

Dr. Sam Halverson

Jet Propulsion Laboratory, California Institute of Technology, 4800 Oak Grove Dr – Pasadena, CA 91109

✉ samuel.halverson@jpl.nasa.gov

Education

The Pennsylvania State University <i>Doctor of Philosophy, "Photonic Systems for High Precision Radial Velocity Measurements"</i> Astronomy & Astrophysics	University Park, PA 2016
The Pennsylvania State University <i>Master of Science</i> Astronomy & Astrophysics	University Park, PA 2013
The University of California, Berkeley <i>Bachelor of Arts</i> Physics and Astrophysics (double major)	Berkeley, CA 2009
City College of San Francisco <i>Associate of Arts</i> Chinese (Mandarin)	San Francisco, CA 2006

Appointments & Experience

Jet Propulsion Laboratory, California Institute of Technology <i>Scientist</i> Exoplanet discovery and stellar activity characterization using ground and space-based observations. Instrumentation development for exoplanet detection and characterization.	Exoplanet Atmospheres Group 2025 –
Jet Propulsion Laboratory, California Institute of Technology <i>Astronomer, Optical Engineer</i> Exoplanet discovery and stellar activity characterization using ground and space-based observations. Instrumentation development for exoplanet detection and characterization.	High Contrast Imaging Group 2019 – 2025
Massachusetts Institute of Technology <i>Sagan Postdoctoral Fellow</i> Instrumentation development for high resolution Doppler radial velocity spectrometers. Laboratory testing and performance simulations for large-scale multiplexed fiber integral field spectrometers.	Kavli Institute for Astrophysics 2018 – 2019
University of Pennsylvania <i>Sagan Postdoctoral Fellow</i> Instrument design and science survey simulation for seeing-limited and diffraction-limited precision radial velocity spectrometers in the optical and near-infrared.	Physics & Astronomy Department 2016 – 2018
The Pennsylvania State University <i>Graduate Research Assistant, Advisor: Suvrath Mahadevan</i> Development of photonic systems and analysis tools to improve the wavelength calibration, radial velocity stability, and efficiency of near-infrared and optical spectrometers for exoplanet surveys.	Astronomy & Astrophysics Department 2010 – 2016
University of California Berkeley <i>Researcher, Advisor: Andrew Howard</i> Combined stellar radial velocity and astrometric data to constrain masses of low-mass companions orbiting nearby Sun-like stars.	Astronomy Department 2010
University of California Berkeley <i>Research assistant, Advisor: Jerry Edelstein</i> Design of optomechanical hardware, control software, and data reduction software for an externally dispersed Doppler interferometer for exoplanet discovery.	Space Sciences Laboratory 2007 – 2009

Honors & Awards

- 2023:** *JPL Team Achievement Award*, Modeling, error budgeting, and systems engineering for the successful PDR (HISPEC)
- 2022:** *JPL Team Achievement Award*, Final on-time delivery of wavefront-sensing and control algorithms (Roman CGI)
- 2021:** *JPL Voyager Award*, For leading the design, execution, and analysis of critical commissioning tests for the NEID high-precision Doppler Spectrometer.
- 2021:** *NASA Group Achievement Award*, For development and delivery of the state-of-the-art NEID radial velocity spectro-

graph and port adapter to the WIYN 3.5-meter telescope on Kitt Peak.

2020: *JPL Team Achievement Award*, Successful delivery of wavefront sensing and control algorithm library (Roman CGI)

2016: *NASA Sagan Postdoctoral Fellowship*, NASA Exoplanet Science Institute

2016: *Lab Bench to Commercialization Award*, Penn State University

2015: *Downsbrough Graduate Fellowship*, Penn State University

2013, 2015: *Research Grant-in-Aid Award*, Sigma-Xi Research Society

2013: *Brumbach Fellowship*, Penn State University

2010 – 2013: *Bunton-Waller Fellowship*, Penn State University

2012 – 2013: *Zaccheus Daniel Award*, Penn State University

2012: *NSF Graduate Fellowship Honorable Mention*, National Science Foundation

2010 – 2012: *Braddock-Roberts Fellowship*, Penn State University

2009: *NASA Group Achievement Award*, Space Interferometer Mission (SIM) Planet Finding Capability Study Team

2009: *Physics Undergraduate Research Scholarship*, UC Berkeley Physics Department

2006: *Honors Certificate*, City College of San Francisco

2005: *Kerkhof Memorial Mathematics Scholarship*, City College of San Francisco

Major Grants & Competitive Funding Awards

Total awards as PI or Co-PI:	\$2,855,000
Total awards as Co-I:	\$20,534,490

Individual grants and awards.....

The Young Active sub-Saturn Survey: Measuring Activity Timescales and Evolution	\$643,000 (PI)
<i>NASA Exoplanet Research Program</i>	2024 – 2027
A Deep Search for Planets with the Keck Planet Finder	\$780,490 (Co-I)
<i>NSF Astronomy and Astrophysics Research Grants program</i>	2024 – 2027
Generalizing deep learning based EPRV measurements of exoplanet-hosting stars	\$50,000 (Co-I)
<i>JPL Innovative Spontaneous Concept Research and Technology Development program</i>	2024
Precursor science with the Keck Planet Finder and PARVI: approaching the ‘E’ in EPRV	\$750,000 (PI)
<i>JPL-Caltech President’s and Director’s Research and Development Fund</i>	2023 – 2026
Keck Planet Finder Stellar Obliquity Survey	\$663,000 (Co-I)
<i>NASA Exoplanet Research Program</i>	2023 – 2026
A community driven, modular data-pipeline architecture to push EPRV into the 1 cm/s era	\$479,000 (Co-I)
<i>NASA Extreme Precision Radial Velocity Foundation Science</i>	2023 – 2025
The Keck Planet Finder	\$6,507,079 (Co-I, Instrument Scientist)
<i>NSF Mid-Scale Innovation Program</i>	2020 – 2023
Exploring stellar activity with NEID - NASA’s flagship Doppler radial velocity instrument	\$615,000 (PI)
<i>JPL Topical Research and Technology Development program</i>	2020 – 2023
Measuring extremely precise radial velocities using deep learning	\$216,000 (Co-I)
<i>JPL Topical Research and Technology Development program</i>	2022 – 2023
Staring at the Sun – leveraging the Keck Planet Finder to better understand stellar activity	\$25,000 (PI)
<i>JPL Researchers on Campus Program</i>	2022 – 2023
Development of a novel stellar activity measurement spectrometer	\$398,000 (PI)
<i>JPL-Caltech President’s and Director’s Research and Development Fund</i>	2020 – 2022
Exploring stellar activity in the Sun using ground-based precision radial velocity systems	\$25,000 (PI)
<i>JPL Researchers on Campus Program</i>	2020 – 2021
Visible Light Adaptive Optics for Extreme Precision Radial Velocities	\$43,000 (Co-I)
<i>JPL Innovative Spontaneous Concept Research and Technology Development program</i>	2020 – 2021

A Novel Optical Etalon for Precision Radial Velocity Measurements <i>NASA Strategic Astrophysics Technology Program</i>	\$2,100,000 (Co-I) 2019 – 2022
Enabling Technologies for Extreme Precision Radial Velocities <i>Sagan Postdoctoral Fellowship Program</i>	\$324,000 (PI) 2016 – 2019
A robust, high magnification ball lens microscope <i>Penn State Lab Bench to Commercialization</i>	\$75,000 (Co-PI) 2016 – 2017
NEID: NN-EXPLORE Exoplanet Investigations with Doppler Spectroscopy <i>NASA ROSES Extreme Precision Doppler Spectrometer Program</i>	\$9,695,894 (Co-I) 2015 – 2021

Advising & Mentoring experience

Undergraduate Students

Abby Burrows: Dartmouth. June 2021 - September 2023 (JPL Intern). Line-by-line analyses of Solar and active star spectra in high precision radial velocity surveys. Research publish in [AJ, Burrows et al. 2024](#). Now a Business Analyst at McKinsey & Company.

Tamar Ervin: UCLA. June 2021 - April 2022 (JPL Intern). Development of ‘SolAster’, an automated pipeline for understanding stellar activity in Solar radial velocities. Research published in [AJ, Ervin et al. 2022](#). Now a graduate student at UC Berkeley.

Jared Siegel: University of Chicago. June 2021 - present (Caltech SURF student). Developing line-by-line activity metrics for tracking and removing stellar activity in Sun-like stars. Research published in [ApJ, Siegel et al. 2022](#). Now a graduate student at Princeton.

Kingsley Ehrich: UC Berkeley. June 2022 - September 2023 (JPL Intern). Development of a spectral line analysis code for diagnosing rotationally-modulated stellar activity. Now a graduate student at University of Florida.

Sarah Jiang: Space Telescope Science Institute. July 2022 - November 2022. Co-advised with Arpita Roy (STSci). Radial velocity studies of activity signals in Epsilon Eridani. Research published [AJ, Jiang et al.2023, accepted](#)

Elizabeth Gonzalez: Columbia. June 2022 - August 2022 (JPL Intern). Co-advised with Jennifer Burt (JPL). Gaussian-process modeling of solar activity and radial velocities. Now a graduate student at Penn State.

Evelyn Allsup: UT Austin. May 2023 - August 2023 (JPL Intern). Analysis of high resolution solar spectra during coronal mass ejection events.

Graduate Students

Ryan Rubenzahl: PhD student at Caltech (co-advisor). June 2020 - July 2024. Advised on instrumentation development for a dedicated solar calibrator for the Keck Planet Finder, analysis of high resolution solar spectra, and exoplanet obliquity measurements. Recent solar work published in [PASP, Rubenzahl et al. 2023](#). Now a postdoctoral fellow at the Flatiron Institute.

Christian Gilbertson: PhD student at Penn State (co-advised). May 2022 - October 2023 (JPL Intern). Advised on the development of a fully data-driven radial velocity, stellar activity, and telluric model measurement pipeline. Research submitted to ApJ (Gilbertson et al. submitted). Now a postdoctoral fellow at Sandia National Labs.

Postdoctoral Fellows

Dr. Ashley Baker: 51 Peg b Fellow at Caltech (tertiary mentor). August 2018 - June 2022. Advised on the development of a novel UV spectrometer for measuring stellar activity ([SPIE, Baker et al. 2022](#)), and on the design and construction of a dedicated instrument concept for probing exoplanet atmospheres. Latter research published in [PASP, Baker et al. 2019](#). Now a member of the technical staff at Caltech Optical Observatories.

Dr. Jacob Luhn: JPL NASA Postdoctoral Program Fellow. September 2024 - present. Advising on stellar activity modeling and mitigation strategies for extremely precise radial velocity measurements using ground-based exoplanet instruments.

Leadership Roles & Collaborations

2024 – : *SHERA*, a space-borne precision astrometry mission concept designed to search for Earth-like planets orbiting nearby binary stars (instrument & science team member).

2022 – : *High resolution Infrared SPectrograph for Exoplanet Characterization (HISPEC)*, a near-infrared, single mode fiber-fed diffraction-limited instrument for Keck Observatory (instrument team member).

2019 – : *The Palomar Radial Velocity Instrument (PARVI)*, a near-infrared, diffraction-limited radial velocity spectrometer for the 200" Hale telescope (science and instrument team member)

2015 – : *The Keck Planet Finder*, an ultra-stable, high resolution optical spectrometer for Keck Observatory (Instrument Scientist, Project Scientist).

2014 – : *The Extreme Precision Doppler Spectrometer (NEID)*, a high resolution, ultra-stable optical spectrometer for the 3.5 meter WIYN telescope (Architect)

2011 – : *The Habitable-zone Planet Finder*, a high resolution, near-infrared spectrometer for the 10 meter Hobby-Eberly Telescope (Architect)

2019 – 2022: *Roman Space Telescope Coronagraph*, a high-contrast imaging instrument part of the Roman Space Telescope (wavefront sensing and control team)

2020 – 2021: *STellar Activity Recorder and Spectro-Photometric ObservaTory (STARSPOT)*, a proposed Astrophysics Explorers Mission of Opportunity (science and instrument team member)

2019 – 2020: *Origins Space Telescope*, a far-infrared flagship mission concept study (science study team member)

2018 – 2019: *Large Lenslet Array Magellan Spectrograph (LLAMAS)*, a wide-field (37" x 37") Integral Field Spectrograph for the 6.5-meter Magellan Telescopes (instrument team member).

2016 – 2019: *The MINiature Exoplanet Radial Velocity Array - Red (MINERVA-red)*, a diffraction-limited spectrometer on a 0.7 meter telescope (instrument & science team member)

2016 – 2019: *EarthFinder*, a space-borne precision radial velocity mission concept study (science simulation lead and instrument team member).

2011 – 2015: *The Apache Point Observatory Galactic Evolution Explorer*, a near-infrared, multi-object spectrometer part of the Sloan Digital Sky Survey (collaborator)

2007 – 2010: *TripleSpec Exoplanet Discovery Instrument*, a near-infrared, externally dispersed interferometer used as a Doppler velocimeter (student research assistant)

2008: *The Space Interferometer Mission*, a former NASA astrometric observatory (member of science simulation team)

2008: *The Attempt To Observe Outer-planets In Non-single-stellar Environments*, a ground-based radial-velocity survey designed to detect low-mass companions in multi-star systems (student research assistant)

Service & Committees

Referee: Astronomy & Astrophysics (A&A), the Astrophysical Journal (ApJ), Proceedings of Astronomical Society of the Pacific (PASP), Journal of Astronomical Telescopes, Instruments, and Systems (JATIS), Geosciences, Applied Optics

Invited review panelist: NASA ROSES Exoplanet Research Program (XRP) (4x), NSF Astronomy and Astrophysics Research Grants, NASA Earth and Space Science Fellowship Program, NOIRLab Time Allocation Committee (5x semesters, 1x as panel chair).

Reviewer: NASA Small Business Innovation Research / Small Business Technology Transfer program (technical monitor for multiple exoplanet-based projects), JPL internal funding programs (subject matter expert for exoplanet instrumentation development proposals).

