

Edward F. Schlafly
Curriculum Vitae May 2025
eschlafly@gmail.com <http://e.schlaf.ly>

ADDRESS: Space Telescope Science Institute
3700 San Martin Drive
Baltimore, MD 21218

PERSONAL: Born 17 October, 1984, US citizen

EDUCATION: Ph.D., Physics, Harvard University, 2012
Dissertation: *Dust in Large Optical Surveys*, supervised by Doug Finkbeiner
B.S., Physics, Stanford University, 2007

POSITIONS:

June 2022 – present
Associate Astronomer, Space Telescope Science Institute

August 2019 – May 2022
Research Scientist, Lawrence Livermore National Laboratory

December 2018 – August 2019
Project Scientist, Lawrence Berkeley National Laboratory

December 2015 – November 2018
Hubble Fellow, Lawrence Berkeley National Laboratory

August 2012 – November 2015
Postdoctoral Researcher, Max Planck Institut für Astronomie
Supervisor: Hans-Walter Rix

August 2007 – July 2012
Ph.D. student, Physics, Harvard University
Advisor: Douglas P. Finkbeiner

RESEARCH INTERESTS:

- Large surveys, statistics, modeling
- Interstellar dust, interstellar medium
- Galactic structure, streams, dwarf galaxies

AWARDS and FELLOWSHIPS:

- 2015 Hubble Fellowship
- 2011 Harvard Graduate School of Arts and Sciences Merit Fellowship
- 2008 Harvard Physics Purcell Fellowship
- 2007 Jeff Willick Memorial Award (astronomy), Stanford Physics
- 2007 Sterling Award for Scholastic Achievement, Stanford University
- 2007 Departmental Honors, Stanford Physics

TELESCOPE TIME:

2017	DECam Plane Survey 2	25 nights	Blanco 4m	Co-PI
2017	California Molecular Cloud Survey	ancillary survey	Sloan 2.5m	Co-PI
2017	SDSS-V Interstellar Medium Survey	survey	Sloan	WG lead
2015	DECam Plane Survey	22 nights	Blanco 4m	Co-PI
2015	APOGEE Reddening Survey	ancillary survey	Sloan 2.5m	PI

RESEARCH ADVISED:

(graduate)

2023—2024	Xingyao Shi
2020	Victor Baules (with M. D. Schneider)
2018	Jacqueline Beechert (with D. J. Schlegel)
2016—2020	Catherine Zucker (with D. P. Finkbeiner)
2012—2017	Albert Lee (with D. P. Finkbeiner)
2013—2015	Nina Hernitschek (with H. W. Rix)
2010—2015	Gregory Green (with D. P. Finkbeiner)

(undergraduate)

2024—	Sarv Parteek Singh
2022—2023	Uzair Tahamid Siam
2015	Iraj Eshghi
2014	Melih Ozcelik (with H. W. Rix)

TEACHING EXPERIENCE:

2017	Guest lecturer, Berkeley Physics 209 (graduate E&M)
2017	Guest lecturer, St. Louis Priory High School Computer Science
2009	Harvard Undergraduate Physics 15a (mechanics) lab teaching assistant
1999—2003	Aim High St. Louis Calligraphy Teacher (5 week summer school)

COLLABORATIONS:

- Roman Calibration Pipeline Lead
- Roman I-Sim Lead (Roman Image Simulator)

- DESI Survey Operations Lead (2022–2024)
- DESI Builder
- APOGEE Reddening Survey PI
- DECam Galactic Plane Survey Co-PI
- SDSS-V Dust Working Group Lead
- DECam Legacy Survey founding Co-I

PROFESSIONAL SERVICE and OUTREACH:

- Roman Galactic Plane Survey Definition Committee
- Space Telescope Science Institute Science Evaluation Committee
- Hubble Fellow Selection Committee
- Hubble Space Telescope Time Allocation Committee (Cycle 25)
- Peer reviewer for ApJ, A&A, MNRAS, PASP
- SDSS-IV Collaboration Council
- San Francisco “Discovery Day” volunteer
- Guest lecturer, Castro Valley public schools

INVITED TALKS:

- “Mapping Dust with Roman.” Roman@Yerkes meeting, 2024.
- “DESI Instrument and Operations.” DESI collaboration meeting plenary, 2023.
- “Data Visualization in Astronomy.” CSUCI Plot-a-thon, 2023.
- “Mapping dust with stellar spectra.” Harvard, 2022.
- “Commissioning the Dark Energy Spectroscopic Instrument.” Cosmopalooza, 2022.
- “DESI System Throughput From Fiber Dither Analysis.” APS, 2021.
- “DESI Positioning and Throughput Performance.” DESI Winter Meeting, plenary, 2020.
- “X-raying the Interstellar Medium.” University of Wisconsin-Madison, colloquium, 2020.
- “X-raying the Interstellar Medium.” University of Florida, colloquium, 2019.
- “Realizing the Full Potential of Large Surveys.” University of Toledo, colloquium, 2019.
- “Realizing the Full Potential of Large Surveys.” University of Utah, colloquium, 2019.
- “Realizing the Full Potential of Large Surveys.” Lawrence Livermore National Laboratory, 2019.
- “Realizing the Full Potential of Large Surveys.” University of Pittsburgh, colloquium, 2019.
- “Realizing the Full Potential of Large Surveys.” Penn State, colloquium, 2019.
- “The DECam Plane Survey.” Lawrence Livermore National Laboratory, 2018.
- “DECals & DECaPS: Surveys in and out of the Galaxy.” University of Chicago, 2018.
- “The Milky Way’s Dust in 3D.” Saint Louis Astronomical Society, public talk, 2018.
- “The Milky Way’s Dust in 3D.” Caltech, 2018.

- “The DECam Plane Survey.” University of Washington, 2018.
- “The Milky Way’s Dust in 3D.” University of Pennsylvania, colloquium, 2018.
- “The Milky Way’s Dust in 3D.” Flatiron Institute, colloquium, 2018.
- “The DECam Plane Survey and the Extinction Curve.” MPIA, 2017.
- “Dust in the Milky Way in 3D.” Berkeley, colloquium, 2017.
- “Dust and the Extinction Curve in 3D.” Institut d’astrophysique spatiale, 2017.
- “Mapping the Galaxy’s Dust in 3D.” University of Kentucky, 2016.
- “The Photometric Calibration of PS1.” European Space Astronomy Center, 2016.
- “The Optical-Infrared Extinction Curve and its Variation.” Stanford, 2016.
- “Dust Extinction and its Distribution in the Galaxy.” Mayacamas Ranch, review, 2016.
- “The Optical-Infrared Extinction Curve and its Variation.” STScI, colloquium, 2016.
- “The Optical-Infrared Extinction Curve and its Variation.” University of Washington, colloquium, 2016.
- “Mapping the Galaxy’s Dust in 3D: Results and Prospects” Hawaii, colloquium, 2016.
- “The Optical-Infrared Extinction Curve.” Strasbourg, colloquium, 2015.
- “Mapping Dust in 3D with Photometry.” EWASS, review, 2015.
- “3D dust mapping reveals that Orion forms part of a large ring of dust.” Vienna, 2015.
- “The Milky Way’s Dust in Three Dimensions.” MPIA, colloquium, 2015.
- “Dust with Gaia.” Ringberg, review, 2014.
- “Mapping the Galaxy’s Dust in 3D with PS1.” Strasbourg, colloquium, 2013.
- “PS1 and BigBOSS.” Institut Henri Poincaré, 2012.
- “Photometric Calibration of the First 1.5 Years of the PS1 Survey.” LBL, 2012.
- “Reconstructing the 3D Distribution of Dust and Stars with PS1.” Leiden, 2011.

PUBLICATION SUMMARY: (from ADS, 2025-03)

- 13 first author papers with 7,903 total citations
- 131 total papers with 27,563 total citations
- h-index 68

FIRST AUTHOR PUBLICATIONS:

1. *Correcting Turbulence-induced Errors in Fiber Positioning for the Dark Energy Spectroscopic Instrument.* E. F. Schlafly, J. Guy, K. Honscheid, et al.. 2024, AJ, 168, 263.
2. *Measuring Fiber Positioning Accuracy and Throughput with Fiber Dithering for the Dark Energy Spectroscopic Instrument.* E. F. Schlafly, D. J. Schlegel, S. BenZvi, et al.. 2024, AJ, 168, 35.
3. *Survey Operations for the Dark Energy Spectroscopic Instrument.* E. F. Schlafly, D.

