

Sedona Price

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Research Interests

Galaxy formation and evolution, high redshift galaxies, galaxy structure, gas and stellar kinematics, dynamical modeling, galaxy quenching

Education

2017 **Ph.D. Astrophysics**, *University of California, Berkeley*
Dissertation: Galaxies in the Young Universe: Structures, Masses, and Composition of Star-Forming Galaxies at $z \sim 1.5 - 3$
Advisor: Mariska Kriek
2013 **M.A. Astrophysics**, *University of California, Berkeley*
2011 **B.S. Physics**, *with honors, California Institute of Technology*

Research Positions

2022-present Samuel P. Langley PITT PACC Fellow, University of Pittsburgh, PA, USA
2017-2022 Postdoctoral Scholar, Max-Planck-Institut für extraterrestrische Physik, Garching, Germany
2011-2017 Graduate Student, UC Berkeley, CA, USA
2008-2010 Summer Undergraduate Research Fellow; undergrad. researcher, Caltech, Pasadena, CA, USA

Fellowships & Awards

2022 Samuel P. Langley PITT PACC Fellowship, University of Pittsburgh
2014 Outstanding Graduate Student Instructor Award, UC Berkeley
2012 NSF Graduate Research Fellowship, UC Berkeley
2009 Margie Lauritsen Leighton Prize, Caltech

Large Surveys and Collaborations

UNCOVER, *JWST Cycle 1 Treasury program; Survey manager (PIs: I. Labbé, R. Bezanson)*
NOEMA^{3D}, *MPG-IRAM Observatory Program IRAM/NOEMA survey (PIs: R. Genzel, R. Neri, L.J. Tacconi)*
KMOS^{3D}, *VLT/KMOS GTO survey (PIs: N.M. Förster Schreiber, D. Wilman)*
MOSDEF, *MOSFIRE Deep Evolution Field Survey, Keck Large Multi-Year Project (PIs: A.E. Shapley, A.L. Coil, M. Kriek, B. Mobasher, N.A. Reddy, B. Siana)*
3D-HST, *HST Treasury grism survey (PI: P. van Dokkum)*

Approved Observing Proposals as Co-I

ALMA, Cycle 9, 2022.1.00073.S, “A joint ALMA and JWST public Legacy Field - Abell 2744”, 37.2 hrs (*PI: S. Fujimoto*)
JWST, NIRCam/NIRSpec, Cycle 1 Treasury, #2561, “UNCOVER: Ultra-deep NIRCam and NIRSpec Observations Before the Epoch of Reionization”, 71 hrs (*PIs: I. Labbé, R. Bezanson*)
JWST, NIRSpec, Cycle 1, #2110, “Ultra-deep continuum spectroscopy of quiescent galaxies at $1.0 < z < 2.5$: chemical abundances and stellar kinematics”, 23 hrs (*PIs: M. Kriek, A. Beverage*)
ALMA, Cycle 8 Large Program, 2021.1.00280.L, “CRISTAL: a survey of gas, dust and stars on kiloparsec scales in star-forming galaxies at $z \sim 4-5$ ”, 138.7 hrs (*PIs: M. Aravena, I. de Looze, N.M. Förster Schreiber, J. González López, R. Herrera-Camus, J. Spilker, K. Tadaki*)
IRAM/NOEMA, W20, W20EM, “Resolved [CII] Kinematics and ISM Properties of a $z > 6$ Galaxy”, 30 hrs (*PI: N.M. Förster Schreiber*)
Keck, LRIS, F20/F19, U049/U160, “An Unprecedented Probe of the Multi-Phase Structure and Kinematics of Outflows at High Redshift”, 4 nights (*PI: A.E. Shapley*)
ALMA, Cycle 7, 2019.1.00477.S, “ColdSINS: an ALMA cold gas census of the deepest near-IR IFU+AO sample of $z \sim 2$ star-forming galaxies”, 15 hrs (*PI: N.M. Förster Schreiber*)