2024 – : Invited Expert Author in instrumentation, 'State of the Field' for extremely precise radial velocity measurements, Annual Review of Astronomy and Astrophysics

2022 – : Invited Steering Committee member, Extreme Precision Radial Velocity Research Coordination Network

2022 – 2023: Invited Expert Author, Astrophotonics Community Roadmap (JPhys Photonics)

2020 – 2024: Member of PhD thesis committee for graduate student Ryan Rubenzahl (Caltech)

2019 – 2021: Invited member of NASA/NSF Extreme Precision Radial Velocity (EPRV) Working Group – lead for instrumental error sub-group

2018, 2019, 2020: Invited Lecturer, NASA Exoplanet Science Institute Sagan Summer School

2015: Science Organizing Committee, Emerging Researchers in Exoplanet Science I conference (PSU)

Invited Seminars & Colloquia

- 2025:** *The Keck Planet Finder: commissioning and early science results*, Extreme Precision Radial Velocity Workshop 6
- 2023:** *The Road to exo-Earths: Doppler Velocimetry in the 2020s*, UCLA Physics & Astronomy Department
- 2022:** *Instrumental challenges in the EPRV era – the path towards 10 cm s^{-1}* , NASA Extreme Precision Radial Velocity Research Coordination Network colloquium
- 2021:** *Pushing the limits of exoplanet discovery with the Keck Planet Finder*, George Mason University colloquium (remote)
- 2020:** *Pushing the limits of exoplanet discovery with the Keck Planet Finder*, IPAC seminar (remote)
- 2019:** *Error budgets in extreme precision radial velocity measurements*, [Extreme Precision Radial Velocity IV conference](#), Grindelwald, Switzerland
- 2019:** *The Keck Planet Finder instrument*, Yale exoplanet seminar
- 2019:** *Hunting for exo-Earths from the ground with Doppler velocimetry*, Sagan fellow symposium, Pasadena CA
- 2018:** *The NEID precision radial velocity system*, Harvard Exoplanets Pizza Lunch
- 2018:** *The Habitable-zone Planet Finder*, Keck Precision Radial Velocity Landscape Symposium, Pasadena CA
- 2018:** *Instrumental challenges of precision radial velocity measurements*, Sagan Summer workshop, Pasadena CA
- 2017:** *Next-generation planet hunters in the optical and near-Infrared*, JPL astro colloquium
- 2017:** *Towards the discovery of Exo-Earths and habitable worlds*, Lockheed Martin Advanced Technology Center seminar
- 2016:** *Next generation exoplanet discovery instruments in the optical and near-infrared*, Notre Dame astrophysics seminar
- 2015:** *Development of Fabry-Perot interferometers for radial velocity instruments*, [Pathways towards habitable worlds II](#), Bern Switzerland
- 2015:** *The Habitable-zone Planet Finder Instrument – Towards 1 m s^{-1} precision in the NIR*, Yale exoplanet seminar
- 2013:** *Pushing the limits of radial velocity precision in the near-infrared*, NASA GSFC astrophysics seminar

Other talks

- 2022:** *Solar activity studies with NEID and SDO (remote)*, [GPRV workshop](#), Oxford UK (remote)
- 2018:** *Overview of the Keck Planet finder – design and science goals*, Boston Area Exoplanet Science Meeting, MA
- 2018:** *Doppler velocimetry in the optical and near-infrared*, UCSC seminar
- 2017:** *From M to R – Enabling technologies for characterizing exo-Earths from the ground*, MIT lunch seminar
- 2017:** *Next-generation planet hunters in the optical and NIR*, [Precision Spectroscopy: Towards Earth 2.0](#), São Paulo, Brazil
- 2016:** *Photonic System for High Precision Radial Velocity Measurements*, AAS 2016, Kissimmee FL
- 2015:** *An overview of the The Habitable-zone Planet Finder Instrument*, Emerging Researchers in Exoplanet Science Symposium, State College PA

Technical skills

Optical Systems: Experience in design, construction, alignment, and testing of single object and multi-object high resolution optical and near-infrared spectrometers and imaging systems

Photonics: Development, assembly and performance verification of microscopic and macroscopic photonic systems, including miniature optical fiber devices for high resolution spectroscopy. Extensive experience in the testing and characterization of specialized single-mode and multi-mode optical fibers

Spectroscopy: Development of spectroscopic frequency standards and calibration sources for high resolution spectrometers, such as stabilized Fabry-Perot cavities, broadband optical frequency combs

Systems Engineering: Experience in deriving realistic instrument performance and error budgets for large-scale projects, systems engineering of multifaceted optical systems – including STOP analysis

Detectors: Experience in the use and characterization of large-format scientific CMOS and CCD detectors in both the optical and near-infrared

Data Reduction and Processing: Extensive observing experience processing spectroscopic and imaging data for scientific measurements, both for astronomical imaging and spectroscopy

Observing: Extensive observing experience on large astronomical telescopes, including telescopes at Keck, Palomar,

AAT, and & Lick Observatories

Software: python, IDL, Zemax (optical design), TFCalc (optical coating simulations), GSolver (diffraction grating simulations)

Professional memberships

SPIE, The Optical Society (OSA), American Astronomical Society (AAS)

Patents

Optical fiber scramblers, S. Mahadevan, **S. Halverson**, A. Roy. U.S. Patent Application 62/204,206, filed August 2015.

A Robust Microscope for External Cell Phone Attachment, A. Roy, S. Mahadevan, **S. Halverson**, Pending

Publications

ADS listings: [Refereed articles link](#), [Non-refereed articles link](#)

Total 108 accepted refereed papers (+5 submitted), 50 SPIE publications, 10 other non-refereed publications

3982 citations, h-index 29

Refereed journal publications – *denotes first author or directly supervised student publication

An Obliquity Measurement of the Hot Neptune TOI-1694b, Handley, L. B., Howard, A. W., Rubenzahl, R. A., Dai, F., Tyler, D., Lee, R. A., Giacalone, S., Isaacson, H., Fulton, B., Householder, A., **Halverson, S.**, Roy, A., & Walawender, J. (2025), *AJ*, 169, 212.

Searching for GEMS: TOI-5688 A b, a Low-density Giant Orbiting a High-metallicity Early M-dwarf, Reji, V., Kanodia, S., Ninan, J. P., Cañas, C. I., Libby-Roberts, J., Lin, A. S. J., Gupta, A. F., Swaby, T. N., Larsen, A., Kobulnicky, H. A., Choi, P. I., Evans, N., Santomenna, S., Winnick, I., Yu, L., Alvarado-Montes, J. A., Bender, C. F., Bernabó, L. M., Blake, C. H., Cochran, W. D., Diddams, S. A., **Halverson, S.**, Han, T., Hearty, F., Logsdon, S. E., Mahadevan, S., McElwain, M. W., Monson, A., Robertson, P., Ojha, D. K., Roy, A., Schwab, C., Stefansson, G., & Wright, J. (2025), *AJ*, 169, 187.

Quantification of broadband chromatic drifts in Fabry-Perot resonators for exoplanet science, Kreider, M. K., Fredrick, C., Diddams, S. A., Terrien, R. C., Mahadevan, S., Ninan, J. P., **Halverson, S.**, Bender, C. F., Hearty, F., Mitchell, D., Rajagopal, J., Roy, A., Schwab, C., & Wright, J. T. (2025), *Nature Astronomy*.

Gaia-4b and 5b: Radial Velocity Confirmation of Gaia Astrometric Orbital Solutions Reveal a Massive Planet and a Brown Dwarf Orbiting Low-mass Stars, Stefansson, G., Mahadevan, S., Winn, J. N., Marcussen, M. L., Kanodia, S., Albrecht, S., Fitzmaurice, E., Mikulskytė, O., Cañas, C. I., Espinoza-Retamal, J. I., Zwart, Y., Krolikowski, D. M., Hotnisky, A., Robertson, P., Alvarado-Montes, J. A., Bender, C. F., Blake, C. H., Callingham, J. R., Cochran, W. D., Delamer, M., Diddams, S. A., Dong, J., Fernandes, R. B., Giovinnazzi, M. R., **Halverson, S.**, Libby-Roberts, J., Logsdon, S. E., McElwain, M. W., Ninan, J. P., Rajagopal, J., Reji, V., Roy, A., Schwab, C., & Wright, J. T. (2025), *AJ*, 169, 107.

Jitter Across 15 yr: Leveraging Precise Photometry from Kepler and TESS to Extract Exoplanets from Radial Velocity Time Series, Beard, C., Robertson, P., Lubin, J., Han, T., Holcomb, R., Premnath, P., Butler, R. P., Dalba, P. A., Holden, B., Blake, C. H., Diddams, S. A., Gupta, A. F., **Halverson, S.**, Krolikowski, D. M., Li, D., Lin, A. S. J., Logsdon, S. E., Lubar, E., Mahadevan, S., McElwain, M. W., Ninan, J. P., Paredes, L. A., Roy, A., Schwab, C., Stefansson, G., Terrien, R. C., & Wright, J. T. (2025), *AJ*, 169, 92.

Origins of Super Jupiters: TOI-2145b has a Moderately Eccentric and Nearly Aligned Orbit, Dong, J., Chontos, A., Zhou, G., Stefansson, G., Wang, S., Huang, C. X., Gupta, A. F., **Halverson, S.**, Kanodia, S., Luhn, J. K., Mahadevan, S., Monson, A., Alvarado-Montes, J. A., Ninan, J. P., Robertson, P., Roy, A., Schwab, C., & Wright, J. T. (2025), *AJ*, 169, 4.

The NEID Earth Twin Survey. I. Confirmation of a 31 Day Planet Orbiting HD 86728, Gupta, A. F., Luhn, J. K., Wright, J. T., Mahadevan, S., Robertson, P., Krolikowski, D. M., Ford, E. B., Cañas, C. I., **Halverson, S.**, Lin, A. S. J., Kanodia, S.,

Fitzmaurice, E., Gilbertson, C., Bender, C. F., Blake, C. H., Dong, J., Giovinazzi, M. R., Logsdon, S. E., Monson, A., Ninan, J. P., Rajagopal, J., Roy, A., Schwab, C., & Stefánsson, G. (2025), AJ, 169, 1.

A Testbed for Tidal Migration: The 3D Architecture of an Eccentric Hot Jupiter HD 118203 b Accompanied by a Possibly Aligned Outer Giant Planet, Zhang, J., Huber, D., Weiss, L. M., Xuan, J. W., Burt, J. A., Dai, F., Saunders, N., Petigura, E. A., Rubenzahl, R. A., Winn, J. N., Wang, S. X., Van Zandt, J., Brodheim, M., Claytor, Z. R., Crossfield, I., Deich, W., Fulton, B. J., Gibson, S. R., **Halverson, S.**, Hill, G. M., Holden, B., Householder, A., Howard, A. W., Isaacson, H., Kaye, S., Lanclos, K., Laher, R. R., Lubin, J., Payne, J., Roy, A., Schwab, C., Shaum, A. P., Walawender, J., Wishnow, E., & Yeh, S. (2024), AJ, 168, 295.

Earths within Reach: Evaluation of Strategies for Mitigating Solar Variability using 3.5 years of NEID Sun-as-a-Star Observations, Ford, E. B., Bender, C. F., Blake, C. H., Gupta, A. F., Kanodia, S., Lin, A. S. J., Logsdon, S. E., Luhn, J. K., Mahadevan, S., Palumbo, M. L., Terrien, R. C., Wright, J. T., Zhao, J., **Halverson, S.**, Hunting, E., Robertson, P., Roy, A., & Stefánsson, G. (2024), AJ submitted.

The OATMEAL Survey. I. Low Stellar Obliquity in the Transiting Brown Dwarf System GPX-1, Giacalone, S., Dai, F., Zanazzi, J. J., Howard, A. W., Dressing, C. D., Winn, J. N., Rubenzahl, R. A., Carmichael, T. W., Vowell, N., Kesseli, A., **Halverson, S.**, Isaacson, H., Brodheim, M., Deich, W., Fulton, B. J., Gibson, S. R., Hill, G. M., Holden, B., Householder, A., Kaye, S., Laher, R. R., Lanclos, K., Payne, J., Petigura, E. A., Roy, A., Schwab, C., Shaum, A. P., Sirk, M. M., Smith, C., Stefánsson, G., Walawender, J., Wang, S. X., Weiss, L. M., & Yeh, S. (2024), AJ Accepted.

Redshifted Sodium Transient Near Exoplanet Transit, Oza, A. V., Seidel, J. V., Hoeijmakers, H. J., Unni, A., Kesseli, A. Y., Schmidt, C., Thirupathi, S., Gebek, A., Meyer zu Westram, M., Sousa, S., Bello-Arufe, A., Lopes, R., Hu, R., Fisher, C., Charnoz, S., Baker, A. D., **Halverson, S.**, de Kleer, K., Schneider, N., Psaridi, A., Lendl, M., Wytttenbach, A., Bhatnagar, I., & Johnson, R. E. (2024), AJ accepted.

Searching for GEMS: Characterizing Six Giant Planets around Cool Dwarfs, Kanodia, S., Gupta, A. F., Canas, C. I., Marta Bernabo, L., Reji, V., Han, T., Brady, M., Seifahrt, A., Cochran, W. D., Morrell, N., Basant, R., Bean, J., Bender, C. F., de Beurs, Z. L., Bieryla, A., Birkholz, A., Brown, N., Chapman, F., Ciardi, D. R., Clark, C. A., Cotter, E. G., Diddams, S. A., **Halverson, S.**, Hawley, S., Hebb, L., Holcomb, R., Howell, S. B., Kobulnicky, H. A., Kowalski, A. F., Larsen, A., Libby-Roberts, J., Lin, A. S. J., Lund, M. B., Luque, R., Monson, A., Ninan, J. P., Parker, B. A., Patel, N., Rodruck, M., Ross, G., Roy, A., Schwab, C., Stefánsson, G., Thoms, A., & Vanderburg, A. (2024), AJ accepted.

A Testbed for Tidal Migration: the 3D Architecture of an Eccentric Hot Jupiter HD 118203 b Accompanied by a Possibly Aligned Outer Giant Planet, Zhang, J., Huber, D., Weiss, L. M., Xuan, J. W., Burt, J. A., Dai, F., Saunders, N., Petigura, E. A., Rubenzahl, R. A., Winn, J. N., Wang, S. X., Van Zandt, J., Brodheim, M., Claytor, Z. R., Crossfield, I., Deich, W., Fulton, B. J., Gibson, S. R., Hill, G. M., Holden, B., Householder, A., **Halverson, S.**, Howard, A. W., Isaacson, H., Kaye, S., Lanclos, K., Laher, R. R., Lubin, J., Payne, J., Roy, A., Schwab, C., Shaum, A. P., Walawender, J., Wishnow, E., & Yeh, S. (2024), AJ accepted.

Utilizing Photometry from Multiple Sources to Mitigate Stellar Variability in Precise Radial Velocities: A Case Study of Kepler-21, Beard, C., Robertson, P., Giovinazzi, M. R., Akana Murphy, J. M., Ford, E. B., **Halverson, S.**, Han, T., Holcomb, R., Lubin, J., Luque, R., Premnath, P., Bender, C. F., Blake, C. H., Gong, Q., Isaacson, H., Kanodia, S., Li, D., Lin, A. S. J., Logsdon, S. E., Lubar, E., McElwain, M. W., Monson, A., Ninan, J. P., Rajagopal, J., Roy, A., Schwab, C., Stefánsson, G., Terrien, R. C., & Wright, J. T. (2024), AJ accepted.

The HD 191939 Exoplanet System is Well-Aligned and Flat, Lubin, J., E. A. Petigura, J. Van Zandt, C. Beard, F. Dai, **S. Halverson**, R. Holcomb, A. W. Howard, H. Isaacson, J. Luhn, P. Robertson, R. A. Rubenzahl, G. Stefánsson, J. N. Winn, M. Brodheim, W. Deich, G. M. Hill, S. R. Gibson, B. Holden, A. Householder, R. R. Laher, K. Lanclos, J. Payne, A. Roy, R. Smith, A. P. Shaum, C. Schwab, and J. Walawender (2024), AJ accepted.

Asteroseismology of the Nearby K-Dwarf σ Draconis using the Keck Planet Finder and TESS, Hon, M., Huber, D., Li, Y., Metcalfe, T. S., Bedding, T. R., Ong, J., Chontos, A., Rubenzahl, R., **Halverson, S.**, García, R. A., Kjeldsen, H., Stello, D., Hey, D. R., Campante, T., Howard, A. W., Gibson, S. R., Rider, K., Roy, A., Baker, A. D., Edelstein, J., Smith, C., Fulton, B.