Kirkby, D. J. Schlegel, et al.. 2023, AJ, 166, 259. **91 citations**

4. *The unWISE Catalog: Two Billion Infrared Sources from Five Years of WISE Imaging.* **E. F. Schlafly**, A. M. Meisner, G. M. Green, 2019, ApJ, 240, 30. **281 citations**
5. *The DECam Plane Survey: Optical photometry of two billion objects in the southern Galactic plane.* **E. F. Schlafly**, G. M. Green, D. Lang, et al., 2018, ApJ, 234, 39. **142 citations**
6. *Mapping the Extinction Curve in 3D: Structure on Kiloparsec Scales.* **E. F. Schlafly**, J. E. G. Peek, D. P. Finkbeiner, G. M. Green, 2017, ApJ, 838, 36. **44 citations**
7. *The Optical-Infrared Extinction Curve and its Variation in the Milky Way.* **E. F. Schlafly**, A. M. Meisner, A. M. Stutz, et al., 2016, ApJ, 821, 78. **228 citations**
8. *Three-dimensional Dust Mapping Reveals that Orion Forms Part of a Large Ring of Dust.* **E. F. Schlafly**, G. Green, D. P. Finkbeiner, et al., 2015, ApJ, 799, 116. **36 citations**
9. *A Map of Dust Reddening to 4.5 kpc from Pan-STARRS1.* **E. F. Schlafly**, G. Green, D. P. Finkbeiner, et al., 2014, ApJ, 789, 15. **103 citations**
10. *A Large Catalog of Accurate Distances to Molecular Clouds from PS1 Photometry.* **E. F. Schlafly**, G. Green, D. P. Finkbeiner, et al., 2014, ApJ, 786, 29. **190 citations**
11. *Photometric Calibration of the First 1.5 Years of the Pan-STARRS1 Survey.* **E. F. Schlafly**, D. P. Finkbeiner, M. Juric, et al., 2012, ApJ, 756, 158. **342 citations**
12. *Measuring Reddening with SDSS Stellar Spectra and Recalibrating SFD.* **E. F. Schlafly**, D. P. Finkbeiner, 2011, ApJ, 737, 103. **6291 citations**
13. *The Blue Tip of the Stellar Locus: Measuring Reddening with the SDSS.* **E. F. Schlafly**, D. P. Finkbeiner, D. J. Schlegel, et al., 2010, ApJ, 725, 1175. **153 citations**

2nd OR 3rd AUTHOR PUBLICATIONS:

14. *Deep DECam Y-band Follow-up of WISEA J153429.75-104303.3 (a.k.a “The Accident”).* A. M. Meisner, D. Caselden, **E. F. Schlafly**, et al.. 2023, RNAAS 7, 3, 36.
15. *The Dark Energy Camera Plane Survey 2 (DECaPS2): More Sky, Less Bias, and Better Uncertainties.* A. K. Saydjari, **E. F. Schlafly**, D. Lang, et al.. 2023, ApJS, 264, 28S. **35 citations**.
16. *unTimely: a Full-sky, Time-domain unWISE Catalog.* A. M. Meisner, D. Caselden, **E. F. Schlafly**, et al.. 2023, AJ, 165, 36M. **33 citations**.
17. *9-yr Deep Sky unWISE Coadds.* A. M. Meisner, D. Lang, **E. F. Schlafly**, et al.. 2022,

RNAAS, 6, 188M.

