

David O. Jones

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Profile

Measuring dark energy and the local value of the Hubble constant with Type Ia Supernovae
Statistical analyses and transient classification with large supernova datasets

Experience

2020 - Present NASA Einstein Fellow
University of California, Santa Cruz
2017 - 2020 Moore Fellow
University of California, Santa Cruz

Education

2011-2017 PhD in Physics & Astronomy - Johns Hopkins University
Advisor: Dr. Adam Riess
Thesis: "Measuring Dark Energy with 1,345 Supernovae: Reducing Statistical Uncertainties on the Equation of State and Understanding the Dependence of Type Ia Supernovae on Their Local Environments"
2011-2014 M.A. in Physics & Astronomy - Johns Hopkins University
Advisor: Dr. Adam Riess
2010-2011 M.A. in Astronomy - Boston University
Advisor: Dr. Andrew West
Thesis: "Using Stellar Spectra to Constrain the Distribution of Galactic Dust"
2006-2010 B.A. in Astronomy - Boston University
Magna cum laude
2006-2010 B.Mus. in Brass Performance - Boston University
Magna cum laude

Grants and Investigations

2020 PI, 2020 NASA ADAP, "Building A Holistic Picture of the Host Galaxy Environments of Supernovae with the NASA Archive" – \$205K grant to UC Santa Cruz
2020 PI, *HST*-GO Proposal 16269, 110 orbits – \$232K funding
2020- NASA Einstein Fellowship – \$345K grant to UC Santa Cruz
2020 Clay Fellowship, Harvard CfA/Smithsonian Astrophysical Observatory (declined)
2019- Project Scientist, Young Supernova Experiment – \$1.8 million committed funding
Collaboration between UC Santa Cruz, University of Copenhagen, University of Hawaii, Queens University Belfast, University of Toronto, Northwestern University, University of Illinois
2019- Co-PI, DEHVLS Survey (Dark Energy, H_0 , and peculiar Velocities with Infrared Light from Supernovae) – \$500K committed funding, \$900K planned
2019- Co-PI, Supernova Standardization Team – \$93K through *HST* Archival Grant 15808
2017-2020 Moore Foundation Fellowship – \$310K grant to UC Santa Cruz

Publication Statistics

9 First-Author Journal Articles
59 Refereed Journal Articles
448 First-Author Citations
1000+ Second-Author Citations
4800+ Total Citations
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Funded Proposals as Co-I Since 2019

- 2021** Measuring the Effect of Progenitor Metallicity on Type Ia Supernova Distance Estimates
Hubble Space Telescope Cycle 29 proposal 16690, 12 orbits
PI: R. J. Foley, Co-I: D. O. Jones
- 2021** Snapshot Observations of Nearby, Recent Transients and Their Environments
Hubble Space Telescope Cycle 29 proposal 16691, 75 targets
PI: R. J. Foley, Co-I: D. O. Jones
- 2021** Nebular Spectroscopy of a Kilonova with JWST
James Webb Space Telescope Cycle 1 proposal 01936, 14.9 hours
PI: C. D. Kilpatrick, Co-I: D. O. Jones
- 2021** Detecting the Synthesis of the Heaviest Elements with Photometry of a Kilonova in the Optically Thin Phase
James Webb Space Telescope Cycle 1 proposal 02091, 12 hours
PI: M. Drout, Co-I: D. O. Jones
- 2021** Nucleosynthesis, Astrophysics, and Cosmology with IR Observations of a Gravitational Wave Counterpart
James Webb Space Telescope Cycle 1 proposal 02061, 17.2 hours
PI: R. J. Foley, Co-I: D. O. Jones
- 2020** Measuring the Effect of Progenitor Metallicity on Type Ia Supernova Distance Estimates
Hubble Space Telescope Cycle 28 proposal 16238, 12 orbits
PI: R. J. Foley, Co-I: D. O. Jones
- 2020** Snapshot Observations of Nearby, Recent Supernovae and Their Environments
Hubble Space Telescope Cycle 28 proposal 16239, 97 snapshot targets
PI: R. J. Foley, Co-I: D. O. Jones
- 2020** Using the full power of the HST Archive to Address the Red Supergiant Problem
Hubble Space Telescope archival proposal 16136
PI: C. D. Kilpatrick, Co-I: D. O. Jones
- 2019** SALT3: Taking the Type Ia Supernova Cosmology Workhorse to Longer Wavelengths
Hubble Space Telescope Cycle 27 archival proposal 15808
PI: J. Roberts-Pierel, Co-I: D. O. Jones
- 2019** Precision Cosmology with SOFIA: Characterizing the Dust Emission in Nearby Supernovae Type Ia Host Galaxies
SOFIA Cycle 7 proposal 0135
PI: C. M. Casey, Co-I: D. O. Jones
- 2019** Supernovae in the Infrared avec Hubble
Hubble Space Telescope Cycle 27 proposal 15889, 77 orbits
PI: S. W. Jha, Co-I: D. O. Jones