J., Walawender, J., Brodheim, M., Brown, M., Chan, D., Dai, F., Deich, W., Gottschalk, C., Grillo, J., Hale, D., Hill, G. M., Holden, B., Householder, A., Isaacson, H., Ishikawa, Y., Jelinsky, S. R., Kassis, M., Kaye, S., Laher, R., Lanclos, K., Lee, C.-H., Lilley, S., McCarney, B., Miller, T. N., Payne, J., Petigura, E. A., Poppett, C., Raffanti, M., Rockosi, C., Sanford, D., Schwab, C., Shaum, A. P., Sirk, M. M., Smith, R., Thorne, J., Valliant, J., Vandenberg, A., Ywan Wang, S., Wishnow, E., Wold, T., Yeh, S., Baker, A., Basu, S., Bedell, M., Burt, J., Cegla, H. M., Crossfield, I., Dressing, C., Dumusque, X., Ford, E., Knutson, H., Mawet, D., O'Meara, J., Stefánsson, G., Teske, J., Vasisht, G., Xuesong Wang, S., Weiss, L. M., Winn, J. N., & Wright, J. T. (2024), AJ accepted.

* KPF Confirms a Polar Orbit for KELT-18 b, Rubenzahl, R. A., Dai, F., **Halverson, S.**, Howard, A. W., Householder, A., Fulton, B., Behmard, A., Gibson, S. R., Roy, A., Shaum, A. P., Isaacson, H., Brodheim, M., Deich, W., Hill, G. M., Holden, B., Laher, R. R., Lanclos, K., Payne, J. N., Petigura, E. A., Schwab, C., Smith, C., Stefánsson, G., Walawender, J., Wang, S. X., Weiss, L. M., Winn, J. N., & Wishnow, E. (2024), AJ accepted.

An Earth-sized Planet on the Verge of Tidal Disruption, Dai, F., Howard, A. W., **Halverson, S.**, Orell-Miquel, J., Pallé, E., Isaacson, H., Fulton, B., Price, E. M., Plotnykov, M., Rogers, L. A., Valencia, D., Paragas, K., Greklek-McKeon, M., Gomez Barrientos, J., Knutson, H. A., Petigura, E. A., Weiss, L. M., Lee, R., Brinkman, C. L., Huber, D., Stefánsson, G., Masuda, K., Giacalone, S., Lu, C. X., Kite, E. S., Hu, R., Gaidos, E., Zhang, M., Rubenzahl, R. A., Winn, J. N., Han, T., Beard, C., Holcomb, R., Householder, A., Gilbert, G. J., Lubin, J., Ong, J. M. J., Polanski, A. S., Saunders, N., Van Zandt, J., Yee, S. W., Zhang, J., Zink, J., Holden, B., Baker, A., Brodheim, M., Crossfield, I. J. M., Deich, W., Edelstein, J., Gibson, S. R., Hill, G. M., Jelinsky, S. R., Kassis, M., Laher, R. R., Lanclos, K., Lilley, S., Payne, J. N., Rider, K., Robertson, P., Roy, A., Schwab, C., Shaum, A. P., Sirk, M. M., Smith, C., Vandenberg, A., Walawender, J., Wang, S. X., Wang, S.-Y. (Cindy) ., Wishnow, E., Wright, J. T., Yeh, S., Caballero, J. A., Morales, J. C., Murgas, F., Nagel, E., Reiners, A., Schweitzer, A., Tabernero, H. M., Zechmeister, M., Spencer, A., Ciardi, D. R., Clark, C. A., Lund, M. B., Caldwell, D. A., Collins, K. A., Schwarz, R. P., Barkaoui, K., Watkins, C., Shporer, A., Narita, N., Fukui, A., Srdoc, G., Latham, D. W., Jenkins, J. M., Ricker, G. R., Seager, S., & Vanderspek, R. (2024), AJ, 168, 101.

A hot-Jupiter progenitor on a super-eccentric retrograde orbit, Gupta, A. F., Millholland, S. C., Im, H., Dong, J., Jackson, J. M., Carleo, I., Libby-Roberts, J., Delamer, M., Giovinnazzi, M. R., Lin, A. S. J., Kanodia, S., Wang, X.-Y., Stassun, K., Masseron, T., Dragomir, D., Mahadevan, S., Wright, J., Alvarado-Montes, J. A., Bender, C., Blake, C. H., Caldwell, D., Cañas, C. I., Cochran, W. D., Dalba, P., Everett, M. E., Fernandez, P., Golub, E., Guillet, B., **Halverson, S.**, Hebb, L., Higuera, J., Huang, C. X., Klusmeyer, J., Knight, R., Leroux, L., Logsdon, S. E., Loose, M., McElwain, M. W., Monson, A., Ninan, J. P., Nowak, G., Palle, E., Patel, Y., Pepper, J., Primm, M., Rajagopal, J., Robertson, P., Roy, A., Schneider, D. P., Schwab, C., Schweiker, H., Sgro, L., Shimizu, M., Simard, G., Stefánsson, G., Stevens, D. J., Villanueva, S., Wisniewski, J., Will, S., & Ziegler, C. (2024), Nature, 632, 50.

* Obliquity Constraints for the Extremely Eccentric Sub-Saturn Kepler-1656 b, Rubenzahl, R. A., Howard, A. W., **Halverson, S.**, Petrovich, C., Angelo, I., Stefánsson, G., Dai, F., Householder, A., Fulton, B., Gibson, S. R., Roy, A., Shaum, A. P., Isaacson, H., Brodheim, M., Deich, W., Hill, G. M., Holden, B., Huber, D., Laher, R. R., Lanclos, K., Payne, J. N., Petigura, E. A., Schwab, C., Walawender, J., Wang, S. X., Weiss, L. M., Winn, J. N., & Wright, J. T. (2024), ApJL, 971, L40.

TOI-1685 b Is a Hot Rocky Super-Earth: Updates to the Stellar and Planet Parameters of a Popular JWST Cycle 2 Target, Burt, J. A., Hooton, M. J., Mamajek, E. E., Barragán, O., Millholland, S. C., Fairnington, T. R., Fisher, C., **Halverson, S. P.**, Huang, C. X., Brady, M., Seifahrt, A., Gaidos, E., Luque, R., Kasper, D., & Bean, J. L. (2024), ApJL, 971, L12.

TOI-2015 b: A Warm Neptune with Transit Timing Variations Orbiting an Active Mid-type M Dwarf, Jones, S. E., Stefánsson, G., Masuda, K., Libby-Roberts, J. E., Gardner, C. N., Holcomb, R., Beard, C., Robertson, P., Cañas, C. I., Mahadevan, S., Kanodia, S., Lin, A. S. J., Kobulnicky, H. A., Parker, B. A., Bender, C. F., Cochran, W. D., Diddams, S. A., Fernandes, R. B., Gupta, A. F., **Halverson, S.**, Hawley, S. L., Hearty, F. R., Hebb, L., Kowalski, A., Lubin, J., Monson, A., Ninan, J. P., Ramsey, L., Roy, A., Schwab, C., Terrien, R. C., & Wisniewski, J. (2024), AJ, 168, 93.

A low-mass sub-Neptune planet transiting the bright active star HD 73344, Sulis, S., Crossfield, I. J. M., Santerne, A., Saillenfest, M., Sousa, S., Mary, D., Aguichine, A., Deleuil, M., Delgado Mena, E., Mathur, S., Polanski, A., Adibekyan, V., Boisse, I., Costes, J. C., Cretignier, M., Heidari, N., Lebarbé, C., Forveille, T., Hara, N., Meunier, N., Santos, N., Balcarcel-Salazar, S., Cortés-Zuleta, P., Dalal, S., Gorjian, V., **Halverson, S.**, Howard, A. W., Kosiarek, M. R., Lopez, T. A., Martin, D. V., Mousis, O., Rajkumar, B., Strøm, P. A., Udry, S., Venot, O., & Willett, E. (2024), A&A, 688, A14.

The Epoch of Giant Planet Migration Planet Search Program. II. A Young Hot Jupiter Candidate around the AB Dor Member HS Psc, Tran, Q. H., Bowler, B. P., Cochran, W. D., **Halverson, S.**, Mahadevan, S., Ninan, J. P., Robertson, P., Stefánsson, G., & Terrien, R. C. (2024), *AJ*, 167, 193.

TOI-663: A newly discovered multi-planet system with three transiting mini-Neptunes orbiting an early M star, Cointepas, M., Bouchy, F., Almenara, J. M., Bonfils, X., Astudillo-Defru, N., Knierim, H., Stalport, M., Mignon, L., Grieves, N., Bean, J., Brady, M., Burt, J., Canto Martins, B. L., Collins, K. A., Collins, K. I., Delfosse, X., de Medeiros, J. R., Demory, B.-O., Dorn, C., Forveille, T., Fukui, A., Gan, T., Gómez Maqueo Chew, Y., **Halverson, S.**, Helled, R., Helm, I., Hirano, T., Horne, K., Howell, S. B., Isogai, K., Kasper, D., Kawauchi, K., Livingston, J. H., Massey, B., Matson, R. A., Murgas, F., Narita, N., Palte, E., Relles, H. M., Sabin, L., Schanche, N., Schwarz, R. P., Seifahrt, A., Shporer, A., Stefánsson, G., Sturmer, J., Tamura, M., Tan, T.-G., Twicken, J. D., Watanabe, N., Wells, R. D., Wilkin, F. P., Ricker, G. R., Seager, S., Winn, J. N., & Jenkins, J. M. (2024), *A&A*, 685, A19.

Obliquity Constraints for the Extremely Eccentric Sub-Saturn Kepler-1656 b, Rubenzahl, R. A., Howard, A. W., **Halverson, S.**, Petrovich, C., Angelo, I., Stefánsson, G., Dai, F., Householder, A., Fulton, B., Gibson, S. R., Roy, A., Shaum, A. P., Isaacson, H., Brodheim, M., Deich, W., Hill, G. M., Holden, B., Huber, D., Laher, R. R., Lanclos, K., Payne, J. N., Petigura, E. A., Schwab, C., Walawender, J., Wang, S. X., Weiss, L. M., Winn, J. N., & Wright, J. T. (2024), *ApJL*, 971, L40.

* Quiet Please: Tracing Anomalous Radial Velocity Variations with a Physically Motivated Spot Model, Siegel, J., **Halverson, S.**, Zhao, L., Al Moull, K., Robertson, P., Bender, C. F., Terrien, R., Roy, A., Mahadevan, S., Hearty, F., Ninan, J. P., Wright, J. T., Ford, E. B., Schwab, C., Stefánsson, G. K., Blake, C. H., & McElwain, M. W. (2024), *AJ*, **accepted**

* The death of Vulcan: NEID reveals the planet candidate orbiting HD 26965 is stellar activity, Burrows, A., **Halverson, S.**, Siegel, J., Gilbertson, C., Luhn, J., Burt, J., Bender, C. F., Roy, A., Terrien, R., Vangstein, S., Mahadevan, S., Wright, J. T., Robertson, P., Ford, E. B., Stefánsson, G. K., Ninan, J. P., Blake, C. H., McElwain, M. W., Schwab, C., & Zhao, J. (2024), *AJ*, **accepted**

* Revisiting ϵ Eridani with NEID: Identifying New Activity-Sensitive Lines in a Young K Dwarf Star, Jiang, S., Roy, A., **Halverson, S.**, Bender, C., Selgas, C., Otor, O. J., Mahadevan, S., Stefánsson, G., Terrien, R. C., Schwab, C. (2024) *AJ*, **accepted**

TOI-5344 b: A Saturn-like planet orbiting a super-Solar metallicity M0 dwarf, Han, T., Robertson, P., Kanodia, S., Canas, C., Lin, A. S. J., Stefánsson, G., Libby-Roberts, J. E., Larsen, A., Kobulnicky, H. A., Mahadevan, S., Bender, C. F., Cochran, W. D., Endl, M., Everett, M. E., Gupta, A. F., **Halverson, S.**, Hearty, F., Monson, A., Ninan, J. P., Roy, A., Schwab, C., Terrien, R. C. (2024) *ApJ*, **accepted**

* Staring at the Sun with the Keck Planet Finder: An Autonomous Solar Calibrator for High Signal-to-Noise Sun-as-a-Star Spectra, Rubenzahl, R., **Halverson, S.**, Walawender, J., Hill, G. M., Howard, A. W., Brown, M., Ida, E., Teheri, J., Fulton, B. J., Gibson, S. R., Kassis, M., Smith, B., Wold, T., & Payne, J. (2023), *PASP*, **accepted**

A Neptune-mass exoplanet in close orbit around a very low mass star challenges formation models, Stefánsson, G., Mahadevan, S., Miguel, Y., Robertson, P., Delamer, M., Kanodia, S., Cañas, C., Winn, J., Ninan, J., Terrien, R., Holcomb, R., Ford, E., Zawadzki, B., Bowler, B. P., Bender, C., Cochran, W., Diddams, S., Endl, M., Fredrick, C., **Halverson, S.**, Hearty, F., Hill, G. J., Lin, A., Metcalf, A., Monson, A., Ramsey, L., Roy, A., Schwab, C., Wright, J., & Zeimann, G. (2023), *Science*, **accepted**

2023 Astrophotonics Roadmap: pathways to realizing multi-functional integrated astrophotonic instruments, Jovanovic N., Gatkine P., Anugu N., Amezcua-Correa R., Thakur R. B., Beichman C., Bender C. F., Berger J-P., Bigioli A., Bland-Hawthorn J., Bourdarot G., Bradford C. M., Broeke R., Bryant J., Bundy K., Cheriton R., Cvetojevic N., Diab M., Diddams S. A., Dinkelaker A. N., Duis J., Eikenberry S., Ellis S., Endo A., Figer D. F., Fitzgerald M. P., Gris-Sanchez I., Gross S., Grossard L., Guyon O., Haffert S. Y., **Halverson S.**, Harris R. J., He J., Herr T., Hottinger P., Huby E., Ireland M., Jenson-Clem R., Jewell J., Jocou L., Kraus S., Labadie L., Lacour S., Laugier R., Ławniczuk K., Lin J., Leifer S., Leon-Saval S., Martin G., Martinache F., Martinod M-A., Mazin B. A., Minardi S., Monnier J. D., Moreira R., Mourard D., Nayak A. S.,

Norris B., Obrzud E., Perraut K., Reynaud F., Sallum S., Schiminovich D., Schwab C., Serbayn E., Soliman S., Stoll A., Tang L., Tuthill P., Vahala K., Vasisht G., Veilleux S., Walter A. B., Wollack E. J., Xin Y., Yang Z., Yerolatsitis S., Zhang Y. & Zou C.-L. (2023), *J. Phys. Photonics* 5 042501

The Extreme Stellar-signals Project. III. Combining Solar Data from HARPS, HARPS-N, EXPRES, and NEID, Zhao, L. L., Dumusque, X., Ford, E. B., Llama, J., Mortier, A., Bedell, M., Al Moulla, K., Bender, C. F., Blake, C. H., Brewer, J. M., Collier Cameron, A., Cosentino, R., Figueira, P., Fischer, D. A., Ghedina, A., Gonzalez, M., **Halverson, S.**, Kanodia, S., Latham, D. W., Lin, A. S. J., Lo Curto, G., Lodi, M., Logsdon, S. E., Lovis, C., Mahadevan, S., Monson, A., Ninan, J. P., Pepe, F., Roettenbacher, R. M., Roy, A., Santos, N. C., Schwab, C., Stefánsson, G., Szymkowiak, A. E., Terrien, R. C., Udry, S., Weiss, S. A., Wildi, F., Wildi, T., & Wright, J. T. (2023), *AJ*, 166, 173.