18. *Eight-year Full-depth unWISE Coadds*. A. M. Meisner, D. Lang, **E. F. Schlafly**, et al.. 2022, RNAAS, 6, 62M.
19. *Full-sky unWISE Coadds at Seven Years' Depth*. A. M. Meisner, D. Lang, **E. F. Schlafly**, et al.. 2021, RNAAS, 5, 200M.
20. *Six-year Static Sky unWISE Coadds*. A. M. Meisner, D. Lang, **E. F. Schlafly**, et al.. 2021, RNAAS, 5, 168MM.
21. *Pan-STARRS Photometric and Astrometric Calibration*. E. A. Magnier, **E. F. Schlafly**, D. P. Finkbeiner, et al.. 2020, ApJS, 251, 6M. **274 citations**
22. *unWISE Tomography of Planck CMB Lensing*. A. Krolewski, S. Ferraro, **E. F. Schlafly**, M. White, 2020, JCAP, 05, 047. **65 citations**
23. *Transformations from Pan-STARRS1 and UBV Filters into ZTF Filters*. M. S. Medford, J. R. Lu, **E. F. Schlafly**, 2020, RNAAS, 4, 38.
24. *A compendium of distances to molecular clouds in the Star Formation Handbook*. C. Zucker, J. S. Speagle, **E. F. Schlafly**, et al., 2020, A&A, 633, 51. **187 citations**
25. *unWISE Coadds: The Five-year Data Set*. A. M. Meisner, D. Lang, **E. F. Schlafly**, D. J. Schlegel, 2019, PASP, 131, 4504. **44 citations**
26. *A 3D Dust Map Based on Gaia, Pan-STARRS 1, and 2MASS*. G. M. Green, E. F. Schlafly, et al., 2019, ApJ, 887, 93. **989 citations**
27. *A Large Catalog of Accurate Distances to Local Molecular Clouds: The Gaia DR2 Edition*. C. Zucker, J. S. Speagle, E. F. Schlafly, et al., ApJ, 879, 125. **227 citations**
28. *Mapping Distances Across the Perseus Molecular Cloud Using CO Observations, Stellar Photometry, and Gaia DR2 Parallax Measurements*. C. Zucker, **E. F. Schlafly**, et al., 2018, ApJ, 869, 83. **105 Citations**
29. *Confirmation of a New Metal-poor Globular Cluster in the Galactic Bulge*. D. Minniti, **E. F. Schlafly**, et al., 2018, ApJ, 866, 12.
30. *Three-dimensional dust mapping in the Orion Complex, combining Gaia-TGAS, 2MASS, and WISE*. S. Rezaei Kh., C. A. L. Bailer-Jones, **E. F. Schlafly**, et al., 2018, A&A, 616, 44.
31. *Galactic reddening in 3D from stellar photometry - an improved map*. G. M. Green, **E. F. Schlafly**, et al., 2018, MNRAS, 478, 651. **406 citations**
32. *A Color-locus Method for Mapping R_V Using Ensembles of Stars*. A. Lee, G. M. Green, **E. F. Schlafly**, et al., 2018, ApJ, 854, 79.

33. *A Synoptic Map of Halo Substructures from the Pan-STARRS1 3π Survey.* E. J. Bernard, A. M. N. Ferguson, **E. F. Schlafly**, et al., 2016, MNRAS, 463, 1759. **113 citations**
34. *The stellar population structure of the Galactic disk.* J. Bovy, H.-W. Rix, **E. F. Schlafly**, et al., 2016, ApJ, 823, 30. **215 citations**
35. *Hypercalibration: A Pan-STARRS1-based Recalibration of the Sloan Digital Sky Survey Photometry.* D. P. Finkbeiner, **E. F. Schlafly**, D. J. Schlegel, et al., 2016, ApJ, 823, 30. **103 citations**
36. *Finding, Characterizing, and Classifying Variable Sources in Multi-epoch Sky Surveys: QSOs and RR Lyrae in PS1 3π data.* N. Hernitschek, **E. F. Schlafly**, B. Sesar, et al., 2016, 817, 73. **71 citations**
37. *A Three-dimensional Map of Milky Way Dust.* G. M. Green, **E. F. Schlafly**, D. P. Finkbeiner, et al., 2015, ApJ, 810, 25. **461 citations**
38. *Serendipitous discovery of a thin stellar stream near the Galactic bulge in the Pan-STARRS1 3pi Survey.* E. J. Bernard, A. M. N. Ferguson, **E. F. Schlafly**, et al., 2014, MNRAS, 443, 84. **55 citations**
39. *Galactic globular and open cluster fiducial sequences in the Pan-STARRS1 photometric system.* E. J. Bernard, A. M. N. Ferguson, **E. F. Schlafly**, et al., 2014, MNRAS, 442, 2999. **29 citations**
40. *The Complex Structure of Stars in the Outer Galactic Disk as Revealed by Pan-STARRS1.* C. T. Slater, E. Bell, **E. F. Schlafly**, et al., 2014, ApJ, 791, 9. **69 citations**
41. *Measuring Distances and Reddenings for a Billion Stars: Toward a 3D Dust Map from Pan-STARRS 1.* G. Green, **E. F. Schlafly**, D. P. Finkbeiner, et al., 2014, ApJ, 783, 114. **103 citations**
42. *Perseus I: A Distant Satellite Dwarf Galaxy of Andromeda.* N. F. Martin, **E. F. Schlafly**, C. T. Slater, et al., 2013, ApJL, 779, 10. **47 citations**
43. *Lacerta I and Cassiopeia III. Two Luminous and Distant Andromeda Satellite Dwarf Galaxies Found in the 3pi Pan-STARRS1 Survey.* N. F. Martin, C. T. Slater, **E. F. Schlafly**, et al., 2013, ApJ, 772, 15. **84 citations**
44. *The Pan-STARRS 1 Photometric Reference Ladder, Release 12.01.* E. A. Magnier, **E. F. Schlafly**, D. P. Finkbeiner, et al., 2013, ApJS, 205, 20. **308 citations**
45. *A Pan-STARRS1 View of the Bifurcated Sagittarius Stream.* C. T. Slater, E. F. Bell, **E. F. Schlafly**, et al., 2013, ApJ, 762, 6. **37 citations**