Additional Telescope Time as PI

- 2021** Using Gemini to build a Near-Infrared Model of Type Ia Supernovae
18.8 hours in 2021B, Band 3, Gemini North
- 2021** Using HST and Gemini to build a Near-Infrared Model of Type Ia Supernovae
15.4 hours in 2021A, Band 1, Gemini North
- 2013-2016** Obtaining Redshifts and Host Galaxy Spectra for Supernovae in Pan-STARRS
15+ nights on WIYN and APO
- 2014** Redshifts and Host Galaxy Spectra for the Completed Pan-STARRS Supernova Survey
3 nights, Anglo-Australian Telescope, NOAO proposal N0336

Selected Talks & Conferences (2018-2021)

- Dec 2021** Invited Talk: If the SH0ES fit: Searching for New Physics with Local Measurements of the Hubble Constant
New Mexico State University Colloquium
- Nov 2021** Invited Talk: Performing Next-Generation Cosmology and Transient Astrophysics Today with the Young Supernova Experiment
National Center for Supercomputing Applications seminar
- Nov 2021** Cosmology today with SNe Ia and The Future With Roman

- Roman Science Team Community Briefing*
- Aug 2021** Cosmological Results from the RAISIN Survey: Using Type Ia Supernovae in the Near Infrared as a Novel Path to Measure the Dark Energy Equation of State
Cosmo '21, Virtual Meeting
- Feb 2020** Invited Talk: H_0 , Dark Energy, and Testing Gravity: Using Pan-STARRS Supernovae to Understand Cosmic Controversies in the 2020s
NRAO Colloquium, Socorro, NM
- Jan 2020** SALT3: Rebuilding the SALT2 Model of Type Ia Supernova Standardization for the 2020s
AAS 235, Honolulu, HI
- Aug 2019** Invited Talk: How much do cosmological constraints from SNe Ia depend on SN physics?
Progenitors of Type Ia Supernovae
Lijiang, Yunnan Province, China
- Jul 2019** The Role of Type Ia Supernova Host Galaxies in Understanding the Hubble Tension
Tensions between the Early and the Late Universe
Kavli Institute for Theoretical Physics, Santa Barbara, CA
- Jul 2019** Lessons from Pan-STARRS: How Uncertainties in Photometric Classification Propagate to Measurements of Cosmological Parameters from Type Ia Supernovae
Optimizing Training Samples for SN Photometric Classification
Université Clermont Auvergne, Clermont-Ferrand, France
- Mar 2019** New Constraints on Dark Energy from Photometrically Classified Type Ia Supernovae and the Foundation Supernova Survey
Kavli Institute for Cosmology Seminar Series
University of Cambridge, Cambridge, UK
- Feb 2019** Invited Talk: The Next Decade of Supernova Cosmology and the Local Value of the Hubble Constant
Concordances and Challenges in Cosmology after Planck
Sexten Center for Astrophysics
- Apr 2018** Invited Talk: Measuring the Local Value of the Hubble Constant
American Physical Society April Meeting
Columbus, OH
- Mar 2018** Measuring Cosmological Parameters from Photometrically Classified Type Ia Supernovae: Challenges for the 2020s
SnowPAC
Salt Lake City, UT
- Jan 2018** Measuring Cosmological Parameters with Photometrically Classified Supernovae from Pan-STARRS
American Astronomical Society 231st Meeting
Washington, DC