Stable Fiber-illumination for Extremely Precise Radial Velocities with NEID, Kanodia, S., Lin, A. S. J., Lubar, E., **Halverson, S.**, Mahadevan, S., Bender, C. F., Logsdon, S. E., Ramsey, L. W., Ninan, J. P., Stefánsson, G., Monson, A., Schwab, C., Roy, A., Paredes, L. A., Golub, E., Higuera, J., Klusmeyer, J., McBride, W., Blake, C., Diddams, S. A., Grisé, F., Gupta, A. F., Hearty, F., McElwain, M. W., Rajagopal, J., Robertson, P., & Terrien, R. C. (2023), *AJ*, 166, 105.

The Unusual M-dwarf Warm Jupiter TOI-1899 b: Refinement of Orbital and Planetary Parameters, Lin, A. S. J., Libby-Roberts, J. E., Alvarado-Montes, J. A., Cañas, C. I., Kanodia, S., Han, T., Hebb, L., Jensen, E. L. N., Mahadevan, S., Powers, L. C., Swaby, T. N., Wisniewski, J., Beard, C., Bender, C. F., Blake, C. H., Cochran, W. D., Diddams, S. A., Frazier, R. C., Fredrick, C., Gully-Santiago, M., **Halverson, S.**, Logsdon, S. E., McElwain, M. W., Morley, C., Ninan, J. P., Rajagopal, J., Ramsey, L. W., Robertson, P., Roy, A., Schwab, C., Stefánsson, G., Stevens, D. J., Terrien, R. C., & Wright, J. T. (2023), *AJ*, 166, 90.

TOI-1859b: A 64 Day Warm Jupiter on an Eccentric and Misaligned Orbit, Dong, J., Wang, S., Rice, M., Zhou, G., Huang, C. X., Dawson, R. I., Stefánsson, G. K., **Halverson, S.**, Kanodia, S., Mahadevan, S., McElwain, M. W., Alvarado-Montes, J. A., Ninan, J. P., Robertson, P., Roy, A., Schwab, C., Logsdon, S. E., Terrien, R. C., Collins, K. A., Srdoc, G., Sefako, R., Laloum, D., Latham, D. W., Bieryla, A., Dalba, P. A., Dragomir, D., Villanueva, S., Howell, S. B., Ricker, G. R., Seager, S., Winn, J. N., Jenkins, J. M., Shporer, A., & Rapetti, D. (2023), *ApJL*, 951, L29.

TOI-3984 A b and TOI-5293 A b: Two Temperate Gas Giants Transiting Mid-M Dwarfs in Wide Binary Systems, Cañas, C. I., Kanodia, S., Libby-Roberts, J., Lin, A. S. J., Schutte, M., Powers, L., Jones, S., Monson, A., Wang, S., Stefánsson, G., Cochran, W. D., Robertson, P., Mahadevan, S., Kowalski, A. F., Wisniewski, J., Parker, B. A., Larsen, A., Chapman, F. A. L., Kobulnicky, H. A., Gupta, A. F., Everett, M. E., Penprase, B. E., Zeimann, G., Beard, C., Bender, C. F., Colón, K. D., Diddams, S. A., Fredrick, C., **Halverson, S.**, Ninan, J. P., Ramsey, L. W., Roy, A., & Schwab, C. (2023), *AJ*, 166, 30.

Seeing-limited Coupling of Starlight into Single-mode Fiber with a Small Telescope, Sliski, D. H., Blake, C. H., Eastman, J. D., & **Halverson, S.** (2023), *Astronomische Nachrichten*, 344.

An In-depth Look at TOI-3884b: A Super-Neptune Transiting an M4 Dwarf with Persistent Starspot Crossings, Libby-Roberts, J. E., Schutte, M., Hebb, L., Kanodia, S., Cañas, C. I., Stefánsson, G., Lin, A. S. J., Mahadevan, S., Parts, W., Powers, L., Wisniewski, J., Bender, C. F., Cochran, W. D., Diddams, S. A., Everett, M. E., Gupta, A. F., **Halverson, S.**, Kobulnicky, H. A., Kowalski, A. F., Larsen, A., Monson, A., Ninan, J. P., Parker, B. A., Ramsey, L. W., Robertson, P., Schwab, C., Swaby, T. N., & Terrien, R. C. (2023), *AJ*, 165, 249.

A High-Eccentricity Warm Jupiter Orbiting TOI-4127, Gupta, A. F., Jackson, J. M., Hébrard, G., Lin, A. S. J., Stassun, K. G., Dong, J., Villanueva, S., Dragomir, D., Mahadevan, S., Wright, J. T., Almenara, J. M., Blake, C. H., Boisse, I., Cortés-Zuleta, P., Dalba, P. A., Díaz, R. F., Ford, E. B., Forveille, T., Gagliano, R., **Halverson, S.**, Heidari, N., Kanodia, S., Kiefer, F., Latham, D. W., McElwain, M. W., Mireles, I., Moutou, C., Pepper, J., Ricker, G. R., Robertson, P., Roy, A., Schlecker, M., Schwab, C., Seager, S., Shporer, A., Stefánsson, G., Terrien, R. C., Ting, E. B., Winn, J. N., & Youngblood, A. (2023), *AJ*, 165, 234.

TOI-5205b: A Short-period Jovian Planet Transiting a Mid-M Dwarf, Kanodia, S., Mahadevan, S., Libby-Roberts, J., Stefánsson, G., Cañas, C. I., Piette, A. A. A., Boss, A., Teske, J., Chambers, J., Zeimann, G., Monson, A., Robertson, P., Ninan, J. P., Lin, A. S. J., Bender, C. F., Cochran, W. D., Diddams, S. A., Gupta, A. F., **Halverson, S.**, Hawley, S., Kobulnicky, H. A., Metcalf, A. J., Parker, B. A., Powers, L., Ramsey, L. W., Roy, A., Schwab, C., Swaby, T. N., Terrien, R. C., & Wisniewski,

NEID Reveals That the Young Warm Neptune TOI-2076 b Has a Low Obliquity, Frazier, R. C., Stefánsson, G., Mahadevan, S., Yee, S. W., Cañas, C. I., Winn, J. N., Luhn, J., Dai, F., Doyle, L., Cegla, H., Kanodia, S., Robertson, P., Wisniewski, J., Bender, C. F., Dong, J., Gupta, A. F., **Halverson, S.**, Hawley, S., Hebb, L., Holcomb, R., Kowalski, A., Libby-Roberts, J., Lin, A. S. J., McElwain, M. W., Ninan, J. P., Petrovich, C., Roy, A., Schwab, C., Terrien, R. C., & Wright, J. T. (2023), ApJL, 944, L41.

Detection of p-mode Oscillations in HD 35833 with NEID and TESS, Gupta, A. F., Luhn, J., Wright, J. T., Mahadevan, S., Ford, E. B., Stefánsson, G., Bender, C. F., Blake, C. H., **Halverson, S.**, Hearty, F., Kanodia, S., Logsdon, S. E., McElwain, M. W., Ninan, J. P., Robertson, P., Roy, A., Schwab, C., & Terrien, R. C. (2022), AJ, 164, 254.

TOI-3757 b: A Low-density Gas Giant Orbiting a Solar-metallicity M Dwarf, Kanodia, S., Libby-Roberts, J., Cañas, C. I., Ninan, J. P., Mahadevan, S., Stefánsson, G., Lin, A. S. J., Jones, S., Monson, A., Parker, B. A., Kobulnicky, H. A., Swaby, T. N., Powers, L., Beard, C., Bender, C. F., Blake, C. H., Cochran, W. D., Dong, J., Diddams, S. A., Fredrick, C., Gupta, A. F., **Halverson, S.**, Hearty, F., Logsdon, S. E., Metcalf, A. J., McElwain, M. W., Morley, C., Rajagopal, J., Ramsey, L. W., Robertson, P., Roy, A., Schwab, C., Terrien, R. C., Wisniewski, J., & Wright, J. T. (2022), AJ, 164, 81.

GJ 3929: High-precision Photometric and Doppler Characterization of an Exo-Venus and Its Hot, Mini-Neptune-mass Companion, Beard, C., Robertson, P., Kanodia, S., Lubin, J., Cañas, C. I., Gupta, A. F., Holcomb, R., Jones, S., Libby-Roberts, J. E., Lin, A. S. J., Mahadevan, S., Stefánsson, G., Bender, C. F., Blake, C. H., Cochran, W. D., Endl, M., Everett, M., Ford, E. B., Fredrick, C., **Halverson, S.**, Hebb, L., Li, D., Logsdon, S. E., Luhn, J., McElwain, M. W., Metcalf, A. J., Ninan, J. P., Rajagopal, J., Roy, A., Schutte, M., Schwab, C., Terrien, R. C., Wisniewski, J., & Wright, J. T. (2022), ApJ, 936, 55.

The Warm Neptune GJ 3470b Has a Polar Orbit, Stefánsson, G., Mahadevan, S., Petrovich, C., Winn, J. N., Kanodia, S., Millholland, S. C., Maney, M., Cañas, C. I., Wisniewski, J., Robertson, P., Ninan, J. P., Ford, E. B., Bender, C. F., Blake, C. H., Cegla, H., Cochran, W. D., Diddams, S. A., Dong, J., Endl, M., Fredrick, C., **Halverson, S.**, Hearty, F., Hebb, L., Hirano, T., Lin, A. S. J., Logsdon, S. E., Lubar, E., McElwain, M. W., Metcalf, A. J., Monson, A., Rajagopal, J., Ramsey, L. W., Roy, A., Schwab, C., Schweiker, H., Terrien, R. C., & Wright, J. T., ApJL, 931, L15, 2022

TOI-1696 and TOI-2136: Constraining the Masses of Two Mini-Neptunes with the Habitable-Zone Planet Finder, Beard, C., Robertson, P., Kanodia, S., Libby-Roberts, J., Cañas, C. I., Gupta, A. F., Holcomb, R., Jones, S., Kobulnicky, H. A., Lin, A. S. J., Lubin, J., Maney, M., Parker, B. A., Stefánsson, G., Cochran, W. D., Endl, M., Hebb, L., Mahadevan, S., Wisniewski, J., Bender, C. F., Diddams, S. A., Everett, M., Fredrick, C., **Halverson, S.**, Hearty, F., Metcalf, A. J., Monson, A., Ninan, J. P., Roy, A., Schutte, M., Schwab, C., & Terrien, R. C., AJ, 163, 286, 2022

* Leveraging Space-based Data from the Nearest Solar-type Star to Better Understand Stellar Activity Signatures in Radial Velocity Data, Ervin, T., **Halverson, S.**, Burrows, A., Murphy, N., Roy, A., Haywood, R. D., Rescigno, F., Bender, C. F., Lin, A. S. J., Burt, J., & Mahadevan, S., AJ, 163, 272, 2022

* Into the Depths: A New Activity Metric for High-precision Radial Velocity Measurements Based on Line Depth Variations, Siegel, J. C., Rubenzahl, R. A., **Halverson, S.**, & Howard, A. W., AJ, 163, 260, 2022

A Close-in Puffy Neptune with Hidden Friends: The Enigma of TOI 620, Reefer, M. A., Luque, R., Gaidos, E., Beard, C., Plavchan, P. P., Cointepas, M., Cale, B. L., Palle, E., Parviainen, H., Feliz, D. L., Eastman, J., Stassun, K., Gagné, J., Jenkins, J. M., Boyd, P. T., Kidwell, R. C., McDermott, S., Collins, K. A., Fong, W., Guerrero, N., Almenara-Villa, J.-M., Bean, J., Beichman, C. A., Berberian, J., Bieryla, A., Bonfils, X., Bouchy, F., Brady, M., Bryant, E. M., Cacciapuoti, L., Cañas, C. I., Ciardi, D. R., Collins, K. I., Crossfield, I. J. M., Dressing, C. D., Eigmüller, P., El Mufti, M., Esparza-Borges, E., Fukui, A., Gao, P., Geneser, C., Gnlika, C. L., Gonzales, E., Gupta, A. F., **Halverson, S.**, Hearty, F., Howell, S. B., Irwin, J., Kanodia, S., Kasper, D., Kodama, T., Kostov, V., Latham, D. W., Lendl, M., Lin, A., Livingston, J. H., Lubin, J., Mahadevan, S., Matson, R., Matthews, E., Murgas, F., Narita, N., Newman, P., Ninan, J., Osborn, A., Quinn, S. N., Robertson, P., Roy, A., Schlieder, J., Schwab, C., Seifahrt, A., Smith, G. D., Sohani, A., Stefánsson, G., Stevens, D., Stürmer, J., Tanner, A., Terrien, R., Teske, J., Vermilion, D., Wang, S. X., Wittrock, J., Wright, J. T., Zechmeister, M., & Zohrabi, F., AJ, 163, 269, 2022

Observing the Sun as a Star: Design and Early Results from the NEID Solar Feed. Lin, A. S. J., Monson, A., Mahadevan, S., Ninan, J. P., **Halverson, S.**, Nitroy, C., Bender, C. F., Logsdon, S. E., Kanodia, S., Terrien, R. C., Roy, A., Luhn, J. K., Gupta, A. F., Ford, E. B., Hearty, F., Laher, R. R., Hunting, E., McBride, W. R., Salazar Rivera, N. I., Rajagopal, J., Wolf, M. J., Robertson, P., Wright, J. T., Blake, C. H., Cañas, C. I., Lubar, E., McElwain, M. W., Ramsey, L. W., Schwab, C., & Stefansson, G., *AJ*, 163, 184, 2022

Rotational Modulation of Spectroscopic Zeeman Signatures in Low-mass Stars. Terrien, R. C., Keen, A., Oda, K., Parts (they/them), W., Stefansson, G., Mahadevan, S., Robertson, P., Ninan, J. P., Beard, C., Bender, C. F., Cochran, W. D., Cunha, K., Diddams, S. A., Fredrick, C., **Halverson, S.**, Hearty, F., Ickler, A., Kanodia, S., Libby-Roberts, J. E., Lubin, J., Metcalf, A. J., Olsen, F., Ramsey, L. W., Roy, A., Schwab, C., Smith, V. V., & Turner, B., *ApJL*, 927, L11, 2022

The Aligned Orbit of WASP-148b, the Only Known Hot Jupiter with a nearby Warm Jupiter Companion, from NEID and HIRES. Wang, X.-Y., Rice, M., Wang, S., Pu, B., Stefansson, G., Mahadevan, S., Radzom, B., Giacalone, S., Wu, Z.-Y., Esposito, T. M., Dalba, P. A., Avsar, A., Holden, B., Skiff, B., Polakis, T., Voeller, K., Logsdon, S. E., Klusmeyer, J., Schweiker, H., Wu, D.-H., Beard, C., Dai, F., Lubin, J., Weiss, L. M., Bender, C. F., Blake, C. H., Dressing, C. D., **Halverson, S.**, Hearty, F., Howard, A. W., Huber, D., Isaacson, H., Jackman, J. A. G., Llama, J., McElwain, M. W., Rajagopal, J., Roy, A., Robertson, P., Schwab, C., Shkolnik, E. L., Wright, J. T., & Laughlin, G., *ApJL*, 926, L8, 2022