- ALMA, Cycle 7, 2019.1.01362.S, “Testing the high- z main-sequence paradigm with ALMA: from disk instability to clumps, bulge formation and quenching”, 31.6 hrs (*PI: R. Herrera-Camus*)
- ALMA, Cycles 6 & 7, 2018.1.00543.S / 2019.1.00640.S, “Simultaneous AGN and star formation driven feedback in action on a massive, typical galaxy at $z \sim 2$ ”, 19.6 hrs (*PI: R. Herrera-Camus*)
- VLT, SINFONI, Period 102, 0102.B-0062, “Witnessing angular momentum transport and the build-up of massive bulges through kiloparsec-scale kinematics of massive $z=1-1.5$ star-forming galaxies with SINFONI+AO”, 7 nights (*PI: N.M. Förster Schreiber*)
- VLT, SINFONI, Period 102, 0102.B-0087, “Connecting galaxies through cosmic time – the outer disk rotation curves and baryonic-to-dark matter ratios of low-velocity galaxies at $z=1-2$ ”, 4 nights (*PI: H. Übler*)
- Keck, MOSFIRE/LRIS, F18/S18/F17/S17/F16, U094/U258/U147/U091/U195, “The Heavy Metal Survey: The chemical enrichment, star-formation and assembly histories of $z \sim 1.4-2.3$ quiescent galaxies”, 10/1 nights (*PI: M. Kriek*)

Observing Experience

- European Southern Observatory, VLT, SINFONI (3 nights)
- W. M. Keck Observatory, Keck I 10 m telescope, MOSFIRE (10.5 nights), OSIRIS (3.5 nights), LRIS (0.5 night)

Presentations

Conferences & Workshops:

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| 2022 Sep | Talk, KICC, <i>Epoch of Galaxy Quenching 2022</i> , Cambridge, UK |
| 2022 Jul | Invited participant, Ringberg, <i>In Situ View of Galaxy Formation 2</i> , Ringberg, Germany |
| 2022 Jun | Talk, <i>LEGA-C Collaboration workshop</i> , Bruges, Belgium |
| 2021 Sep | Talk, University of Oxford, <i>Spatially Resolved Spectroscopy with Extremely Large Telescopes</i> , virtual |
| 2020 Mar | Invited talk, IAU Symposium 359, <i>GALFEED</i> , Bento Gonçalves, RS, Brazil |
| 2019 Oct | Invited participant, Lorentz Center, <i>Revolutionary Spectroscopy of Today as a Springboard to Webb</i> , Leiden, the Netherlands |
| 2019 Sep | Invited talk, KIAA, <i>Second Forum on Gas in Galaxies</i> , Beijing, China |
| 2019 Mar | Invited talk, Universität Heidelberg, <i>MOSAIC 2019 Science meeting</i> , Heidelberg, Germany |
| 2018 Dec | Talk, ESO Workshop, <i>KMOS@5</i> , Garching, Germany |
| 2018 Aug | Talk, Santa Cruz Galaxy Workshop, Santa Cruz, CA, USA |
| 2017 Jun | Talk, <i>Advances in Galaxy Evolution</i> , Ringberg, Germany |
| 2016 Sep | Talk, Keck Science Meeting, Pasadena, CA, USA |
| 2016 Aug | Talk, Santa Cruz Galaxy Workshop, Santa Cruz, CA, USA |
| 2016 Jul | Talk, Munich Joint Conference, <i>Discs in Galaxies</i> , Garching, Germany |
| 2016 Apr | Poster, STScI Spring Symposium, <i>What Shapes Galaxies?</i> , Baltimore, MD, USA |
| 2015 Aug | Talk, IAU Symposium 319, <i>Galaxies at High Redshift and Their Evolution over Cosmic Time</i> , Honolulu, HI, USA |
| 2013 May | Talk, Lorentz Center, <i>Galaxy formation from $z=5$ to $z=0$</i> , Leiden, the Netherlands |

Seminars:

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| 2022 Oct | Colloquium, Penn State University, State College, PA, USA |
| 2022 Jun | Scientific Advisory Board talk, MPE, Garching, Germany |
| 2017 Jun | Invited Cosmology seminar, UC Davis, CA, USA |
| 2016 Nov | Tea talk, Caltech, Pasadena, CA, USA |
| 2016 Nov | Lunch seminar, Carnegie Observatories, Pasadena, CA, USA |
| 2016 Nov | Invited seminar, CfA/Harvard, Cambridge, MA, USA |
| 2016 Nov | Invited lunch talk, MIT, Cambridge, MA, USA |
| 2015 Nov | Lunch talk, UC Berkeley, CA, USA |
| 2013 Oct | Lunch talk, UC Berkeley, CA, USA |