OTHER PUBLICATIONS:

46. *Identifying Missing Quasars from the DESI Bright Galaxy Survey*. S. Juneau et al., 2025, AJ, 169, 157J.
47. *Measuring σ_8 using DESI Legacy Imaging Surveys Emission-Line galaxies and Planck CMB lensing, and the impact of dust on parameter inference*. T. Karim et al, 2025, JCAP, 2, 45K.
48. *DESI 2024 VI: cosmological constraints from the measurements of baryon acoustic oscillations*. A. Adame et al., 2025, JCAP, 2, 21A.
49. *DESI 2024: Constraints on physics-focused aspects of dark energy using DESI DR1 BAO data*. K. Lodha et al., 2025, PhRvD, 111b, 3532L.
50. *Impact and mitigation of spectroscopic systematics on DESI DR1 clustering measurements*. A. Krolewski et al., 2025, JCAP, 1, 147K.
51. *Forward modeling fluctuations in the DESI LRGs target sample using image simulations*. H. Kong et al., 2025, JCAP, 1, 146K.
52. *Optimal reconstruction of baryon acoustic oscillations for DESI 2024*. E. Paillas et al., 2025, JCAP, 1, 142P.
53. *Impact of systematic redshift errors on the cross-correlation of the Lyman- α forest with quasars at small scales using DESI Early Data*. A. Bault et al., 2025, JCAP, 1, 130B.
54. *ELG spectroscopic systematics analysis of the DESI Data Release 1*. J. Yu et al., 2025, JCAP, 1, 126Y.
55. *The construction of large-scale structure catalogs for the Dark Energy Spectroscopic Instrument*. A. J. Ross et al., 2025, JCAP, 1, 125R.
56. *DESI 2024 IV: Baryon Acoustic Oscillations from the Lyman alpha forest*. A. G. Adame et al., 2025, JCAP, 1, 124A.
57. *The Atacama Cosmology Telescope DR6 and DESI: structure formation over cosmic time with a measurement of the cross-correlation of CMB lensing and luminous red galaxies*. J. Kim et al., 2024, JCAP, 12, 22K.
58. *Overview of the Fiber System for the Dark Energy Spectroscopic Instrument*. C. Poppett et al., 2024, 168, 245P.
59. *The DESI Early Data Release white dwarf catalogue*. C. Manser et al., 2024, MNRAS, 535, 254M.
60. *New Measurements of the Ly α Forest Continuum and Effective Optical Depth with LyCAN and DESI Y1 Data*. W. Turner, 2024, ApJ, 976, 143T.