NEID Rossiter-McLaughlin Measurement of TOI-1268b: A Young Warm Saturn Aligned with Its Cool Host Star. Dong, J., Huang, C. X., Zhou, G., Dawson, R. I., Stefansson, G. K., Bender, C. F., Blake, C. H., Ford, E. B., **Halverson, S.**, Kanodia, S., Mahadevan, S., McElwain, M. W., Ninan, J. P., Robertson, P., Roy, A., Schwab, C., Stevens, D. J., Terrien, R. C., Vanderburg, A., Kraus, A. L., Douglas, S., Newton, E., Rampalli, R., Krolikowski, D. M., Collins, K. A., Rodriguez, J. E., Feliz, D. L., Srdoc, G., Ziegler, C., Barkaoui, K., Pozuelos, F. J., Jehin, E., Michaël, C., Benkhaldoun, Z., Lewin, P., Forés-Toribio, R., Muñoz, J. A., McLeod, K. K., Özyurt, F. P., Horta, F. G., Murgas, F., Latham, D. W., Quinn, S. N., Bieryla, A., Howell, S. B., Gnilka, C. L., Ciardi, D. R., Lund, M. B., Dressing, C. D., Giacalone, S., Savel, A. B., Strakhov, I. A., Belinski, A. A., Ricker, G. R., Seager, S., Winn, J. N., Jenkins, J. M., Torres, G., & Paegert, M., *ApJL*, 926, L7, 2022

High-resolution Near-infrared Spectroscopy of a Flare around the Ultracool Dwarf vB 10. Kanodia, S., Ramsey, L. W., Maney, M., Mahadevan, S., Cañas, C. I., Ninan, J. P., Monson, A., Kowalski, A. F., Goumas, M. C., Stefansson, G., Bender, C. F., Cochran, W. D., Diddams, S. A., Fredrick, C., **Halverson, S.**, Hearty, F., Janowiecki, S., Metcalf, A. J., Odewahn, S. C., Robertson, P., Roy, A., Schwab, C., & Terrien, R. C., *ApJ*, 925, 155, 2022

A Hot Mars-sized Exoplanet Transiting an M Dwarf. Cañas, C. I., Mahadevan, S., Cochran, W. D., Bender, C. F., Feigelson, E. D., Harman, C. E., Kopparapu, R. K., Caceres, G. A., Diddams, S. A., Endl, M., Ford, E. B., **Halverson, S.**, Hearty, F., Jones, S., Kanodia, S., Lin, A. S. J., Metcalf, A. J., Monson, A., Ninan, J. P., Ramsey, L. W., Robertson, P., Roy, A., Schwab, C., & Stefansson, G., *AJ*, 163, 3, 2022

A Search for Planetary Metastable Helium Absorption in the V1298 Tau System. Vissapragada, S., Stefansson, G., Greklek-McKeon, M., Oklopčić, A., Knutson, H. A., Ninan, J. P., Mahadevan, S., Cañas, C. I., Chachan, Y., Cochran, W. D., Collins, K. A., Dai, F., David, T. J., **Halverson, S.**, Hawley, S. L., Hebb, L., Kanodia, S., Kowalski, A. F., Livingston, J. H., Maney, M., Metcalf, A. J., Morley, C., Ramsey, L. W., Robertson, P., Roy, A., Spake, J., Schwab, C., Terrien, R. C., Tinyanont, S., Vasisht, G., & Wisniewski, J., *AJ*, 162, 222, 2021

TOI-532b: The Habitable-zone Planet Finder confirms a Large Super Neptune in the Neptune Desert orbiting a metal-rich M-dwarf host. Kanodia, S., Stefansson, G., Cañas, C. I., Maney, M., Lin, A. S. J., Ninan, J. P., Jones, S., Monson, A., Parker, B. A., Kobulnicky, H. A., Rothenberg, J., Beard, C., Lubin, J., Robertson, P., Gupta, A. F., Mahadevan, S., Cochran, W. D., Bender, C. F., Diddams, S. A., Fredrick, C., **Halverson, S.**, Hawley, S., Hearty, F., Hebb, L., Kopparapu, R., Metcalf, A. J., Ramsey, L. W., Roy, A., Schwab, C., Schutte, M., Terrien, R. C., Wisniewski, J., & Wright, J. T., *AJ*, 162, 135, 2021

The Habitable-zone Planet Finder Detects a Terrestrial-mass Planet Candidate Closely Orbiting Gliese 1151: The Likely Source of Coherent Low-frequency Radio Emission from an Inactive Star. Mahadevan, S., Stefansson, G., Robertson, P., Terrien, R. C., Ninan, J. P., Holcomb, R. J., **Halverson, S.**, Cochran, W. D., Kanodia, S., Ramsey, L. W., Wolszczan, A., Endl, M., Bender, C. F., Diddams, S. A., Fredrick, C., Hearty, F., Monson, A., Metcalf, A. J., Roy, A., & Schwab, C., *ApJL*, 919, L9, 2021

TOI-1231 b: A Temperate, Neptune-sized Planet Transiting the Nearby M3 Dwarf NLTT 24399. Burt, J. A., Dragomir, D., Mollière, P., Youngblood, A., García Muñoz, A., McCann, J., Kreidberg, L., Huang, C. X., Collins, K. A., Eastman, J. D., Abe, L., Almenara, J. M., Crossfield, I. J. M., Ziegler, C., Rodriguez, J. E., Mamajek, E. E., Stassun, K. G., **Halverson, S. P.**, Villanueva, S., Butler, R. P., Wang, S. X., Schwarz, R. P., Ricker, G. R., Vanderspek, R., Latham, D. W., Seager, S., Winn, J. N., Jenkins, J. M., Agabi, A., Bonfils, X., Ciardi, D., Cointepas, M., Crane, J. D., Crouzet, N., Dransfield, G., Feng, F., Furlan, E., Guillot, T., Gupta, A. F., Howell, S. B., Jensen, E. L. N., Law, N., Mann, A. W., Marie-Sainte, W., Matson, R. A., Matthews, E. C., Mékarnia, D., Pepper, J., Scott, N., Shectman, S. A., Schlieder, J. E., Schmider, F.-X., Stevens, D. J., Teske, J. K., Triaud, A. H. M. J., Charbonneau, D., Berta-Thompson, Z. K., Burke, C. J., Daylan, T., Barclay, T., Wohler, B., & Brasseur, C. E., *AJ*, 162, 87, 2021

Nondetection of Helium in the Upper Atmospheres of TRAPPIST-1b, e, and f. Krishnamurthy, V., Hirano, T., Stefánsson, G., Ninan, J. P., Mahadevan, S., Gaidos, E., Kopparapu, R., Sato, B., Hori, Y., Bender, C. F., Cañas, C. I., Diddams, S. A., **Halverson, S.**, Harakawa, H., Hawley, S., Hearty, F., Hebb, L., Hodapp, K., Jacobson, S., Kanodia, S., Konishi, M., Kotani, T., Kowalski, A., Kudo, T., Kurokawa, T., Kuzuhara, M., Lin, A., Maney, M., Metcalf, A. J., Morris, B., Nishikawa, J., Omiya, M., Robertson, P., Roy, A., Schwab, C., Serizawa, T., Tamura, M., Ueda, A., Vievard, S., & Wisniewski, J., *AJ*, 162, 82, 2021

Stellar Activity Manifesting at a One-year Alias Explains Barnard b as a False Positive. Lubin, J., Robertson, P., Stefánsson, G., Ninan, J., Mahadevan, S., Endl, M., Ford, E., Wright, J. T., Beard, C., Bender, C., Cochran, W. D., Diddams, S. A., Fredrick, C., **Halverson, S.**, Kanodia, S., Metcalf, A. J., Ramsey, L., Roy, A., Schwab, C., & Terrien, R., *AJ*, 162, 61, 2021

Broadband Stability of the Habitable Zone Planet Finder Fabry-Perot Etalon Calibration System: Evidence for Chromatic Variation. Terrien, R. C., Ninan, J. P., Diddams, S. A., Mahadevan, S., **Halverson, S.**, Bender, C., Fredrick, C., Hearty, F., Jennings, J., Metcalf, A. J., Monson, A., Roy, A., Schwab, C., & Stefánsson, G., *AJ*, 161, 252, 2021

The Epoch of Giant Planet Migration Planet Search Program. I. Near-infrared Radial Velocity Jitter of Young Sun-like Stars. Tran, Q. H., Bowler, B. P., Cochran, W. D., Endl, M., Stefánsson, G., Mahadevan, S., Ninan, J. P., Bender, C. F., **Halverson, S.**, Roy, A., & Terrien, R. C., *AJ*, 161, 173, 2021

A Harsh Test of Far-field Scrambling with the Habitable-zone Planet Finder and the Hobby-Eberly Telescope. Kanodia, S., **Halverson, S.**, Ninan, J. P., Mahadevan, S., Stefánsson, G., Roy, A., Ramsey, L. W., Bender, C. F., Janowiecki, S., Cochran, W. D., Diddams, S. A., Drory, N., Endl, M., Ford, E. B., Hearty, F., Metcalf, A. J., Monson, A., Robertson, P., Schwab, C., Terrien, R. C., & Wright, J. T., *ApJ*, 912, 15, 2021

Target Prioritization and Observing Strategies for the NEID Earth Twin Survey. Gupta, A. F., Wright, J. T., Robertson, P., **Halverson, S.**, Luhn, J., Roy, A., Mahadevan, S., Ford, E. B., Bender, C. F., Blake, C. H., Hearty, F., Kanodia, S., Logsdon, S. E., McElwain, M. W., Monson, A., Ninan, J. P., Schwab, C., Stefánsson, G., & Terrien, R. C., *AJ*, 161, 130, 2021

A Mini-Neptune and a Radius Valley Planet Orbiting the Nearby M2 Dwarf TOI-1266 in Its Venus Zone: Validation with the Habitable-zone Planet Finder. Stefánsson, G., Kopparapu, R., Lin, A., Mahadevan, S., Cañas, C. I., Kanodia, S., Ninan, J. P., Cochran, W. D., Endl, M., Hebb, L., Wisniewski, J., Gupta, A., Everett, M., Bender, C. F., Diddams, S. A., Ford, E. B., Fredrick, C., **Halverson, S.**, Hearty, F., Levi, E., Maney, M., Metcalf, A. J., Monson, A., Ramsey, L. W., Robertson, P., Roy, A., Schwab, C., Terrien, R. C., & Wright, J. T., *AJ*, 160, 259, 2020

The Habitable Zone Planet Finder Reveals a High Mass and Low Obliquity for the Young Neptune K2-25b. Stefánsson, G., Mahadevan, S., Maney, M., Ninan, J. P., Robertson, P., Rajagopal, J., Haase, F., Allen, L., Ford, E. B., Winn, J., Wolfgang, A., Dawson, R. I., Wisniewski, J., Bender, C. F., Cañas, C., Cochran, W., Diddams, S. A., Fredrick, C., **Halverson, S.**, Hearty, F., Hebb, L., Kanodia, S., Levi, E., Metcalf, A. J., Monson, A., Ramsey, L., Roy, A., Schwab, C., Terrien, R., & Wright, J. T., *AJ*, 160, 192, 2020

TOI-824 b: A New Planet on the Lower Edge of the Hot Neptune Desert. Burt, J. A., Nielsen, L. D., Quinn, S. N., Mamajek, E. E., Matthews, E. C., Zhou, G., Seidel, J. V., Huang, C. X., Lopez, E., Soto, M., Otegi, J., Stassun, K. G., Kreidberg, L., Collins, K. A., Eastman, J. D., Rodriguez, J. E., Vanderburg, A., **Halverson, S. P.**, Teske, J. K., Wang, S. X., Butler, R. P., Bouchy, F., Dumusque, X., Segransen, D., Shectman, S. A., Crane, J. D., Feng, F., Montet, B. T., Feinstein, A. D., Beletski, Y.,

Flowers, E., Günther, M. N., Daylan, T., Collins, K. I., Conti, D. M., Gan, T., Jensen, E. L. N., Kielkopf, J. F., Tan, T.-G., Helled, R., Dorn, C., Haldemann, J., Lissauer, J. J., Ricker, G. R., Vanderspek, R., Latham, D. W., Seager, S., Winn, J. N., Jenkins, J. M., Twicken, J. D., Smith, J. C., Tenenbaum, P., Cartwright, S., Barclay, T., Pepper, J., Esquerdo, G., & Fong, W., *AJ*, 160, 153, 2020

A Warm Jupiter Transiting an M Dwarf: A TESS Single-transit Event Confirmed with the Habitable-zone Planet Finder. Cañas, C. I., Stefansson, G., Kanodia, S., Mahadevan, S., Cochran, W. D., Endl, M., Robertson, P., Bender, C. F., Ninan, J. P., Beard, C., Lubin, J., Gupta, A. F., Everett, M. E., Monson, A., Wilson, R. F., Lewis, H. M., Brewer, M., Majewski, S. R., Hebb, L., Dawson, R. I., Diddams, S. A., Ford, E. B., Fredrick, C., **Halverson, S.**, Hearty, F., Lin, A. S. J., Metcalf, A. J., Rajagopal, J., Ramsey, L. W., Roy, A., Schwab, C., Terrien, R. C., & Wright, J. T., *AJ*, 160, 147, 2020

TOI-1728b: The Habitable-zone Planet Finder Confirms a Warm Super-Neptune Orbiting an M-dwarf Host. Kanodia, S., Cañas, C. I., Stefansson, G., Ninan, J. P., Hebb, L., Lin, A. S. J., Baran, H., Maney, M., Terrien, R. C., Mahadevan, S., Cochran, W. D., Endl, M., Dong, J., Bender, C. F., Diddams, S. A., Ford, E. B., Fredrick, C., **Halverson, S.**, Hearty, F., Metcalf, A. J., Monson, A., Ramsey, L. W., Robertson, P., Roy, A., Schwab, C., & Wright, J. T., *ApJ*, 899, 29, 2020

Persistent Starspot Signals on M Dwarfs: Multiwavelength Doppler Observations with the Habitable-zone Planet Finder and Keck/HIRES. Robertson, P., Stefansson, G., Mahadevan, S., Endl, M., Cochran, W. D., Beard, C., Bender, C. F., Diddams, S. A., Duong, N., Ford, E. B., Fredrick, C., **Halverson, S.**, Hearty, F., Holcomb, R., Juan, L., Kanodia, S., Lubin, J., Metcalf, A. J., Monson, A., Ninan, J. P., Palafoutas, J., Ramsey, L. W., Roy, A., Schwab, C., Terrien, R. C., & Wright, J. T., *ApJ*, 897, 125, 2020