News Highlights

- May 2021** Temperamental Supernova Appeared Strangely Cool Before Exploding
- Apr 2018** How 1.7 Billion Stars Were Mapped With Dazzling 3-D Precision
- Apr 2018** APS April Meeting—Cosmologists Can't Agree on the Hubble Constant
- Apr 2013** Hubble breaks record for furthest supernova

Teaching Experience

- 2015-2017** Head Teaching Fellow
Professor: Dr. Adam Riess
Course: Stars and the Universe
- 2012-2013** Teaching Fellow
Professor: Dr. Adam Riess
Course: Stars and the Universe
- Spring 2011** Teaching Fellow
Professor: Dr. Elizabeth Blanton
Course: Principles of Astronomy II
- Fall 2010** Teaching Fellow
Professor: Dr. Paul Withers

Course: Introduction to the Solar System

Service

- *HST* Cycle 29 Time Allocation Committee Panelist
- 2021 NASA FINESST reviewer
- *TESS* Cycle 4 Panelist
- Referee for *ApJ*, *PASP*, and *MNRAS* since 2018

Graduate Students Mentored

- 2020 - Present** Erik Peterson, Duke University graduate student
DEHVILS project; peculiar velocity and growth of structure measurements from NIR SNe Ia
- 2018 - Present** D'Arcy Kenworthy, Johns Hopkins University graduate student
Re-training the SALT2 model of SN Ia standardization
Kenworthy, Jones, Dai et al., 2021, ApJ, submitted
- 2018 - Present** Justin Roberts-Pierel, University of South Carolina graduate student
Building a simulation framework to understand Roman SN systematics
Pierel, Jones, Dai et al., 2021, ApJ, 911, 96P
- 2018 - Present** Matt Siebert, UC Santa Cruz graduate student
Distance biases from high-velocity SNe Ia
Siebert, Foley, Jones & Davis 2020, MNRAS, 493, 5713; Siebert, Foley, Jones et al., 2019, MNRAS, 486, 5785S
- 2017 - Present** César Rojas-Bravo, UC Santa Cruz graduate student
Leading the data release and cosmological analysis of the Swope Supernova Survey
- 2017 - Present** Dave Coulter, UC Santa Cruz graduate student
Developing SQL database and web application for managing and querying transient data
- 2018 - 2020** Tayler Quist, UC Santa Cruz masters student
Using machine learning to classify transients in the Young Supernova Experiment

Undergraduate Students Mentored

- 2021 - Present** Payton Crawford, UCSC undergraduate student
Measuring the effect of SN host galaxy environment on measurements of the Hubble constant
- 2020 - 2020** Hakan Solak, Cambridge University undergraduate student
Distance biases from SNe Ia in bright hosts
Solak, Kessler & Jones 2020, PASP, 133, 4001S
- 2018 - 2020** Jesus Nunez, UC Santa Cruz undergraduate Student
Developing web applications for managing transient data and LIGO EM counterpart searches
- 2018 - 2019** Bennett Garza, UC Santa Cruz undergraduate Student
Used Gaussian processes to build templates of young core-collapse Supernovae
- 2014-2016** Carolyn Ortega, Johns Hopkins University undergraduate
Classified Type Ia supernovae and characterized their host galaxies

Outreach & Inclusion

- 2021** **Lamat Mentor**
I was a mentor in UCSC's Lamat program in summer 2021, which provides astrophysics research opportunities to students at California community colleges. Eighty percent of Lamat students in 2021 are members of a historically marginalized group in STEM.
- 2020-** **NASA Hubble Fellowship Program Anti-Racism Initiative**
With the NHFP fellows, I am working to implement an ambitious set of programs to increase diversity and fight anti-Black racism in astronomy & astrophysics. I am the co-lead of the mentorship and outreach subgroup and led the development of the website to coordinate our efforts, <https://nhfp-equity.org>.
- 2019-** **Leadership Committee, Astronomy on Tap Santa Cruz**
I am the lead postdoc in charge of our local Astronomy on Tap program, which provides a setting for professional astronomers to give free, informal public talks every month at Santa Cruz breweries, with recent talks given via YouTube Live.