61. *CMB lensing and Ly α forest cross bispectrum from DESI's first-year quasar sample.* N. Karacayli, 2024, PhRvD, 110f, 3505K.
62. *DESI Early Data Release Milky Way Survey value-added catalogue.* S. Koposov et al., 2024, MNRAS, 533, 1012K.
63. *New Strong Gravitational Lenses from the DESI Legacy Imaging Surveys Data Release 9.* C. Storfer et al., 2024, ApJS, 274, 16S.
64. *Archetype-based Redshift Estimation for the Dark Energy Spectroscopic Instrument Survey.* A. Abhijeet et al., 2024, AJ, 168, 124A.
65. *High redshift LBGs from deep broadband imaging for future spectroscopic surveys.* V. Ruhlmann-Kleider et al., 2024, JCAP, 8, 59R.
66. *The clustering of Lyman Alpha Emitting galaxies at z=2–3.* M. White, 2024, JCAP, 8, 20W.
67. *Mapping the Milky Way in 5D with 170 Million Stars.* J. Speagle et al., 2024, ApJ, 970, 121S.
68. *The Early Data Release of the Dark Energy Spectroscopic Instrument.* DESI Collaboration et al., 2024, AJ, 168, 58D.
69. *Constraints on the Spacetime Variation of the Fine-structure Constant Using DESI Emission-line Galaxies.* J. Linhua et al., 2024, ApJ, 968, 120J.
70. *The JWST Resolved Stellar Populations Early Release Science Program. V. DOLPHOT Stellar Photometry for NIRCam and NIRISS.* D. Weisz et al., 2024, ApJS, 271, 47W.
71. *The Lyman- α forest catalog from the Dark Energy Spectroscopic Instrument Early Data Release.* C. Ramirez-Perez et al., 2024, MNRAS, 528, 6666R.
72. *Validation of the Scientific Program for the Dark Energy Spectroscopic Instrument.* DESI Collaboration et al., 2024, AJ, 167, 62D.
73. *DESI z > 5 Quasar Survey. I. A First Sample of 400 New Quasars at z 4.7-6.6.* J. Yang et al., 2023, ApJS, 269, 27Y.
74. *Siena Galaxy Atlas 2020.* J. Moustakas et al., 2023, ApJS, 269, 3M.
75. *Astrometric Calibration and Performance of the Dark Energy Spectroscopic Instrument Focal Plane.* S. Kent et al., 2023, AJ, 166, 177K.
76. *The JWST Resolved Stellar Populations Early Release Science Program. II. Survey Overview.* D. Weisz et al., 2023, ApJS, 268, 15W.
77. *The DESI Bright Galaxy Survey: Final Target Selection, Design, and Validation.* C. Hahn et al., 2023, AJ, 165, 253H.

78. *Comparing the Photometric Calibration of DESI Imaging and Gaia Synthetic Photometry.* R. Zhou et al., 2023, RNAAS, 7, 105Z.
79. *Overview of the DESI Milky Way Survey.* A. P. Cooper et al., 2023, ApJ, 947, 37C.
80. *The Spectroscopic Data Processing Pipeline for the Dark Energy Spectroscopic Instrument.* J. Guy et al., 2023, AJ, 165, 144G.
81. *Target Selection and Validation of DESI Emission Line Galaxies.* A. Raichoor et al., 2023, AJ, 165, 126R.
82. *Target Selection and Validation of DESI Quasars.* E. Chaussidon et al., 2023, ApJ, 944, 107C.
83. *DESI Observations of the Andromeda Galaxy: Revealing the Immigration History of Our Nearest Neighbor.* A. Dey et al., 2023, ApJ, 944, 1D.
84. *Target Selection and Validation of DESI Luminous Red Galaxies.* R. Zhou et al., 2023, AJ, 165, 58Z.
85. *The Target-selection Pipeline for the Dark Energy Spectroscopic Instrument.* A. Myers et al., 2023, AJ, 165, 50M.
86. *The Robotic Multiobject Focal Plane System of the Dark Energy Spectroscopic Instrument (DESI).* J. Silber et al., 2023, AJ, 165, 9S.
87. *Overview of the Instrumentation for the Dark Energy Spectroscopic Instrument.* DESI Collaboration et al., 2022, AJ, 164, 207D.
88. *SDSS-V robotic focal plane system: overview of coordinate systems and transforms.* C. Sayres et al., 2022, SPIE, 12184, 47K.
89. *GIGA-Lens: Fast Bayesian Inference for Strong Gravitational Lens Modeling.* A. Gu et al., 2022, ApJ, 935, 49G.
90. *A Reanalysis of Public Galactic Bulge Gravitational Microlensing Events from OGLE-III and -IV.* N. Golovich et al., 2022, ApJS, 260, 2G.
91. *Final Targeting Strategy for the Sloan Digital Sky Survey IV Apache Point Observatory Galactic Evolution Experiment 2 North Survey.* R. Beaton et al., 2021, AJ, 162, 302B.
92. *The CATWISE2020 Catalog.* F. Marocco et al., 2021, ApJS, 253, 8M.
93. *Discovering New Strong Gravitational Lenses in the DESI Legacy Imaging Surveys.* X. Huang et al., 2021, ApJ, 909, 27H.
94. *Data-driven Stellar Models.* G. M. Green et al., 2020, AJ, 160, 61.
95. *Dynamic Observing and Tiling Strategies for the DESI Legacy Surveys.* K. J. Burleigh