Evidence for He I 10830 Å Absorption during the Transit of a Warm Neptune around the M-dwarf GJ 3470 with the Habitable-zone Planet Finder. Ninan, J. P., Stefansson, G., Mahadevan, S., Bender, C., Robertson, P., Ramsey, L., Terrien, R., Wright, J., Diddams, S. A., Kanodia, S., Cochran, W., Endl, M., Ford, E. B., Fredrick, C., **Halverson, S.**, Hearty, F., Jennings, J., Kaplan, K., Lubar, E., Metcalf, A. J., Monson, A., Nitroy, C., Roy, A., & Schwab, C., *ApJ*, 894, 97, 2020

A Sub-Neptune-sized Planet Transiting the M2.5 Dwarf G 9-40: Validation with the Habitable-zone Planet Finder. Stefansson, G., Cañas, C., Wisniewski, J., Robertson, P., Mahadevan, S., Maney, M., Kanodia, S., Beard, C., Bender, C. F., Brunt, P., Clemens, J. C., Cochran, W., Diddams, S. A., Endl, M., Ford, E. B., Fredrick, C., **Halverson, S.**, Hearty, F., Hebb, L., Huehnerhoff, J., Jennings, J., Kaplan, K., Levi, E., Lubar, E., Metcalf, A. J., Monson, A., Morris, B., Ninan, J. P., Nitroy, C., Ramsey, L., Roy, A., Schwab, C., Sigurdsson, S., Terrien, R., & Wright, J. T., *AJ*, 159, 100, 2020

Solar Contamination in Extreme-precision Radial-velocity Measurements: Deleterious Effects and Prospects for Mitigation. Roy, A., **Halverson, S.**, Mahadevan, S., Stefansson, G., Monson, A., Logsdon, S. E., Bender, C. F., Blake, C. H., Golub, E., Gupta, A., Jaehnig, K. P., Kanodia, S., Kaplan, K., McElwain, M. W., Ninan, J. P., Rajagopal, J., Robertson, P., Schwab, C., Terrien, R. C., Wang, S. X., Wolf, M. J., & Wright, J. T., *AJ*, 159, 161, 2020

A Sub-Neptune-sized Planet Transiting the M2.5 Dwarf G 9-40: Validation with the Habitable-zone Planet Finder. Stefansson, G., Cañas, C., Wisniewski, J., Robertson, P., Mahadevan, S., Maney, M., Kanodia, S., Beard, C., Bender, C. F., Brunt, P., Clemens, J. C., Cochran, W., Diddams, S. A., Endl, M., Ford, E. B., Fredrick, C., **Halverson, S.**, Hearty, F., Hebb, L., Huehnerhoff, J., Jennings, J., Kaplan, K., Levi, E., Lubar, E., Metcalf, A. J., Monson, A., Morris, B., Ninan, J. P., Nitroy, C., Ramsey, L., Roy, A., Schwab, C., Sigurdsson, S., Terrien, R., & Wright, J. T., *AJ*, 159, 100, 2020

First Radial Velocity Results From the MINiature Exoplanet Radial Velocity Array (MINERVA). Wilson, M. L., Eastman, J. D., Cornachione, M. A., Wang, S. X., Johnson, S. A., Sliski, D. H., Schap, W. J., Morton, T. D., Johnson, J. A., McCrady, N., Wright, J. T., Wittenmyer, R. A., Plavchan, P., Blake, C. H., Swift, J. J., Bottom, M., Baker, A. D., Barnes, S. I., Berlind, P., Blackhurst, E., Beatty, T. G., Bolton, A. S., Cale, B., Calkins, M. L., Colón, A., de Vera, J., Esquerdo, G., Falco, E. E., Fortin, P., Garcia-Mejia, J., Geneser, C., Gibson, S. R., Grell, G., Groner, T., **Halverson, S.**, Hamlin, J., Henderson, M., Horner, J., Houghton, A., Janssens, S., Jonas, G., Jones, D., Kirby, A., Lawrence, G., Luebbbers, J. A., Muirhead, P. S., Myles, J., Nava, C., Rivera-García, K. O., Reed, T., Relles, H. M., Riddle, R., Robinson, C., Chaput de Saintonge, F., & Sergi, A., *PASP*, 131, 115001, 2019

A Super-Earth and Sub-Neptune Transiting the Late-type M Dwarf LP 791-18. Crossfield, I. J. M., Waalkes, W., Newton,

E. R., Narita, N., Muirhead, P., Ment, K., Matthews, E., Kraus, A., Kostov, V., Kosiarek, M. R., Kane, S. R., Isaacson, H., **Halverson, S.**, Gonzales, E., Everett, M., Dragomir, D., Collins, K. A., Chontos, A., Berardo, D., Winters, J. G., Winn, J. N., Scott, N. J., Rojas-Ayala, B., Rizzuto, A. C., Petigura, E. A., Peterson, M., Mocnik, T., Mikal-Evans, T., Mehrle, N., Matson, R., Kuzuhara, M., Irwin, J., Huber, D., Huang, C., Howell, S., Howard, A. W., Hirano, T., Fulton, B. J., Dupuy, T., Dressing, C. D., Dalba, P. A., Charbonneau, D., Burt, J., Berta-Thompson, Z., Benneke, B., Watanabe, N., Twicken, J. D., Tamura, M., Schlieder, J., Seager, S., Rose, M. E., Ricker, G., Quintana, E., Lépine, S., Latham, D. W., Kotani, T., Jenkins, J. M., Hori, Y., Colon, K., & Caldwell, D. A., *ApJL*, 883, L16, 2019

The Apache Point Observatory Galactic Evolution Experiment (APOGEE) Spectrographs. Wilson, J. C., Hearty, F. R., Skrutskie, M. F., Majewski, S. R., Holtzman, J. A., Eisenstein, D., Gunn, J., Blank, B., Henderson, C., Smees, S., Nelson, M., Nidever, D., Arns, J., Barkhouser, R., Barr, J., Beland, S., Bershady, M. A., Blanton, M. R., Brunner, S., Burton, A., Carey, L., Carr, M., Colque, J. P., Crane, J., Damke, G. J., Davidson, J. W., Dean, J., Di Mille, F., Don, K. W., Ebelke, G., Evans, M., Fitzgerald, G., Gillespie, B., Hall, M., Harding, A., Harding, P., Hammond, R., Hancock, D., Harrison, C., Hope, S., Horne, T., Karakla, J., Lam, C., Leger, F., MacDonald, N., Maseman, P., Matsunari, J., Melton, S., Mitcheltree, T., O'Brien, T., O'Connell, R. W., Patten, A., Richardson, W., Rieke, G., Rieke, M., Roman-Lopes, A., Schiavon, R. P., Sobek, J. S., Stolberg, T., Stoll, R., Tembe, M., Trujillo, J. D., Uomoto, A., Vernieri, M., Walker, E., Weinberg, D. H., Young, E., Anthony-Brumfield, B., Bizyaev, D., Breslauer, B., De Lee, N., Downey, J., **Halverson, S.**, Huehnerhoff, J., Klaene, M., Leon, E., Long, D., Mahadevan, S., Malanushenko, E., Nguyen, D. C., Owen, R., Sánchez-Gallego, J. R., Sayres, C., Shane, N., Shethman, S. A., Shetrone, M., Skinner, D., Stauffer, F., & Zhao, B., *PASP*, 131, 055001, 2019

Stellar spectroscopy in the near-infrared with a laser frequency comb. Metcalf, A. J., Anderson, T., Bender, C. F., Blakeslee, S., Brand, W., Carlson, D. R., Cochran, W. D., Diddams, S. A., Endl, M., Fredrick, C., **Halverson, S.**, Hickstein, D. D., Hearty, F., Jennings, J., Kanodia, S., Kaplan, K. F., Levi, E., Lubar, E., Mahadevan, S., Monson, A., Ninan, J. P., Nitroy, C., Osterman, S., Papp, S. B., Quinlan, F., Ramsey, L., Robertson, P., Roy, A., Schwab, C., Sigurdsson, S., Srinivasan, K., Stefansson, G., Sterner, D. A., Terrien, R., Wolszczan, A., Wright, J. T., & Ycas, G., *Optica*, 6, 233, 2019

Ultrastable environment control for the NEID spectrometer: design and performance demonstration. Robertson, P., Anderson, T., Stefansson, G., Hearty, F. R., Monson, A., Mahadevan, S., Blakeslee, S., Bender, C., Ninan, J. P., Conran, D., Levi, E., Lubar, E., Cole, A., Dykhouse, A., Kanodia, S., Nitroy, C., Smolsky, J., Tuggle, D., Blank, B., Nelson, M., Blake, C., **Halverson, S.**, Henderson, C., Kaplan, K. F., Li, D., Logsdon, S. E., McElwain, M. W., Rajagopal, J., Ramsey, L. W., Roy, A., Schwab, C., Terrien, R., & Wright, J. T., *Journal of Astronomical Telescopes, Instruments, and Systems*, 5, 015003, 2019

Temporal Variations of Telluric Water Vapor Absorption at Apache Point Observatory, Li, D., Blake, C., Nidever, D., **Halverson, S.**, *PASP* 130, 983, 2018

A Low-cost Environmental Control System for Precise Radial Velocity Spectrometers, Sliski, D., Blake, C., **Halverson, S.**, *PASP* 129, 982, 2017

Frequency stability characterization of a broadband fiber Fabry-Perot interferometer, Jennings, J., **Halverson, S.**, Terrien, R., Mahadevan, S., Ycas, G., & Diddams, S. *Optics Express*, 24, 14, 2017

Towards Space-like Photometric Precision from the Ground with Beam Shaping Diffusers, Stefansson, G., Mahadevan, S., Hebb, L., Wisniewski, J., Huehnerhoff, J., Morris, B., **Halverson, S.**, Zhao, M., Wright, J., O'Rourke, J., Knutson, H., Hawley, S., Kanodia, S., Li, Y., Hagen, L., Lio, L., Bender, C., Robertson, P., Dembicky, J., Gray, C., Ketzeback, W., McMillan, R., & Rudyk, T., *ApJ*, 848, 1, 2017

The Impact of Charge Transfer Inefficiency on Extreme Precision Doppler Measurements, Blake, C., **Halverson, S.**, Roy, A., *Journal of Instrumentation*, 12, C04003, 2017

A Versatile Technique to Enable Sub-milli-Kelvin Instrument Stability for Precise Radial Velocity Measurements: Tests with the Habitable-zone Planet Finder, Stefansson, G., Hearty, F., Robertson, P., Mahadevan, S., Anderson, T., Levi, E., Bender, C., Nelson, M., Monson, A., Blank, B., **Halverson, S.**, Henderson, C., Ramsey, L., Roy, A., Schwab, C., & Terrien, R., *ApJ*, 833, 175, 2016

- * ‘Modal-noise’ in single-mode fibers: A cautionary note for high precision radial velocity instruments, **Halverson, S.**, Roy, A., Mahadevan, S., & Schwab, C, ApJ, 814, L22, 2015
- * An Efficient, Compact, and Versatile Fiber Double Scrambler for High Precision Radial Velocity Instruments, **Halverson, S.**, Roy, A., Mahadevan, S., Ramsey, L., Levi, E., Schwab, C., Hearty, F., & MacDonald, N., ApJ, 806, 61, 2015
- * Development of Fiber Fabry-Perot Interferometers as Stable Near-infrared Calibration Sources for High Resolution Spectrographs, **Halverson, S.**, Mahadevan, S., Ramsey, L., Hearty, F., Wilson, J., Holtzman, J., Redman, S., Nave, G., Nidever, D., Nelson, M., Venditti, N., Bizyaev, D., & Fleming, S., PASP, 126, 939, 2014
- Suppression of Fiber Modal Noise Induced Radial Velocity Errors for Bright Emission-line Calibration Sources, Mahadevan, S., **Halverson, S.**, Ramsey, & Venditti, N. ApJ, 786, 18, 2014
- The Tenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Apache Point Observatory Galactic Evolution Experiment, Ahn, Christopher P., Alexandroff, Rachael, Allende Prieto, Carlos, Anders, Friedrich, Anderson, Scott F., Anderton, Timothy., **Halverson, S. (85th author)** ApJS, 211, 17, 2014
- Spectro-interferometric Observations of Classical Nova V458 Vul 2007, Rajabi, S., Muterspaugh, M. W., Lane, B., Sirk, M., Browne, S., Ghasempour, A., **Halverson, S.**, Kelly, J., & Williamson, M., ApJ, 786, 18, 2012
- Precise Stellar Radial Velocities of an M Dwarf with a Michelson Interferometer and a Medium-Resolution Near-Infrared Spectrograph, Muirhead, P., Edelstein, J., Erskine, D. J., Wright, J. T., Muterspaugh, M. W., Covey, K., Wishnow, E., Hamren, K., Andelson, P., Kimber, D., Mercer, T., **Halverson, S.**, Vanderburg, A., Mondo, D., Czeszumska, A., & Lloyd, J. P., PASP, 123, 709, 2011
- A Prograde, Low-inclination Orbit for the Very Hot Jupiter WASP-3b, Tripathi, A., Winn, J., Johnson, J. A., Howard, A., **Halverson, S.**, Marcy, G. W., Holman, M., de Kleer, K., Carter, J., Esquerdo, G., Everett, M., & Cabrera, N., ApJ, 715, 421, 2010
- ## Conference articles
- Differential high-precision photometry with narrowband filters using HIRAX: instrument overview, Baker, A. D., Siam, U. T., Jovanovic, N., **Halverson, S.**, Howard, A., Mawet, D., & Fahey, L. (2024), Proc. SPIE, 13096, 1309688.
- Calibration unit design for Keck/High-Resolution Infrared Spectrograph for Exoplanet Characterization (HISPEC), Sappey, B., Konopacky, Q., Maire, J., Baker, A., Jovanovic, N., **Halverson, S.**, Gibson, R., Leifer, S., Ferrara, J., Bertz, R., Mawet, D., Fitzgerald, M., Kassis, M., Bailey, J. I. III, Fucik, J., Neill, D., Johnson, C., & Magnone, K. (2024), Proc. SPIE, 13096, 130966K.
- The Large Fiber Array Spectroscopic Telescope: fiber feed fabrication and characterization, Choi, S. O. T., Angel, R., Bender, C., Berkson, J., Bugueno, E., Chavez-Lopez, G., Dibelka, J., Didato, N., Ford, J., Foster, W., Garcia, N., Gilliam, K., Gray, P., **Halverson, S.**, Huang, Y., Ketelsen, D., Kim, D., Monson, A., Oh, C., Patrou, J., Schwab, C., Sisco, M., Wortley, R., & Young, A. (2024), Proc. SPIE, 13096, 130965V.
- Fiber-fed high-resolution infrared spectroscopy at the diffraction limit with Keck-HISPEC and TMT-MODHIS: status update, Mawet, D., Fitzgerald, M. P., Konopacky, Q., Jovanovic, N., Baker, A., Andersen, D., Artigau, E., Bailey, J. I. III, Beichman, C., Benneke, B., Bertz, R., Betters, C., Breatly, D., Brown, A., Brugger, J., Dekany, R., Ferrara, J., Franco, A., Fucik, J., Gibson, R., Greffe, T., **Halverson, S.**, Johnson, C., Kassis, M. F., Kotani, T., Kim, Y. J., Leifer, S., Leon-Saval, S., Lin, J., Lingvay, L., Maire, J., Marin, E., Magnone, K., Neill, D., Pahuja, R., Ruane, G., Sercel, G., Soda, S., Sohn, J. M., Steiner, J., Tamura, M., Thorne, J., Wang, E., Wold, T., & Zarzaca, R. (2024), Proc. SPIE, 13096, 130960W.
- Innovations and advances in instrumentation at the W. M. Keck Observatory, vol. III, Kassis, M., Alvarez, C., Baker, A., Bailey, J., Banyal, R. K., Bertz, R., Beichman, C., Bouchez, A., Brown, A., Brown, M., Bundy, K., Campbell, R., Chun, M. R., Cooke, J., Deich, W., Dekany, R. G., Doppmann, G., Fassnacht, C., Ferrara, J., Fitzgerald, M. P., Fremling, C., Fucik, J. R.,

Gibson, S. R., Gillingham, P. R., Glazebrook, K., Greffe, T., **Halverson, S.**, Hill, G., Hillenbrand, L., Hinz, P., Holden, B. P., Howard, A. W., Huber, D., Jones, T., Jordan, C., Jovanovic, N., Kain, I., Kasliwal, M., Kirby, E., Konopacky, Q., Krishnan, S., Kulkarni, S., Kupke, R., Lanclos, K., Larkin, J. E., Lilley, S., Lingvay, L., Lu, J. R., Lyke, J. E., MacDonald, N., Martin, C., Mather, J., Matuszewski, M., Mawet, D., McGurk, R., Marin, E., Meeks, B., Millar-Blanchaer, M. A., Nash, R. B., Neill, J. D., O'Meara, J. M., Pahuja, R., Peretz, E., Prusinski, N., Radovan, M. V., Rider, K., Roberts, M., Rockosi, C., Rubenzahl, R., Sallum, S., Sandford, D., Savage, M., Skemer, A. J., Smith, R., Steidel, C. C., Steiner, J., Stelter, D., Walawender, J., Westfall, K. B., Wizinowich, P., Wright, S., Wold, T., & Zimmer, J. H. (2024), *Proc. SPIE*, 13096, 1309606.