Teaching

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| 2013 | Astro C10, <i>Co-head GSI, Introductory course for non-majors</i> , UC Berkeley |
| 2012 | Astro 7b, <i>GSI, Introductory course for majors</i> , UC Berkeley |

2011	Astro C10, <i>GSI, Introductory course for non-majors</i> , UC Berkeley
2010, 2011	Physics 6, TA, <i>Sophomore physics major lab</i> , Caltech

Service

—	Referee, <i>The Astrophysical Journal (ApJ)</i>
2023-present	Pittsburgh Astrolunch co-organizer, University of Pittsburgh
2013-2016	Mentoring coordinator, <i>co-head of grad student mentoring program</i> , UC Berkeley
2014-2015	Co-supervisor, <i>undergraduate student Meng Luo</i> , UC Berkeley
2013-2015	Mentor, <i>mentoring junior graduate student</i> , UC Berkeley
2012-2015	Graduate Student Representative, <i>Astronomy Department</i> , UC Berkeley

Outreach

2020 Jan	IR Group Science and Instrument presentation, <i>Visiting college student tour</i> , MPE
2017 Apr	Solar Activities, <i>Marin Elementary STEAM day</i> , UC Berkeley
2012-2017	Annual Cal Day, <i>Astronomy Department exposition</i> , UC Berkeley
2014-2017	Mentoring Group, <i>Society of Women in Physical Sciences</i> , UC Berkeley
2016 May	Solar Viewing, <i>Ecology Center Festival</i> , UC Berkeley
2011-2015	Annual Bay Area Science Festival, <i>Science@Cal</i> , UC Berkeley
2013-2015	Annual Astronomy Demo Day, <i>Meher School 5th grade class</i> , UC Berkeley
2012-2014	Mentor, <i>Berkeley Compass Project</i> , UC Berkeley
2012 Mar	Expanding Your Horizons workshop, <i>for middle school girls</i> , UC Berkeley

First and Second Author Publications

1. **Price, S. H.**, Übler, H., Förster Schreiber, N. M., et al., “Kinematics and mass distributions for non-spherical deprojected Sérsic density profiles and applications to multi-component galactic systems,” 2022, *A&A*, **665**, A159
2. Nestor Shachar, A., **Price, S. H.**, Förster Schreiber, N. M., et al., “RC100: Rotation Curves of 100 Massive Star-Forming Galaxies at $z=0.6-2.5$ Reveal Little Dark Matter on Galactic Scales,” 2022, [arXiv:2209.12199](https://arxiv.org/abs/2209.12199)
3. **Price, S. H.**, Shimizu, T. T., Genzel, R., et al., “Rotation Curves in $z\sim 1-2$ Star-forming Disks: Comparison of Dark Matter Fractions and Disk Properties for Different Fitting Methods,” 2021, *ApJ*, **922**, 143
4. Genzel, R., **Price, S. H.**, Übler, H., et al., “Rotation Curves in $z\sim 1-2$ Star-forming Disks: Evidence for Cored Dark Matter Distributions,” 2020, *ApJ*, **902**, 98
5. **Price, S. H.**, Kriek, M., Barro, G., et al., “The MOSDEF Survey: Kinematic and Structural Evolution of Star-forming Galaxies at $1.4 \leq z \leq 3.8$,” 2020, *ApJ*, **894**, 91
6. Kriek, M., **Price, S. H.**, Conroy, C., et al., “Stellar Metallicities and Elemental Abundance Ratios of $z \sim 1.4$ Massive Quiescent Galaxies,” 2019, *ApJL*, **880**, L31
7. **Price, S. H.**, Kriek, M., Feldmann, R., et al., “Testing the Recovery of Intrinsic Galaxy Sizes and Masses of $z\sim 2$ Massive Galaxies Using Cosmological Simulations,” 2017, *ApJL*, **844**, L6
8. **Price, S. H.**, Kriek, M., Shapley, A. E., et al., “The MOSDEF Survey: Dynamical and Baryonic Masses and Kinematic Structures of Star-Forming Galaxies at $1.4 \leq z \leq 2.6$,” 2016, *ApJ*, **819**, 80
9. **Price, S. H.**, Kriek, M., Brammer, G. B., et al., “Direct Measurements of Dust Attenuation in $z \sim 1.5$ Star-Forming Galaxies from 3D-HST: Implications for Dust Geometry and Star Formation Rates,” 2014, *ApJ*, **788**, 86
10. Bergé, J., **Price, S.**, Amara, A., & Rhodes, J., “On point spread function modelling: towards optimal interpolation,” 2012, *MNRAS*, **419**, 2356