et al., 2020, AJ, 160, 61.

96. *The 16th Data Release of the Sloan Digital Sky Surveys: First Release from the APOGEE-2 Southern Survey and Full Release of eBOSS Spectra*. R. Ahumada et al., 2020, ApJS, 249, 3.
97. *Gravitational Microlensing Event Statistics for the Zwicky Transient Facility*. M. S. Medford, 2020, ApJ, 897, 144.
98. *Finding Strong Gravitational Lenses in the DESI DECam Legacy Survey*. X. Huang et al., 2020, ApJ, 894, 78.
99. *Expanding the Y Dwarf Census with Spitzer Follow-up of the Coldest CatWISE Solar Neighborhood Discoveries*. A. M. Meisner et al., 2020, ApJ, 889, 74.
100. *A Galactic-scale gas wave in the solar neighbourhood*. J. Alves et al., 2020, Nature, 578, 237.
101. *Discovery of a Disrupting Open Cluster Far into the Milky Way Halo: A Recent Star Formation Event in the Leading Arm of the Magellanic Stream?*, A. M. Price-Whelan et al., 2019, ApJ, 887, 19.
102. *Deep ugrizY imaging and DEEP2/3 spectroscopy: a photometric redshift testbed for LSST and public release of data from the DEEP3 Galaxy Redshift Survey*, R. Zhou et al., 2019, MNRAS, 488, 4565.
103. *SDSS-IV MaStar: A Large and Comprehensive Empirical Stellar Spectral Library. First Release*, R. Yan et al., 2019, ApJ, 883, 175.
104. *Overview of the DESI Legacy Imaging Surveys*, A. Dey et al., 2019, AJ, 159, 168.
105. *The Fifteenth Data Release of the Sloan Digital Sky Surveys: First Release of MaNGA-derived Quantities, Data Visualization Tools, and Stellar Library*, D. S. Aguado et al., 2019, ApJS, 240, 23.
106. *Charge Diffusion Variations in Pan-STARRS1 CCDs*. E. A. Magnier et al., 2018, PASP, 130, 998, 065002.
107. *The APOGEE-2 Survey of the Orion Star-forming Complex. I. Target Selection and Validation with Early Observations*. J. Cottle et al., 2018, ApJS, 236, 27.
108. *The Complete Light-curve Sample of Spectroscopically Confirmed SNe Ia from Pan-STARRS1 and Cosmological Constraints from the Combined Pantheon Sample*. D. M. Scolnic et al., 2018, ApJ, 859, 101.
109. *The Fourteenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the Extended Baryon Oscillation Spectroscopic Survey and from the Second Phase*