2011-2017 Baltimore-Area Outreach

I was a member of the Johns Hopkins Physics and Astronomy Outreach program, through which I regularly visited high schools in Baltimore City to teach physics through demonstrations. The other graduate students and I also answered questions about pursuing science in college and graduate school. I assisted in the building of two portable planetariums for outreach demonstrations; one was donated to a local elementary school and the other is still used for outreach by the Hopkins graduate students.

Professional References

- Prof. Ryan Foley, University of California-Santa Cruz, foley@ucsc.edu
- Prof. Adam Riess, Johns Hopkins University, ariess@stsci.edu
- Prof. Robert Kirshner, Harvard University, rkirshner@cfa.harvard.edu
- Prof. Daniel Scolnic, Duke University, dscolnic@kicp.uchicago.edu

David O. Jones Publications List

[Link to ADS Publication library](#)

h-index: 28, 4800+ citations, 59 refereed publications

Primary Publications

[A Comprehensive Measurement of the Local Value of the Hubble Constant with 1 km/s/Mpc Uncertainty from the Hubble Space Telescope and the SH0ES Team](#)

Riess, A. G., Yuan, W., Macri, L. M., [3 authors], **Jones, D. O.**, et al., ApJ, submitted

[*SALT3: An Improved Type Ia Supernova Model for Measuring Cosmic Distances](#)

Kenworthy, W. D., **Jones, D. O.**, Dai, M. et al., 2021, ApJ, in press

[The Young Supernova Experiment: Survey Goals, Overview, and Operations](#)

Jones, D. O., Foley, R. J., Narayan, G. et al., 2021, ApJ, 908, 143J

[*Understanding Type Ia Supernova Distance Biases by Simulating Spectral Variations](#)

Pierel, J. D. R., **Jones, D. O.**, Dai, M. et al., 2021, ApJ, 911, 96P

[The Foundation Supernova Survey: Measuring Cosmological Parameters using Supernovae from a Single Telescope](#)

Jones, D. O., Scolnic, D. M., Foley, R. J. et al., 2019, ApJ, 881, 19J

[Should Type Ia Supernova Distances be Corrected for their Local Environments?](#)

Jones, D. O., Riess, A. G., Scolnic, D. M. et al., 2018, ApJ, 867, 108J

[The Complete Light-curve Sample of Spectroscopically Confirmed Type Ia Supernovae from Pan-STARRS1 and Cosmological Constraints from The Combined Pantheon Sample](#)

Scolnic, D. M., **Jones, D. O.**, Rest, A. et al., 2018, ApJ, 859, 101S

[Measuring the Properties of Dark Energy with Photometrically Classified Pan-STARRS Supernovae. II. Cosmological Parameters](#)

Jones, D. O., Scolnic, D. M., Riess, A. G. et al., 2018, ApJ, 857, 51J

[Measuring Dark Energy Properties with Photometrically Classified Pan-STARRS Supernovae. I. Systematic Uncertainty from Core-Collapse Supernova Contamination](#)

Jones, D. O., Scolnic, D. M., Riess, A. G. et al., 2017, ApJ, 843, 6J

[A 2.4% Determination of the Local Value of the Hubble Constant](#)

Riess, A. G., [7 authors], **Jones, D. O.** et al., 2016, ApJ, 826, 56R

[A Catalog of GALEX Ultraviolet Emission from Spectroscopically Confirmed M Dwarfs](#)

Jones, D. O., West, A. A., 2016, ApJ, 817, 1J

[Reconsidering the Effects of Local Star Formation on Type Ia Supernova Cosmology](#)

Jones, D. O., Riess, A. G., Scolnic, D. M., 2015, ApJ, 804, 28G

[GALEX Detection of Shock Breakout in Type II-P Supernova PS1-13arp: Implications for the Progenitor Star Wind](#)

Gezari, S., **Jones, D. O.**, Sanders, N. E. et al., 2015, ApJ, 804, 28G

[The Discovery of the Most Distant Known Type Ia Supernova at Redshift 1.914](#)