Contributing Author Publications

1. Weaver, J. R., Cutler, S. E., Pan, R., et al., including **SHP**, “The UNCOVER Survey: A first-look HST+JWST catalog of 50,000 galaxies near Abell 2744 and beyond,” 2023, [arXiv:2301.02671](https://arxiv.org/abs/2301.02671)

2. Liu, D., Förster Schreiber, N. M., Genzel, R., et al., including **SHP**, “An 600 pc View of the Strongly Lensed, Massive Main-sequence Galaxy J0901: A Baryon-dominated, Thick Turbulent Rotating Disk with a Clumpy Cold Gas Ring at $z = 2.259$,” 2023, [ApJ](#), **942**, 98
3. Sanders, R. L., Shapley, A. E., Jones, T., et al., including **SHP**, “CO Emission, Molecular Gas, and Metallicity in Main-sequence Star-forming Galaxies at $z \sim 2.3$,” 2023, [ApJ](#), **942**, 24
4. Fetherolf, T., Reddy, N. A., Shapley, A. E., et al., including **SHP**, “The MOSDEF survey: probing resolved stellar populations at $z \sim 2$ Using a new bayesian-defined morphology metric called patchiness,” 2023, [MNRAS](#), **518**, 4214-4237
5. Furtak, L. J., Zitrin, A., Weaver, J. R., et al., including **SHP**, “UNCOVERing the extended strong lensing structures of Abell 2744 with the deepest JWST imaging,” 2022, [arXiv:2212.04381](#)
6. Bezanson, R., Labbe, I., Whitaker, K. E., et al., including **SHP**, “The JWST UNCOVER Treasury survey: Ultra-deep NIRSpec and NIRCarn Observations before the Epoch of Reionization,” 2022, [arXiv:2212.04026](#)
7. Runco, J. N., Shapley, A. E., Kriek, M., et al., including **SHP**, “The MOSDEF survey: a new view of a remarkable $z = 1.89$ merger,” 2022, [MNRAS](#), **517**, 4405-4416
8. Runco, J. N., Shapley, A. E., Sanders, R. L., et al., including **SHP**, “The MOSDEF survey: towards a complete census of the $z \sim 2.3$ star-forming galaxy population,” 2022, [MNRAS](#), **517**, 4337-4354
9. Naidu, R. P., Oesch, P. A., van Dokkum, P., et al., including **SHP**, “Two Remarkably Luminous Galaxy Candidates at $z \sim 10-12$ Revealed by JWST,” 2022, [ApJL](#), **940**, L14
10. Übler, H., Förster Schreiber, N. M., van der Wel, A., et al., including **SHP**, “Galaxy kinematics and mass estimates at $z \sim 1$ from ionised gas and stars,” 2022, [arXiv:2210.03106](#)
11. Suess, K. A., Bezanson, R., Nelson, E. J., et al., including **SHP**, “Rest-frame Near-infrared Sizes of Galaxies at Cosmic Noon: Objects in JWST’s Mirror Are Smaller than They Appeared,” 2022, [ApJL](#), **937**, L33
