble Space Telescope*
Brammer, G. B. et al., including **Leja, Joel**, 2012, ApJS, 200, 13

90. *Results of the Lick Observatory Supernova Search Follow-up Photometry Program: BVRI Light Curves of 165 Type Ia Supernovae*
Ganeshalingam, M. et al., including **Leja, Joel**, 2010, ApJS, 190, 418G