Jones, D. O., Rodney, S. A., Riess, A. G., [22 authors], 2013, ApJ, 768, 166

[Using M Dwarf Spectra to Map Extinction in the Local Galaxy](#)

Jones, D. O., West, A. A. & Foster, J. B., 2011, AJ, 142, 44

Software

[PythonPhot: Simple DAOPHOT-type photometry in Python](#)

Jones, D. O., Scolnic, D. M., Rodney, S. A., 2015, Astrophysics Source Code Library

Other Publications

[*H-band light curves of Milky Way Cepheids via Difference Imaging](#)

Konchady, T., Oelkers, R. J., **Jones, D. O.** et al., 2022, ApJS, in press

[The Pantheon+ Type Ia Supernova Sample: The Full Dataset and Light-Curve Release](#)

Scolnic, D., Brout, D., Carr, A., [3 authors], **Jones, D. O.** et al., ApJL, submitted

[Progenitor and Close-In Circumstellar Medium of Type II Supernova 2020fqv from High-Cadence Photometry and Ultra-Rapid UV Spectroscopy](#)

Tinyanont, S. ; Ridden-Harper, R., Foley, R., [19 authors], **Jones, D. O.** et al., 2021, MNRAS, in press

[The Pantheon+ Analysis: Evaluating Peculiar Velocity Corrections in Cosmological Analyses with Nearby Type Ia Supernovae](#)

Peterson, E. R., Kenworthy, W. D. ; Scolnic, D., [6 authors], **Jones, D. O.** et al., 2021, ApJ, in press

[SN2018agk: A prototypical Type Ia Supernova with a smooth power-law rise in Kepler \(K2\)](#)

Wang, Q., Rest, A., Zenati, Y., [40 authors], **Jones, D. O.** et al., 2021, ApJ, in press

[Final Moments I: Precursor Emission, Envelope Inflation, and Enhanced Mass loss Preceding the Luminous Type II Supernova 2020tlf](#)

Jacobson-Galan, Wynn V., Dessart, L., **Jones, D. O.** et al., 2021, ApJ, in press

[The Early Phases of Supernova 2020pni: Shock-Ionization of the Nitrogen-Enriched Circumstellar Material](#)

Terreran, G., Jacobson-Galan, W. V., Groh, J.H., [10 authors], **Jones, D. O.**, et al., 2021, ApJ, in press

[An Early-Time Optical and Ultraviolet Excess in the type-Ic SN 2020oi](#)

Gagliano, A., Izzo, L., Kilpatrick, C. D., [11 authors], **Jones, D. O.** et al., 2021, ApJ, in press

[Testing the Consistency of Dust Laws in SN Ia Host Galaxies: A BayeSN Examination of Foundation DRI](#)

Thorp, S., Mandel, K. S., **Jones, D. O.** et al., 2021, MNRAS, 508, 4310T

[The Foundation Supernova Survey: Photospheric Velocity Correlations in Type Ia Supernovae](#)

Dettman, K. G., Jha, S. W., Dai, M., [8 authors], **Jones, D. O.** et al., 2021, ApJ, in press

[A Cool and Inflated Progenitor Candidate for the Type Ib Supernova 2019yvr at 2.6 Years Before Explosion](#)

Kilpatrick, C. D., [4 authors], **Jones, D. O.**, 2021, MNRAS, 504, 2073K

[*Probing Systematic Bias in Low-Redshift Type Ia Supernova Measurements by Cross Analyzing Surface Brightness and Hubble Residuals](#)

Solak, H., Kessler, R. & **Jones, D. O.**, 2021, PASP, 133, 4001S

[Results of the Photometric LSST Astronomical Time-series Classification Challenge \(PLAsTiCC\)](#)

Hlozek, R., Ponder, K. A., Malz, A. I., [7 authors], **Jones, D. O.**, et al., 2020, ApJ, submitted

[Deep optical observations contemporaneous with emission from the periodic FRB 180916.J0158+65](#)