12. Weldon, A., Reddy, N. A., Topping, M. W., et al., including **SHP**, “The MOSDEF-LRIS survey: connection between galactic-scale outflows and the properties of $z \sim 2$ star-forming galaxies,” 2022, [MNRAS](#), **515**, 841-856
13. Herrera-Camus, R., Förster Schreiber, N. M., **Price, S. H.**, et al., “Kiloparsec view of a typical star-forming galaxy when the Universe was ~ 1 Gyr old. II. Regular rotating disk and evidence for baryon dominance on galactic scales,” 2022, [A&A](#), **665**, L8
14. Nelson, E. J., Suess, K. A., Bezanson, R., et al., including **SHP**, “JWST reveals a population of ultra-red, flattened disk galaxies at $2 < z < 6$ previously missed by HST,” 2022, [arXiv:2208.01630](#)
15. Runco, J. N., Reddy, N. A., Shapley, A. E., et al., including **SHP**, “Reconciling the results of the $z \sim 2$ MOSDEF and KBSS-MOSFIRE Surveys,” 2022, [MNRAS](#), **513**, 3871
16. Shapley, A. E., Sanders, R. L., Salim, S., et al., including **SHP**, “The MOSFIRE Deep Evolution Field Survey: Implications of the Lack of Evolution in the Dust Attenuation-Mass Relation to $z \sim 2$,” 2022, [ApJ](#), **926**, 145
17. Reddy, N. A., Topping, M. W., Shapley, A. E., et al., including **SHP**, “The Effects of Stellar Population and Gas Covering Fraction on the Emergent Ly α Emission of High-redshift Galaxies,” 2022, [ApJ](#), **926**, 31
18. Fetherolf, T., Reddy, N. A., Shapley, A. E., et al., including **SHP**, “The MOSDEF survey: the dependence of H α -to-UV SFR ratios on SFR and size at $z \sim 2$,” 2021, [MNRAS](#), **508**, 1431-1445
19. Topping, M. W., Shapley, A. E., Sanders, R. L., et al., including **SHP**, “The MOSDEF survey: the mass-metallicity relationship and the existence of the FMR at $z \sim 1.5$,” 2021, [MNRAS](#), **506**, 1237
20. Suess, K. A., Kriek, M., **Price, S. H.**, & Barro, G., “Dissecting the size-mass and ΣI -mass relations at $1.0 < z < 2.5$: Galaxy Mass Profiles and Color Gradients as a Function of Spectral Shape,” 2021, [ApJ](#), **915**, 87
21. Sanders, R. L., Shapley, A. E., Jones, T., et al., including **SHP**, “The MOSDEF Survey: The Evolution of the Mass-Metallicity Relation from $z = 0$ to $z \sim 3.3$,” 2021, [ApJ](#), **914**, 19