- of the Apache Point Observatory Galactic Evolution Experiment.* B. Abolfathi et al., 2018, ApJS, 235, 42.
110. *UKIRT-2017-BLG-001Lb: A Giant Planet Detected through the Dust.* Y. Shvartzvald et al., 2018, ApJ, 857, 8.
 111. *The Optical/Near-infrared Extinction Law in Highly Reddened Regions.* M. Hosek et al., 2018, ApJ, 855, 13.
 112. *The 13th Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-IV Survey Mapping Nearby Galaxies at Apache Point Observatory.* F. Albareti et al., 2017, ApJS, 233, 25.
 113. *Physical Properties of 15 Quasars at $z \geq 6.5$.* C. Mazzucchelli et al., 2017, ApJ, 849, 91.
 114. *Sloan Digital Sky Survey IV: Mapping the Milky Way, Nearby Galaxies, and the Distant Universe.* M. Blanton et al., 2017, AJ, 154, 28.
 115. *Machine-learned Identification of RR Lyrae Stars from Sparse, Multi-band Data: The PS1 Sample.* B. Sesar et al., 2017, AJ, 153, 204.
 116. *Searching for Planet Nine with Coadded WISE and NEOWISE-Reactivation Images.* A. M. Meisner et al., 2017, AJ, 153, 65.
 117. *The Pan-STARRS1 Distant $z > 5.6$ Quasar Survey: More than 100 Quasars within the First Gyr of the Universe.* E. Bañados et al., 2016, ApJS, 227, 11.
 118. *Mapping the Monoceros Ring in 3D with Pan-STARRS1.* E. Morganson et al., 2016, ApJ, 825, 140.
 119. *The Time-Domain Spectroscopic Survey: Understanding the Optically Variable Sky with SEQUELS in SDSS-III.* J. J. Ruan et al., 2016, ApJ, 825, 137.
 120. *Low Surface Brightness Imaging of the Magellanic System: Imprints of Tidal Interactions between the Clouds in the Stellar Periphery.* G. Besla et al., 2016, ApJ, 825, 20.
 121. *On Galactic Density Modeling in the Presence of Dust Extinction.* J. Bovy et al., 2016, ApJ, 818, 130.
 122. *Supercal: Cross-calibration of Multiple Photometric Systems to Improve Cosmological Measurements with Type Ia Supernovae.* D. Scolnic et al., 2015, ApJ, 815, 117.
 123. *Sagittarius II, Draco II and Laevens 3: Three New Milky Way Satellites Discovered in the Pan-STARRS 1 3π Survey.* B. P. M. Laevens et al., 2015, ApJ, 813, 44.
 124. *The Nature and Orbit of the Ophiuchus Stream.* B. Sesar et al., 2015, ApJ, 809, 59.

125. *The Time Domain Spectroscopic Survey: Variable Selection and Anticipated Results*. E. Morganson et al., 2015, ApJ, 806, 244.
126. *Constraining the Radio-loud Fraction of Quasars at $z > 5.5$* . E. Bañados et al., 2015, ApJ, 804, 118.
127. *A nearby M star with Three Transiting Super-Earths Discovered by K2*. I. Crossfield et al., 2015, ApJ, 804, 10.
128. *A New Faint Milky Way Satellite Discovered in the Pan-STARRS1 3 π Survey*. B. P. M. Laevens et al., 2015, ApJ, 802, 18.
129. *The Identification of Z-dropouts in Pan-STARRS1: Three Quasars at $6.5 < z < 6.7$* . B. P. Venemans et al., 2015, ApJ, 801, 11.
130. *Systematic Uncertainties Associated with the Cosmological Analysis of the First Pan-STARRS1 Type Ia Supernova Sample*. D. Scolnic et al., 2014, ApJ, 795, 45.
131. *Cosmological Constraints from Measurements of Type Ia Supernovae Discovered during the First 1.5 yr of the Pan-STARRS1 Survey*. A. Rest et al., 2014, ApJ, 795, 44.
132. *A New Distant Milky Way Globular Cluster in the Pan-STARRS1 3pi Survey*. B. P. M. Laevens et al., 2014, ApJ, 786, L3.
133. *Measuring Quasar Variability with Pan-STARRS1 and SDSS*. E. Morganson et al., 2014, ApJ, 784, 92.
134. *Towards a complete stellar mass function of the Hyades. I. Pan-STARRS1 optical observations of the low-mass stellar content*. B. Goldman et al., 2013, A&A, 559, 43.
135. *Clustering of Sloan Digital Sky Survey III Photometric Luminous Galaxies: The Measurement, Systematics, and Cosmological Implications*. S. Ho et al., 2012, ApJ, 761, 14.
136. *The Milky Way Tomography with Sloan Digital Sky Survey. IV. Dissecting Dust*. M. Berry et al., 2012, ApJ, 757, 166.
137. *Ameliorating systematic uncertainties in the angular clustering of galaxies: a study using the SDSS-III*. A. J. Ross, et al., 2011, MNRAS, 417, 1350.
138. *CGRaBS: An All-Sky Survey of Blazar Candidates*. S. E. Healey et al., 2008, ApJS, 175, 97.