System design of the Keck Planet Finder, Gibson, S. R., Howard, A. W., Rider, K., **Halverson, S.**, Roy, A., Baker, A. D., Edelstein, J., Smith, C., Fulton, B. J., Walawender, J., Brodheim, M., Brown, M., Chan, D., Dai, F., Deich, W., Gottschalk, C., Grillo, J., Hale, D., Hill, G., Holden, B., Householder, A., Isaacson, H., Ishikawa, Y., Jelinsky, S., Kassis, M., Kaye, S., Laher, R., Lanclos, K., Lee, C.-H., Lilley, S., McCarney, B., Miller, T. N., Payne, J., Petigura, E., Poppett, C., Raffanti, M. P., Rubenzahl, R., Sandford, D., Schwab, C., Shaum, A. P., Sirk, M. M., Smith, R., Thorne, J., Valliant, J., Vandenberg, A., Wang, S.-Y., Wishnow, E. H., Wold, T., Yeh, S., Baca, S., Beichman, C., Berriman, B., Brown, T., Casey, K., Chin, J., Chong, J., Cowley, D., Devenot, M., Elwir, H., Finstad, D., Fraysse, M., James, E., Jhoti, E., Killian, J., Levine, O., Li, A. C., Marin, E., Milner, S., Nance, C., O'Hanlon, T. J., Orr, D., Ortiz-Soto, R., Payne, T., Pember, J., Raskin, G., Savage, M., Seifahrt, A., Smith, B., Storesund, R., Stürmer, J., Suominen, N., Tehero, J., Von Boeckmann, T., Wages, K., Weisfeiler, M., Wilcox, M., Wizinowich, P., & Wolfenberger, A. (2024), *Proc. SPIE*, 13096, 1309609.

MARVEL: an update on the four-telescope dedicated radial velocity facility at the Mercator Observatory, Pember, J., Argyriou, I., Atkinson, D., Ávila, G., Barrett, L., Brandeker, A., Buchhave, L., Coutts, D., De Meester, W., De Ridder, J., Defrère, D., Glasse, A., Güdel, M., Haidar, M., Hakim, K., **Halverson, S.**, Harman, J., Janssen, N., Janson, M., Kinney, A., Kovacs, S., Laugier, R., Missiaen, K., Montet, B., Morren, J., Palle, E., Pérez Padilla, J., Pessemier, W., Pollacco, D., Pope, B., Prins, S., Quirrenbach, A., Raskin, G., Reggiani, M., Ribas, I., Sana, H., Schwab, C., Seynaeve, D., Sharman, R., Stokes, A., Stürmer, J., Tkachenko, A., Tinetti, G., Van Winckel, H., Vandenbussche, B., Waring, C., Wittenmyer, R., Wright, D., Zhou, Y., Adams, & D., Binos, *Proc. SPIE*, 13096, 130966B

Coralign: a software package for coronagraphic alignment and calibration, Riggs, A. J. E., Bertagna, M., Ruane, G. J., Cady, E. J., Marx, D. S., **Halverson, S. P.**, Miller, S., & Ludwick, K. J. (2023), *Proc. SPIE*, 12680, 126802F.

The development of HISPEC for Keck and MODHIS for TMT: science cases and predicted sensitivities, Konopacky, Q. M., Baker, A. D., Mawet, D., Fitzgerald, M. P., Jovanovic, N., Beichman, C., Ruane, G., Bertz, R., Terada, H., Dekany, R., Lingvay, L., Kassis, M., Anderson, D., Tamura, M., Benneke, B., Beatty, T., Do, T., Nishiyama, S., Plavchan, P., Wang, J., Wang, J., Burgasser, A., Ruffio, J.-B., Zhang, H., Brown, A., Fucik, J., Gibbs, A., Gibson, R., **Halverson, S.**, Johnson, C., Karkar, S., Kotani, T., Kress, E., Leifer, S., Magnone, K., Maire, J., Pahuja, R., Porter, M., Roberts, M., Sappety, B., Thorne, J., Wang, E., Artigau, E., Blake, G. A., Canalizo, G., Chen, G., Doppmann, G., Doyon, R., Dressing, C., Fang, M., Greene, T., Herczeg, G., Hillenbrand, L., Howard, A., Kane, S., Kataria, T., Kempton, E., Knutson, H., Lafrenière, D., Liu, C., Metchev, S., Millar-Blanchaer, M., Narita, N., Pandey, G., Rajaguru, S. P., Robertson, P., Salyk, C., Sato, B., Schlawin, E., Sengupta, S., Sivarani, T., Skidmore, W., Vasisht, G., Yasui, C., & Zhang, H. (2023), *Proc. SPIE*, 12680, 1268007.

Real-time exposure control and instrument operation with the NEID spectrograph GUI, Gupta, A. F., Bender, C. F., Ninan, J. P., Logsdon, S. E., Kanodia, S., Golub, E., Higuera, J., Klusmeyer, J., **Halverson, S.**, Mahadevan, S., McElwain, M., Schwab, C., Stefansson, G., Robertson, P., Roy, A., Terrien, R., & Wright, J. (2022), *Proc. SPIE*, 12189, 1218925.

A UV double pass spectrograph for monitoring stellar activity for the Keck Planet Finder, Baker, A. D., Gibson, S. R., Grillo, J., Ishikawa, Y., Howard, A., **Halverson, S.**, Rider, K., Jelinsky, S., Deich, W., Sirk, M. M., Isaacson, H., Roy, A., Edelstein, J., & Smith, C. (2022), *Proc. SPIE*, 12184, 121845H.

The NEID port adapter: on-sky performance, Logsdon, S. E., Wolf, M. J., Li, D., Rajagopal, J., Everett, M., Gong, Q., Golub, E., Higuera, J., Hunting, E., Jaehnig, K. P., Klusmeyer, J., Liang, M., Liu, W., McBride, W. R., McElwain, M. W., Percival, J. W., Ridgway, S., Schweiker, H., Smith, M. P., Timmermann, E., Santoro, F., Schwab, C., Bender, C. F., Blake, C. H., Gupta, A. F., **Halverson, S.**, Hearty, F., Kanodia, S., Mahadevan, S., Monson, A. J., Ninan, J., Ramsey, L., Robertson, P., Roy, A., Terrien, R. C., & Wright, J. T. (2022), *Proc. SPIE*, 12184, 121844N.

The Large Fiber Array Spectroscopic Telescope: fiber feed and spectrometer conceptual design. Bender, C. F., Angel, J. R., Berkson, J., Gray, P., **Halverson, S.**, Kang, H., Kim, D., Monson, A., Oh, C. J., Rademacher, M., Schwab, C., Young, A., & Zaritsky, D. (2022), Proc. SPIE, 12184, 121844J.

Fiber-fed high-resolution infrared spectroscopy at the diffraction limit with Keck-HISPEC and TMT-MODHIS: status update. Mawet, D., Fitzgerald, M. P., Konopacky, Q., Jovanovic, N., Baker, A., Beichman, C., Bertz, R., Dekany, R., Fucik, J., Roberts, M., Porter, M., Pahuja, R., Ruane, G., Leifer, S., **Halverson, S.**, Gibbs, A., Johnson, C., Kress, E., Magnone, K., Sohn, J. M., Wang, E., Brown, A., Maire, J., Sappsey, B., Andersen, D., Terada, H., Kassis, M., Artigau, E., Benneke, B., Doyon, R., Kotani, T., Tamura, M., Beatty, T., Plavchan, P., Do, T., Nishiyama, S., Wang, J., & Wang, J. (2022), Proc. SPIE, 12184, 121841R.

Innovations and advances in instrumentation at the W. M. Keck Observatory, vol. II. Kassis, M. F., Allen, S., Alvarez, C., Banyal, R., Bertz, R., Beichman, C., Brown, A., Brown, M., Cabak, G., Bundy, K., Cetre, S., Chin, J., Chun, M., Deich, W., Dekany, R., Delorme, J., Devenot, M., Doppmann, G., Fitzgerald, M. P., Fucik, J. R., Hill, G., Hinz, P., Holden, B. P., Howard, A., Gao, M., Gibson, S., Gomez, P., Gottschalk, C., Gillingham, P. R., Jones, T., Jovanovic, N., Kirby, E., Konopacky, Q., Krishnan, S., Kupke, R., Larkin, J. E., Leifer, S. D., Lewis, H. A., Lilley, S., Lu, J., Lyke, J. E., MacDonald, N., Marin, E., Matuszewski, M., Mawet, D., McGurk, R., Millar-Blanchaer, M. A., Nash, R. B., Nance, C., Neill, J. D., O'Meara, J. M., Peretz, E., Poppett, C. L., Mather, J. C., Radovan, M. V., Roberts, M. K., Ragland, S., Rider, K., Rockosi, C. M., Sandfor, D., Shen, B., Steidel, C. C., Simha, S., Skemer, A., Stelter, D., Surendran, A., Thorne, J., McCarney, B., Lanclos, K., Baker, A., Rubenzahl, R., Roy, A., **Halverson, S.**, Edelstein, J., Martin, C., Savage, M., Sandford, D., Sallum, S., Walawender, J., Wizinowich, P., Westfall, K. B., Vahala, K. J., Wright, S., Wold, T., & Yeh, S. (2022), Proc. SPIE, 12184, 1218405.

The Large Fiber Array Spectroscopic Telescope: opto-mechanical design and architecture. Young, A. J., Angel, R., Bender, C., Berkson, J., Gray, P., **Halverson, S.**, Kang, H., Kim, D., Monson, A., Oh, C.-J., Rademacher, M., Schwab, C., & Zaritsky, D. (2022), Proc. SPIE, 12182, 121824B.

The NEID spectrometer: fibre injection system design. Schwab, C., Monson, A. J., Kanodia, S., Lubar, E., Lin, A. S. J., Nitroy, C., **Halverson, S.**, Gong, Q., Terrien, R. C., Ninan, J. P., Bender, C., Blake, C., Hearty, F. R., Mahadevan, S., McElwain, M. W., Robertson, P. M., Roy, A., & Stefansson, G., Proc. SPIE, 11447, 114474L, 2020

Keck Planet Finder: design updates. Gibson, S. R., Howard, A. W., Rider, K., Roy, A., Edelstein, J., Kassis, M., Grillo, J., **Halverson, S.**, Sirk, M. M., Smith, C., Allen, S., Baker, A., Beichman, C., Berriman, B., Brown, T., Casey, K., Chin, J., Coutts, D., Cowley, D., Deich, W., Feger, T., Fulton, B., Gers, L., Gurevich, Y., Ishikawa, Y., James, E., Jelinsky, S., Kaye, S., Lanclos, K., Li, A., Lilley, S., McCarney, B., Miller, T., Milner, S., O'Hanlon, T. J., Pember, J., Raffanti, M., Rockosi, C., Rubenzahl, R., Rumph, D., Sandford, D., Savage, M., Schwab, C., Seifahrt, A., Shaum, A., Smith, R., Stuermer, J., Thorne, J., Vandenberg, A., Von Boeckmann, T., Wang, C., Wang, Q., Weisfeiler, M., Wilcox, M., Wishnow, E. H., Wizinowich, P., Wold, T., & Wolfenberger, A., Proc. SPIE, 11447, 1144742, 2020

Ghosts of NEID's past. Kanodia, S., Ninan, J. P., Monson, A. J., Mahadevan, S., Nitroy, C., Schwab, C., **Halverson, S.**, Bender, C. F., Terrien, R., Hearty, F. R., Lubar, E., McElwain, M. W., Ramsey, L. W., Robertson, P. M., Roy, A., Stefansson, G., & Stevens, D. J., Proc. SPIE, 11447, 1144740, 2020

MARVEL, a four-telescope array for high-precision radial-velocity monitoring. Raskin, G., Schwab, C., Vandenbussche, B., De Ridder, J., Lanthermann, C., Pérez Padilla, J., Tkachenko, A., Sana, H., Royer, P., Prins, S., Decin, L., Defrère, D., Pember, J., Atkinson, D., Glasse, A., Pollacco, D., Tinetti, G., Guedel, M., Stuermer, J., Ribas, I., Brandeker, A., Buchhave, L., **Halverson, S.**, Avila, G., Morren, J., & Van Winckel, H., Proc. SPIE, 11447, 114473K, 2020

A microresonator-based etalon for visible light precision radial velocity measurements. Leifer, S., Savchenkov, A., El Amili, A., Beichman, C., Matsko, A., Lai, Y.-H., Love, S., Strekalov, D., Schwab, C., Maleki, L., **Halverson, S.**, Coddington, I., & Bagheri, M., Proc. SPIE, 11447, 114471L, 2020

Status update of LLAMAS: a wide field-of-view visible passband IFU for the 6.5m Magellan telescopes. Furesz, G., Simcoe, R. A., Egan, M., Malonis, A., Masterson, R., Brown, J., Cappiello, G., Chesbrough, C., Clark, K., Coppeta, D., Frostig, D., Gabutti, M., **Halverson, S.**, Hinrichsen, E., Kahn, S., Lambert, M. M., Lourie, N., Piotrowski, J., & Semisch, C.,