Kilpatrick, C. D., Burchett, J. N., **Jones, D. O.** et al., 2020, ApJL, 907, L3

[Active learning with RESSPECT: Resource allocation for extragalactic astronomical transients](#)

Kenamer, Noble, [7 authors], **Jones, D. O.** et al., 2020, IEEE Symposium Series on Computational Intelligence

[SuperRAENN: A Semi-supervised Supernova Photometric Classification Pipeline Trained on Pan-STARRS1 Medium Deep Survey Supernovae](#)

Villar, V. Ashley, [3 authors], **Jones, D. O.** et al., 2020, ApJ, 905, 94V

[Photometric Classification of 2315 Pan-STARRS1 Supernovae with Superphot](#)

Hosseinzadeh, Griffin, [3 authors], **Jones, D. O.**, 2020, ApJ, 905, 93H

[Evidence for Cosmic Acceleration is Robust to Observed Correlations Between Type Ia Supernova Luminosity and Stellar Age](#)

Rose, B. M., [5 authors], **Jones, D. O.** et al., 2019, ApJL, 896L, 4R

[Ca hnk: Calcium-rich Transient SN 2016hmk from the Helium Shell Detonation of a Sub-Chandrasekhar White Dwarf](#)

Jacobson-Galan, Wynn V., [7 authors], **Jones, D. O.** et al., 2020, ApJ, 896, 165J

[*A possible distance bias for type Ia supernovae with different ejecta velocities](#)

Siebert, M. R., Foley, R. J., **Jones, D. O.**, Davis, K. W., 2020, MNRAS, 493, 5713S

[Swift UVOT Grism Observations of Nearby Type Ia Supernovae – II. Probing the Progenitor Metallicity of SNe Ia with Ultraviolet Spectra](#)

Pan, Y. -C., Foley, R. J., **Jones, D. O.**, Filippenko, A. V., Kuin, N. P. M., 2020, MNRAS, 491, 5897P

[Type Ia Supernovae are Excellent Standard Candles in the Near-Infrared](#)

Avelino, A., Friedman, A. S., Mandel, K. S., **Jones, D. O.** et al., 2019, ApJ, 887, 106A

[The Photometric LSST Astronomical Time-series Classification Challenge \(PLAsTiCC\): Selection of a performance metric for classification probabilities balancing diverse science goals](#)

Malz, A., [8 authors], **Jones, D. O.** et al., 2019, ApJ, 158, 171M

[Supernova Photometric Classification Pipelines Trained on Spectroscopically Classified Supernovae from the Pan-STARRS1 Medium-deep Survey](#)

Villar, V. A., [4 authors], **Jones, D. O.**, 2019, ApJ, 884, 83V

[Models and Simulations for the Photometric LSST Astronomical Time Series Classification Challenge \(PLAsTiCC\)](#)

Kessler, R., Narayan, G., Avelino, A., [16 authors], **Jones, D. O.**, PASP, 131, 4501K

[PS1-13cbe: the rapid transition of a Seyfert 2 to a Seyfert 1](#)

Katebi, R., Chornock, R., Berger, E., **Jones, D. O.** et al., 2019, MNRAS, 487, 4057K

[*Investigating the diversity of Type Ia supernova spectra with the open-source relational data base KAE-PORA](#)

Siebert, M. R., Foley, R. J., **Jones, D. O.** et al., 2019, MNRAS, 486, 5785S

[K2 Observations of SN 2018oh Reveal a Two-Component Rising Light Curve for a Type Ia Supernova](#)

Dimitriadis, G., [5 authors], **Jones, D. O.** et al., 2019, ApJ, 870L, 1D

[Photometric and Spectroscopic Properties of Type Ia Supernova 2018oh with Early Excess Emission from the *Kepler 2* Observations](#)

Li, W., [35 authors], **Jones, D. O.** et al., 2019, ApJ, 870, 12L

[The Foundation Supernova Survey: motivation, design, implementation, and first data release](#)

Foley, R. J., [12 authors], **Jones, D. O.** et al., 2018, MNRAS, 475, 193F

[X-ray limits on the progenitor system of the Type Ia supernova 2017ejb](#)