22. Runco, J. N., Shapley, A. E., Sanders, R. L., et al., including **SHP**, “The MOSDEF survey: a comprehensive analysis of the rest-optical emission-line properties of $z \sim 2.3$ star-forming galaxies,” 2021, [MNRAS](#), **502**, 2600
23. Johansson, J., Goobar, A., **Price, S. H.**, et al., “Spectroscopy of the first resolved strongly lensed Type Ia supernova iPTF16geu,” 2021, [MNRAS](#), **502**, 510
24. Davies, R. L., Förster Schreiber, N. M., Genzel, R., et al., including **SHP**, “The KMOS^{3D} Survey: Investigating the Origin of the Elevated Electron Densities in Star-forming Galaxies at $1 \lesssim z \lesssim 3$,” 2021, [ApJ](#), **909**, 78
25. Belli, S., Contursi, A., Genzel, R., et al., including **SHP**, “The Diverse Molecular Gas Content of Massive Galaxies Undergoing Quenching at $z \sim 1$,” 2021, [ApJL](#), **909**, L11
26. Chartab, N., Mobasher, B., Shapley, A. E., et al., including **SHP**, “The MOSDEF Survey: Environmental Dependence of the Gas-phase Metallicity of Galaxies at $1.4 \leq z \leq 2.6$,” 2021, [ApJ](#), **908**, 120
27. Horstman, K., Shapley, A. E., Sanders, R. L., et al., including **SHP**, “The MOSDEF survey: differences in SFR and metallicity for morphologically selected mergers at $z \sim 2$,” 2021, [MNRAS](#), **501**, 137
28. Übler, H., Genel, S., Sternberg, A., et al., including **SHP**, “The kinematics and dark matter fractions of TNG50 galaxies at $z = 2$ from an observational perspective,” 2021, [MNRAS](#), **500**, 4597
29. Reddy, N. A., Shapley, A. E., Kriek, M., et al., including **SHP**, “The MOSDEF Survey: The First Direct Measurements of the Nebular Dust Attenuation Curve at High Redshift,” 2020, [ApJ](#), **902**, 123
30. Jeong, M.-S., Shapley, A. E., Sanders, R. L., et al., including **SHP**, “The MOSDEF Survey: Neon as a Probe of ISM Physical Conditions at High Redshift,” 2020, [ApJL](#), **902**, L16
31. Fetherolf, T., Reddy, N. A., Shapley, A. E., et al., including **SHP**, “The MOSDEF survey: an improved Voronoi binning technique on spatially resolved stellar populations at $z \sim 2$,” 2020, [MNRAS](#), **498**, 5009
32. Suess, K. A., Kriek, M., **Price, S. H.**, & Barro, G., “Color Gradients along the Quiescent Galaxy Sequence: Clues to Quenching and Structural Growth,” 2020, [ApJL](#), **899**, L26
33. Shivaiei, I., Reddy, N., Rieke, G., et al., including **SHP**, “The MOSDEF Survey: The Variation of the Dust Attenuation Curve with Metallicity,” 2020, [ApJ](#), **899**, 117
34. Davies, R. L., Förster Schreiber, N. M., Lutz, D., et al., including **SHP**, “From Nuclear to Circumgalactic: Zooming in on AGN-driven Outflows at $z \sim 2.2$ with SINFONI,” 2020, [ApJ](#), **894**, 28
35. Wilman, D. J., Fossati, M., Mendel, J. T., et al., including **SHP**, “The Regulation of Galaxy Growth along the Size-Mass Relation by Star Formation, as Traced by H α in KMOS^{3D} Galaxies at $0.7 \lesssim z \lesssim 2.7$,” 2020, [ApJ](#), **892**, 1
36. Sanders, R. L., Shapley, A. E., Reddy, N. A., et al., including **SHP**, “The MOSDEF Survey: Direct-Method Metallicities and ISM Conditions at $z \sim 1.5 - 3.5$,” 2020, [MNRAS](#), **491**, 1427
37. Sanders, R. L., Jones, T., Shapley, A. E., et al., including **SHP**, “The MOSDEF Survey: [S III] as a New Probe of Evolving Interstellar Medium Conditions,” 2020, [ApJL](#), **888**, L11
38. Wisnioski, E., Förster Schreiber, N. M., Fossati, M., et al., including **SHP**, “The KMOS^{3D} Survey: data release and final survey paper,” 2019, [ApJ](#), **886**, 124
39. Leung, G. C. K., Coil, A. L., Aird, J., et al., including **SHP**, “The MOSDEF survey: a census of AGN-driven ionized outflows at $z = 1.4 - 3.8$,” 2019, [ApJ](#), **886**, 11
40. Suess, K. A., Kriek, M., **Price, S. H.**, & Barro, G., “Half-mass radii of quiescent and star-forming galaxies evolve slowly from $0 < z < 2.5$: implications for galaxy assembly histories,” 2019, [ApJL](#), **885**, L22
41. Shimizu, T. T., Davies, R. I., Lutz, D., et al., including **SHP**, “The multiphase gas structure and kinematics in the circumnuclear region of NGC 5728,” 2019, [MNRAS](#), **490**, 5860
42. Fornasini, F. M., Kriek, M., Sanders, R. L., et al., including **SHP**, “The MOSDEF Survey: The Metallicity Dependence of X-ray Binary Populations at $z \sim 2$,” 2019, [ApJ](#), **885**, 65

