

## 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

- 2017-present 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

- 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

- NOEMA<sup>3D</sup>, MPG-IRAM Observatory Program IRAM/NOEMA survey (PIs: R. Genzel, R. Neri, L.J. Tacconi)
- KMOS<sup>3D</sup>, 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

- JWST, NIRSpec/NIRCAM, Cycle 1 Treasury, #2561, “UNCOVER: Ultra-deep NIRCам 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 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 <math>z=5</math> to <math>z=0</math></i> , Leiden, the Netherlands                  |

#### *Seminars:*

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| 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, <i>TA, Sophomore physics major lab</i> , Caltech                     |

### Service

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|-----------|---|
| —         | Referee, <i>The Astrophysical Journal (ApJ)</i>                                       |
| 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, [arXiv:2207.06442](https://arxiv.org/abs/2207.06442)
2. **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](https://doi.org/10.1086/371300)
3. 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](https://doi.org/10.1086/371300)
4. **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](https://doi.org/10.1086/371300)
5. 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](https://doi.org/10.1086/371300)
6. **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](https://doi.org/10.1086/371300)
7. **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](https://doi.org/10.1086/371300)
8. **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](https://doi.org/10.1086/371300)
9. Bergé, J., **Price, S.**, Amara, A., & Rhodes, J., “On point spread function modelling: towards optimal interpolation,” 2012, [MNRAS, 419, 2356](https://doi.org/10.1086/371300)

### Contributing Author Publications

1. 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](https://doi.org/10.1086/371300)
2. 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, [arXiv:2206.14812](https://arxiv.org/abs/2206.14812)
3. Runco, J. N., Shapley, A. E., Kriek, M., et al., including **SHP**, “The MOSDEF Survey: A Remarkable  $z=1.89$  Merger,” 2022, [arXiv:2206.05293](https://arxiv.org/abs/2206.05293)
4. 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  $z \sim 2.3$ ,” 2022, [arXiv:2204.06937](https://arxiv.org/abs/2204.06937)
5. Weldon, A., Reddy, N., Topping, M., et al., including **SHP**, “The MOSDEF-LRIS Survey: Connection between Galactic-scale Outflows and the Properties of  $z \sim 2$  star-forming Galaxies,” 2022, [arXiv:2203.09539](https://arxiv.org/abs/2203.09539)

6. Herrera-Camus, R., Förster Schreiber, N. M., **Price, S. H.**, et al., “*Kiloparsec view of a typical star-forming galaxy when the Universe was  $\sim 1$  Gyr old II. Regular rotating disk and evidence for baryon dominance on galactic scales,*” 2022, [arXiv:2203.00689](#)
7. 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](#)
8. 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 $\alpha$  Emission of High-redshift Galaxies,*” 2022, [ApJ, 926, 31](#)
9. Fetherolf, T., Reddy, N. A., Shapley, A. E., et al., including **SHP**, “*The MOSDEF survey: the dependence of H $\alpha$ -to-UV SFR ratios on SFR and size at  $z \sim 2$ ,*” 2021, [MNRAS, 508, 1431-1445](#)
10. 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](#)
11. Suess, K. A., Kriek, M., **Price, S. H.**, & Barro, G., “*Dissecting the size-mass and  $\Sigma I$ -mass relations at  $1.0 < z < 2.5$ : Galaxy Mass Profiles and Color Gradients as a Function of Spectral Shape,*” 2021, [ApJ, 915, 87](#)
12. 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](#)
13. 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](#)
14. Johansson, J., Goobar, A., **Price, S. H.**, et al., “*Spectroscopy of the first resolved strongly lensed Type Ia supernova iPTF16geu,*” 2021, [MNRAS, 502, 510](#)
15. Davies, R. L., Förster Schreiber, N. M., Genzel, R., et al., including **SHP**, “*The KMOS<sup>3D</sup> Survey: Investigating the Origin of the Elevated Electron Densities in Star-forming Galaxies at  $1 \lesssim z \lesssim 3$ ,*” 2021, [ApJ, 909, 78](#)
16. 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](#)
17. 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](#)
18. 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](#)
19. 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](#)
20. 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](#)
21. 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](#)
22. 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](#)
23. 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](#)
24. 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](#)
25. 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](#)
26. 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 $\alpha$  in KMOS<sup>3D</sup> Galaxies at  $0.7 \lesssim z \lesssim 2.7$ ,*” 2020, [ApJ, 892, 1](#)

27. 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
28. 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
29. Wisnioski, E., Förster Schreiber, N. M., Fossati, M., et al., including [SHP](#), “The KMOS<sup>3D</sup> Survey: data release and final survey paper,” 2019, [ApJ](#), 886, 124
30. 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
31. 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
32. 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
33. 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
34. 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
35. 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<sup>3D</sup>,” 2019, [ApJ](#), 880, 48
36. Suess, K. A., Kriek, M., [Price, S. H.](#), & Barro, G., “Half-mass Radii for  $\sim 7000$  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
37. Förster Schreiber, N. M., Übler, H., Davies, R. L., et al., including [SHP](#), “The KMOS<sup>3D</sup> Survey: Demographics and Properties of Galactic Outflows at  $z = 0.6 - 2.7$ ,” 2019, [ApJ](#), 875, 21
38. 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
39. 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
40. 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
41. 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
42. 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
43. 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
44. 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
45. 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
46. Shivaeei, I., Reddy, N. A., Siana, B., et al., including [SHP](#), “The MOSDEF Survey: Direct Observational Constraints on the Ionizing Photon Production Efficiency,  $\xi_{\text{ion}}$ , at  $z \sim 2$ ,” 2018, [ApJ](#), 855, 42



47. 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
48. 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
49. 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
50. 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
51. 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
52. 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
53. 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  $\sim 100,000$  Galaxies*,” 2016, [ApJS](#), 225, 27
54. Sanders, R. L., Shapley, A. E., Kriek, M., et al., including [SHP](#), “*The MOSDEF Survey: Detection of  $[OIII]\lambda 4363$  and the Direct-method Oxygen Abundance of a Star-forming Galaxy at  $z = 3.08$* ,” 2016, [ApJL](#), 825, L23
55. Shivaiei, I., Kriek, M., Reddy, N. A., et al., including [SHP](#), “*The MOSDEF Survey: The Strong Agreement between  $H\alpha$  and UV-to-FIR Star Formation Rates for  $z \sim 2$  Star-forming Galaxies*,” 2016, [ApJL](#), 820, L23
56. 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
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58. Kriek, M., Shapley, A. E., Reddy, N. A., et al., including [SHP](#), “*The MOSFIRE Deep Evolution Field (MOSDEF) Survey: Rest-frame Optical Spectroscopy for  $\sim 1500$  H-selected Galaxies at  $1.37 < z < 3.8$* ,” 2015, [ApJS](#), 218, 15
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## Grants

2016	AAS International Travel Grant, Munich Joint Conference
2015	AAS International Travel Grant, IAU Symposium 319
2012	NSF Graduate Research Fellowship, UC Berkeley

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