Kilpatrick, C. D., [3 authors], **Jones, D. O.** et al., 2018, MNRAS, 481, 4123

[A Near-infrared Period–Luminosity Relation for Miras in NGC 4258, an Anchor for a New Distance Ladder](#)

Huang, C. D., [6 authors], **Jones, D. O.** et al., 2018, ApJ, 857, 67H

[Hydrogen-poor Superluminous Supernovae from the Pan-STARRS1 Medium Deep Survey](#)

Lunnan, R., Chornock, R., Berger, E., **Jones, D. O.** et al., 2018, ApJ, 852, 81L

[New Parallaxes of Galactic Cepheids from Spatially Scanning the Hubble Space Telescope: Implications for the Hubble Constant](#)

Riess, A. G., [8 authors], **Jones, D. O.** et al., 2018, ApJ, 855, 136R

[Type Ia Supernova Distances at Redshift \$> 1.5\$ from the Hubble Space Telescope Multi-cycle Treasury Programs: The Early Expansion Rate](#)

Riess, A. G., [15 authors], **Jones, D. O.** et al., 2018, ApJ, 853, 126R

[Revisiting the logistic map: A closer look at the dynamics of a classic chaotic population model with ecologically realistic spatial structure and dispersal](#)

Storch, L. S., Pringle, J. M., Alexander, K., **Jones, D. O.**, 2017, Theoretical Population Biology, 114, 10

[The GALEX Time Domain Survey. II. Wavelength-Dependent Variability of Active Galactic Nuclei in the PAN-STARRS1 Medium Deep Survey](#)

Hung, T., Gezari, S., **Jones, D. O.** et al., 2016, ApJ, 833, 226H

[PS1-14bj: A Hydrogen-Poor Superluminous Supernova With a Long Rise and Slow Decay](#)

Lunnan, R., Chornock, R., Berger, E., Milisavljevic, D., **Jones, D. O.** et al., 2016, ApJ, 831, 144L

[PS1-10jh Continues to Follow the Fallback Accretion Rate of a Tidally Disrupted Star](#)

Gezari, S., Chornock, R., Lawrence, A., Rest, A., **Jones, D. O.** et al., 2015, ApJ, 815L, 5G

[Zooming In on the Progenitors of Superluminous Supernovae With HST](#)

Lunnan, R., Chornock, R., Berger, E., [3 authors], **Jones, D. O.** et al., 2014, ApJ, 804, 90L

[Two SNe Ia at Redshift \$\approx 2\$: Improved Classification and Redshift Determination with Medium-band Infrared Imaging](#)

Rodney, S. A., Riess, A. G., Scolnic, D. M., **Jones, D. O.** et al., 2015, AJ, 150, 156R

[Type-Ia Supernova Rates to Redshift 2.4 from CLASH: The Cluster Lensing And Supernova Survey with Hubble](#)

Graur, O., Rodney, S. A., [25 authors], **Jones, D. O.** et al., 2014, ApJ, 783, 28G

[Three Gravitationally Lensed Supernovae behind CLASH Galaxy Clusters](#)

Patel, B., McCully, C., Jha, S. W., Rodney, S. A., **Jones, D. O.** et al., 2014, ApJ, 786, 9P

[Type Ia Supernova Rate Measurements to Redshift 2.5 from CANDELS: Searching for Prompt Explosions in the Early Universe](#)

Rodney, S. A., Riess, A. G., [9 authors] **Jones, D. O.** et al., 2014, AJ, 148, 13R

[Color Dispersion and Milky-Way-like Reddening among Type Ia Supernovae](#)

Scolnic, D. M., Riess, A. G., [4 authors], **Jones, D. O.**, 2014, ApJ, 780, 37S

[A Type Ia Supernova at Redshift 1.55 in Hubble Space Telescope Infrared Observations from CANDELS](#)

Rodney, S. A., [9 authors], **Jones, D. O.** et al., 2012, ApJ, 746, 5

[The Sloan Digital Sky Survey DR7 Spectroscopic M Dwarf Catalog I: Data](#)

West, A. A., [18 authors], **Jones, D. O.**, 2011, AJ, 141, 97W

* = Student-Led Publication