43. Shapley, A. E., Sanders, R. L., Shao, P., et al., including [SHP](#), “The MOSDEF Survey: Sulfur Emission-line Ratios Provide New Insights into Evolving Interstellar Medium Conditions at High Redshift,” 2019, [ApJL](#), 881, L35
44. Übler, H., Genzel, R., Wisnioski, E., et al., including [SHP](#), “The Evolution and Origin of Ionized Gas Velocity Dispersion from $z \sim 2.6$ to $z \sim 0.6$ with KMOS^{3D},” 2019, [ApJ](#), 880, 48
45. Suess, K. A., Kriek, M., [Price, S. H.](#), & Barro, G., “Half-mass Radii for ~ 7000 Galaxies at $1.0 \leq z \leq 2.5$: Most of the Evolution in the Mass-Size Relation Is Due to Color Gradients,” 2019, [ApJ](#), 877, 103
46. Förster Schreiber, N. M., Übler, H., Davies, R. L., et al., including [SHP](#), “The KMOS^{3D} Survey: Demographics and Properties of Galactic Outflows at $z = 0.6 - 2.7$,” 2019, [ApJ](#), 875, 21
47. Wilson, T. J., Shapley, A. E., Sanders, R. L., et al., including [SHP](#), “The MOSDEF Survey: No Significant Enhancement in Star Formation or Deficit in Metallicity in Merging Galaxy Pairs at $1.5 \lesssim z \lesssim 3.5$,” 2019, [ApJ](#), 874, 18
48. Davies, R. L., Förster Schreiber, N. M., Übler, H., et al., including [SHP](#), “Kiloparsec Scale Properties of Star-Formation Driven Outflows at $z \sim 2.3$ in the SINS/zC-SINF AO Survey,” 2019, [ApJ](#), 873, 122
49. Freeman, W. R., Siana, B., Kriek, M., et al., including [SHP](#), “The MOSDEF Survey: Broad Emission Lines at $z = 1.4-3.8$,” 2019, [ApJ](#), 873, 102
50. Nelson, E. J., Tadaki, K.-I., Tacconi, L. J., et al., including [SHP](#), “Millimeter Mapping at $z \sim 1$: Dust-obscured Bulge Building and Disk Growth,” 2019, [ApJ](#), 870, 130
51. Reddy, N. A., Shapley, A. E., Sanders, R. L., et al., including [SHP](#), “The MOSDEF Survey: Significant Evolution in the Rest-frame Optical Emission Line Equivalent Widths of Star-forming Galaxies at $z = 1.4-3.8$,” 2018, [ApJ](#), 869, 92
52. Zick, T. O., Kriek, M., Shapley, A. E., et al., including [SHP](#), “The MOSDEF Survey: Stellar Continuum Spectra and Star Formation Histories of Active, Transitional, and Quiescent Galaxies at $1.4 < z < 2.6$,” 2018, [ApJL](#), 867, L16
53. Azadi, M., Coil, A., Aird, J., et al., including [SHP](#), “The MOSDEF Survey: The Nature of Mid-infrared Excess Galaxies and a Comparison of IR and UV Star Formation Tracers at $z \sim 2$,” 2018, [ApJ](#), 866, 63
54. Sanders, R. L., Shapley, A. E., Kriek, M., et al., including [SHP](#), “The MOSDEF Survey: A Stellar Mass-SFR-Metallicity Relation Exists at $z \sim 2.3$,” 2018, [ApJ](#), 858, 99
55. Shivaiei, I., Reddy, N. A., Siana, B., et al., including [SHP](#), “The MOSDEF Survey: Direct Observational Constraints on the Ionizing Photon Production Efficiency, ξ_{ion} , at $z \sim 2$,” 2018, [ApJ](#), 855, 42
56. Übler, H., Genzel, R., Tacconi, L. J., et al., including [SHP](#), “Ionized and Molecular Gas Kinematics in a $z = 1.4$ Star-forming Galaxy,” 2018, [ApJL](#), 854, L24
57. Barro, G., Kriek, M., Pérez-González, P. G., et al., including [SHP](#), “Spatially Resolved Kinematics in the Central 1 kpc of a Compact Star-forming Galaxy at $z \sim 2.3$ from ALMA CO Observations,” 2017, [ApJL](#), 851, L40
58. Leung, G. C. K., Coil, A. L., Azadi, M., et al., including [SHP](#), “The MOSDEF Survey: The Prevalence and Properties of Galaxy-wide AGN-driven Outflows at $z \sim 2$,” 2017, [ApJ](#), 849, 48
59. Shapley, A. E., Sanders, R. L., Reddy, N. A., et al., including [SHP](#), “The MOSDEF Survey: First Measurement of Nebular Oxygen Abundance at $z > 4$,” 2017, [ApJL](#), 846, L30
60. Shivaiei, I., Reddy, N. A., Shapley, A. E., et al., including [SHP](#), “The MOSDEF Survey: Metallicity dependence of the PAH emission at High Redshift and Implications for 24 micron-inferred IR luminosities and star formation rates at $z \sim 2$,” 2017, [ApJ](#), 837, 157
61. Azadi, M., Coil, A. L., Aird, J., et al., including [SHP](#), “The MOSDEF survey: AGN multi-wavelength identification, selection biases and host galaxy properties,” 2017, [ApJ](#), 835, 27

62. Momcheva, I. G., Brammer, G. B., van Dokkum, P. G., et al., including [SHP](#), “*The 3D-HST Survey: Hubble Space Telescope WFC3/G141 Grism Spectra, Redshifts, and Emission Line Measurements for ~100,000 Galaxies*,” 2016, [ApJS](#), 225, 27
63. Sanders, R. L., Shapley, A. E., Kriek, M., et al., including [SHP](#), “*The MOSDEF Survey: Detection of [OIII] λ 4363 and the Direct-method Oxygen Abundance of a Star-forming Galaxy at $z = 3.08$* ,” 2016, [ApJL](#), 825, L23
64. Shivaiei, I., Kriek, M., Reddy, N. A., et al., including [SHP](#), “*The MOSDEF Survey: The Strong Agreement between H α and UV-to-FIR Star Formation Rates for $z \sim 2$ Star-forming Galaxies*,” 2016, [ApJL](#), 820, L23
65. Sanders, R. L., Shapley, A. E., Kriek, M., et al., including [SHP](#), “*The MOSDEF Survey: Electron Density and Ionization Parameter at $z \sim 2.3$* ,” 2016, [ApJ](#), 816, 23
66. Shivaiei, I., Reddy, N. A., Shapley, A. E., et al., including [SHP](#), “*The MOSDEF Survey: Dissecting the Star Formation Rate versus Stellar Mass Relation Using H α and H β Emission Lines at $z \sim 2$* ,” 2015, [ApJ](#), 815, 98
67. Kriek, M., Shapley, A. E., Reddy, N. A., et al., including [SHP](#), “*The MOSFIRE Deep Evolution Field (MOSDEF) Survey: Rest-frame Optical Spectroscopy for ~1500 H-selected Galaxies at $1.37 < z < 3.8$* ,” 2015, [ApJS](#), 218, 15
68. Reddy, N. A., Kriek, M., Shapley, A. E., et al., including [SHP](#), “*The MOSDEF Survey: Measurements of Balmer Decrements and the Dust Attenuation Curve at Redshifts $z \sim 1.4$ -2.6*,” 2015, [ApJ](#), 806, 259
69. Shapley, A. E., Reddy, N. A., Kriek, M., et al., including [SHP](#), “*The MOSDEF Survey: Excitation Properties of $z \sim 2.3$ Star-forming Galaxies*,” 2015, [ApJ](#), 801, 88
70. Coil, A. L., Aird, J., Reddy, N., et al., including [SHP](#), “*The MOSDEF Survey: Optical Active Galactic Nucleus Diagnostics at $z \sim 2.3$* ,” 2015, [ApJ](#), 801, 35
71. Sanders, R. L., Shapley, A. E., Kriek, M., et al., including [SHP](#), “*The MOSDEF Survey: Mass, Metallicity, and Star-formation Rate at $z \sim 2.3$* ,” 2015, [ApJ](#), 799, 138
72. Skelton, R. E., Whitaker, K. E., Momcheva, I. G., et al., including [SHP](#), “*3D-HST WFC3-selected Photometric Catalogs in the Five CANDELS/3D-HST Fields: Photometry, Photometric Redshifts, and Stellar Masses*,” 2014, [ApJS](#), 214, 24

Grants

2016	AAS International Travel Grant, Munich Joint Conference
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