Rubidium transitions as wavelength reference for astronomical Doppler spectrographs. Rogozin, D., Feger, T., Schwab, C., Gurevich, Y. V., Raskin, G., Coutts, D. W., Stuermer, J., Seifahrt, A., Fuehrer, T., Legero, T., Van Winckel, H., **Halverson, S.**, & Quirrenbach, A., Proc. SPIE, 11203, 112031N, 2020

Overview of the spectrometer optical fiber feed for the habitable-zone planet finder. Kanodia, S., Mahadevan, S., Ramsey, L. W., Stefansson, G. K., Monson, A. J., Hearty, F. R., Blakeslee, S., Lubar, E., Bender, C. F., Ninan, J. P., Sterner, D., Roy, A., **Halverson, S. P.**, & Robertson, P. M., Proc. SPIE, 10702, 107026Q, 2018

Extreme precision photometry from the ground with beam-shaping diffusers for K2, TESS, and beyond. Stefansson, G., Mahadevan, S., Wisniewski, J., Li, Y., Hebb, L., Morris, B., **Halverson, S.**, Monson, A., & Robertson, P., Proc. SPIE, 10702, 1070250, 2018

Rubidium traced etalon wavelength calibrators: towards deployment at observatories. Schwab, C., Feger, T., Stürmer, J., Seifahrt, A., Gurevich, Y. V., Rogozin, D., Führer, T., **Halverson, S. P.**, Terrien, R. C., Legero, T., Coutts, D. W., Raskin, G., Walther, T., Bean, J. L., & Quirrenbach, A., Proc. SPIE, 10702, 1070272, 2018

The NEID precision radial velocity spectrometer: optical design of the port adapter and ADC. Schwab, C., Liang, M., Gong, Q., Bender, C., Blake, C., **Halverson, S.**, Harbeck, D., Hearty, F., Hunting, E., Jaehnig, K. P., Logsdon, S. E., Mahadevan, S., McElwain, M. W., Monson, A. J., Percival, J. W., Rajagopal, J., Ramsey, L., Robertson, P. M., Roy, A., Santoro, F., Smith, M. P., Terrien, R. C., Timmermann, E., Willems, P., Wolf, M. J., & Wright, J., Proc. SPIE, 10702, 1070271, 2018

A optical fiber double scrambler and mechanical agitator system for the Keck planet finder spectrograph. Sirk, M. M., Wishnow, E. H., Weisfeiler, M., Jhoti, E., Curtis, J., Ishikawa, Y., Finstad, D., O'Hanlon, T., Gibson, S. R., Edelstein, J., **Halverson, S.**, Roy, A., & Howard, A., Proc. SPIE, 10702, 107026F, 2018

The NEID precision radial velocity spectrometer: port adapter overview, requirements, and test plan. Logsdon, S. E., McElwain, M. W., Gong, Q., Liang, M., Santoro, F., Schwab, C., Bender, C., Blake, C., **Halverson, S.**, Hearty, F., Hunting, E., Jaehnig, K. P., Mahadevan, S., Monson, A. J., Percival, J. W., Rajagopal, J., Ramsey, L., Roy, A., Smith, M. P., Terrien, R. C., Timmermann, E., Willems, P., Wolf, M. J., & Wright, J., Proc. SPIE, 10702, 1070267, 2018

Keck Planet Finder: preliminary design. Gibson, S. R., Howard, A. W., Roy, A., Smith, C., **Halverson, S.**, Edelstein, J., Kassis, M., Wishnow, E. H., Raffanti, M., Allen, S., Chin, J., Coutts, D., Cowley, D., Curtis, J., Deich, W., Feger, T., Finstad, D., Gurevich, Y., Ishikawa, Y., James, E., Jhoti, E., Lanclos, K., Lilley, S., Miller, T., Milner, S., Payne, T., Rider, K., Rockosi, C., Sandford, D., Schwab, C., Seifahrt, A., Sirk, M. M., Smith, R., Stuermer, J., Weisfeiler, M., Wilcox, M., Vandenberg, A., & Wizinowich, P., Proc. SPIE, 10702, 107025X, 2018

Measuring extended red sensitivity in a 1.7 μ m-cutoff HgCdTe detector array. Terrien, R. C., Monson, A. J., Mahadevan, S., Bender, C., **Halverson, S. P.**, & Ramsey, L., Proc. SPIE, 9915, 99151Q, 2016

The instrument control software package for the Habitable-Zone Planet Finder spectrometer. Bender, C. F., Robertson, P., Stefansson, G. K., Monson, A., Anderson, T., **Halverson, S.**, Hearty, F., Levi, E., Mahadevan, S., Nelson, M., Ramsey, L., Roy, A., Schwab, C., Shetrone, M., & Terrien, R., Proc. SPIE, 9913, 991338, 2016

Design of NEID, an extreme precision Doppler spectrograph for WIYN. Schwab, C., Rakich, A., Gong, Q., Mahadevan, S., **Halverson, S. P.**, Roy, A., Terrien, R. C., Robertson, P. M., Hearty, F. R., Levi, E. I., Monson, A. J., Wright, J. T., McElwain, M. W., Bender, C. F., Blake, C. H., Stürmer, J., Gurevich, Y. V., Chakraborty, A., & Ramsey, L. W., Proc. SPIE, 9908, 99087H, 2016

Ultra-stable temperature and pressure control for the Habitable-zone Planet Finder spectrograph. Stefansson, G. K., Hearty, F. R., Robertson, P. M., Levi, E. I., Mahadevan, S., Anderson, T. B., Monson, A. J., Bender, C. F., **Halverson, S. P.**, Li, Y., Ramsey, L. W., Roy, A., Schwab, C., Terrien, R. C., Nelson, M. J., & Blank, B., Proc. SPIE, 9908, 990871, 2016

* A comprehensive radial velocity error budget for next generation Doppler spectrometers. **Halverson, S.**, Terrien, R., Mahadevan, S., Roy, A., Bender, C., Stefánsson, G. K., Monson, A., Levi, E., Hearty, F., Blake, C., McElwain, M., Schwab, C., Ramsey, L., Wright, J., Wang, S., Gong, Q., & Roberston, P., Proc. SPIE, 9908, 99086P, 2016

A system to provide sub-milliKelvin temperature control at T 300K for extreme precision optical radial velocimetry. Robertson, P. M., Hearty, F. R., Anderson, T. B., Stefánsson, G. K., Levi, E. I., Bender, C. F., Mahadevan, S., **Halverson, S. P.**, Monson, A. J., Ramsey, L. W., Roy, A., Schwab, C., Terrien, R. C., Nelson, M. J., & Blank, B., Proc. SPIE, 9908, 990862, 2016

Measuring the thermal sensitivity of a fiber Fabry-Perot interferometer. Jennings, J., **Halverson, S.**, Diddams, S. A., Terrien, R., Ycas, G., & Mahadevan, S., Proc. SPIE, 9907, 99072G, 2016

Adaptive optics fed single-mode spectrograph for high-precision Doppler measurements in the near-infrared. Schwab, C., Jovanovic, N., Feger, T., Bakovic, M., Gurevich, Y. V., Stürmer, J., Apodaca, R., Vanzi, L., Rukdee, S., Lawrence, J. S., Coutts, D. W., Cvetojevic, N., Mahadevan, S., Stefánsson, G. K., **Halverson, S. P.**, & Guyon, O., Proc. SPIE, 9912, 991274, 2016

* The habitable-zone planet finder calibration system. **Halverson, S.**, Mahadevan, S., Ramsey, L., Terrien, R., Roy, A., Schwab, C., Bender, C., Hearty, F., Levi, E., Osterman, S., Ycas, G., & Diddams, S., Proc. SPIE, 9147, 91477Z, 2014

Developments in simulations and software for a near-infrared precision radial velocity spectrograph. Terrien, R. C., Bender, C. F., Mahadevan, S., **Halverson, S. P.**, Ramsey, L. W., & Hearty, F. R., Proc. SPIE, 9152, 915226, 2014

Scrambling and modal noise mitigation in the Habitable Zone Planet Finder fiber feed. Roy, A., **Halverson, S.**, Mahadevan, S., & Ramsey, L. W., Proc. SPIE, 9147, 91476B, 2014

Environmental control system for Habitable-zone Planet Finder (HPF). Hearty, F., Levi, E., Nelson, M., Mahadevan, S., Burton, A., Ramsey, L., Bender, C., Terrien, R., **Halverson, S.**, Robertson, P., Roy, A., Blank, B., Blanchard, K., & Stefansson, G., Proc. SPIE, 9147, 914752, 2014

The Habitable-zone Planet Finder: A status update on the development of a stabilized fiber-fed near-infrared spectrograph for the for the Hobby-Eberly telescope. Mahadevan, S., Ramsey, L. W., Terrien, R., **Halverson, S.**, Roy, A., Hearty, F., Levi, E., Stefansson, G. K., Robertson, P., Bender, C., Schwab, C., & Nelson, M., Proc. SPIE, 9147, 91471G, 2014

* Development of a New, Precise Near-infrared Doppler Wavelength Reference: A Fiber Fabry-Perot Interferometer. **Halverson, S.**, Mahadevan, S., Ramsey, L., Redman, S., Nave, G., Wilson, J. C., Hearty, F., & Holtzman, J., Proc. SPIE, 84468Q, 2012

Optical fiber modal noise in the 0.8 to 1.5 micron region and implications for near infrared precision radial velocity measurements. McCoy, K. S., Ramsey, L., Mahadevan, S., **Halverson, S.**, & Redman, S. L., Proc. SPIE, 8446, 84468J, 2012

The habitable-zone planet finder: a stabilized fiber-fed NIR spectrograph for the Hobby-Eberly Telescope. Mahadevan, S., Ramsey, L., Bender, C., Terrien, R., Wright, J. T., **Halverson, S.**, Hearty, F., Nelson, M., Burton, A., Redman, S., Osterman, S., Diddams, S., Kasting, J., Endl, M., & Deshpande, R., Proc. SPIE, 8446, 84461S, 2012

Performance of the Apache Point Observatory Galactic Evolution Experiment (APOGEE) high-resolution near-infrared multi-object fiber spectrograph. Wilson, J. C., Hearty, F., Skrutskie, M. F., Majewski, S. R., Schiavon, R., Eisenstein, D., Gunn, J., Holtzman, J., Nidever, D., Gillespie, B., Weinberg, D., Blank, B., Henderson, C., Smee, S., Barkhouser, R., Harding, A., Hope, S., Fitzgerald, G., Stolberg, T., Arns, J., Nelson, M., Brunner, S., Burton, A., Walker, E., Lam, C., Maseman, P., Barr, J., Leger, F., Carey, L., MacDonald, N., Ebelke, G., Beland, S., Horne, T., Young, E., Rieke, G., Rieke, M., O'Brien, T., Crane, J., Carr, M., Harrison, C., Stoll, R., Vernieri, M., Shetrone, M., Allende-Prieto, C., Johnson, J., Frinchaboy, P., Zasowski, G., Garcia Perez, A., Bizyaev, D., Cunha, K., Smith, V. V., Meszaros, S., Zhao, B., Hayden, M., Chojnowski, S. D., Andrews, B., Loomis, C., Owen, R., Klaene, M., Brinkmann, J., Stauffer, F., Long, D., Jordan, W., Holder, D., Cope, F., Naugle, T., Pfaffenberger, B., Schlegel, D., Blanton, M., Muna, D., Weaver, B., Snedden, S., Pan, K., Brewington, H.,

Malanushenko, E., Malanushenko, V., Simmons, A., Oravetz, D., Mahadevan, S., & **Halverson, S.**, Proc. SPIE, 8446, 84460H, 2012

Infrared radial velocimetry with TEDI: performance development. Edelstein, J., Muirhead, P., Wright, J., Covey, K., Erskine, D., Muterspaugh, M., Lloyd, J., **Halverson, S.**, Marckwordt, M., & Mondo, D., Proc. SPIE, 7735, 773583, 2010

Precise infrared radial velocimetry with the Triplespec Exoplanet Discovery Instrument: current performance and results. Muirhead, P. S., Edelstein, J., Wright, J. T., Erskine, D. J., Muterspaugh, M. W., Covey, K. R., Marckwordt, M. R., **Halverson, S.**, Mondo, D., & Lloyd, J. P., Proc. SPIE, 7735, 77357X, 2010

Dispersed interferometry for infrared exoplanet velocimetry. Edelstein, J., Muterspaugh, M. W., Erskine, D., Marckwordt, M., Feuerstein, W. M., Mercer, T., Czeszumski, A., Schwer, J., **Halverson, S.**, Lloyd, J. P., Muirhead, P. S., Wright, J. T., & Herter, T., Proc. SPIE, 7014, 70147F, 2008

Predicting migration system dynamics with conditional and posterior probabilities, Andris, C., **Halverson, S.**, Hardisty, F., Spatial Data Mining and Geographical Knowledge Services (ICSDM), 2011 IEEE International Conference, pg 192 - 197

Other non-refereed materials.....

Extreme Precision Radial Velocity Working Group Final Report, Crass, J., Gaudi, B. S., Leifer, S., Beichman, C., Bender, C., Blackwood, G., Burt, J. A., Callas, J. L., Cegla, H. M., Diddams, S. A., Dumusque, X., Eastman, J. D., Ford, E. B., Fulton, B., Gibson, R., **Halverson, S.**, Haywood, R. D., Hearty, F., Howard, A. W., Latham, D. W., Löhner-Böttcher, J., Mamajek, E. E., Mortier, A., Newman, P., Plavchan, P., Quirrenbach, A., Reiners, A., Robertson, P., Roy, A., Schwab, C., Seifahrt, A., Szentgyorgyi, A., Terrien, R., Teske, J. K., Thompson, S., & Vasisht, G., <https://exoplanets.nasa.gov/exep/NNExplore/EPRV/>, 2021

The Mid-Infrared Search for Biosignatures on Temperate M-Dwarf Planets, Kataria, T., Zellem, R. T., Fortney, J. J., Stevenson, K. B., Tremblay, L., Line, M. R., Morley, C., **Halverson, S.**, Meshkat, T., Armus, L., Birkby, J., Evans, T. M., Fauchez, T. J., Kopparapu, R., Pontoppidan, K., Roellig, T. L., Wordsworth, R., Danchi, W. C., Greene, T., Kane, S. R., Sakon, I., Stassun, K., & Swain, M. R., Astro2020: Decadal Survey on Astronomy and Astrophysics, 2020, 462, 2019

The need for single-mode fiber-fed spectrographs, Crass, J., Bechter, A., Bechter, E., Beichman, C., Blake, C., Coutts, D., Feger, T., **Halverson, S.**, Harris, R. J., Jovanovic, N., Plavchan, P., Schwab, C., Vasisht, G., Wallace, J. K., & Wang, J., Astro2020: Decadal Survey on Astronomy and Astrophysics, APC white papers, no. 122; Bulletin of the American Astronomical Society, Vol. 51, Issue 7, id. 122, 2019

EarthFinder: A Precise Radial Velocity Probe Mission Concept For the Detection of Earth-Mass Planets Orbiting Sun-like Stars, Plavchan, P., Cale, B., Newman, P., Hamze, B., Latouf, N., Matzko, W., Beichman, C., Ciardi, D., Purcell, B., Lightsey, P., Cegla, H., Dumusque, X., Bourrier, V., Dressing, C., Gao, P., Vasisht, G., Leifer, S., Wang, S., Gagne, J., Thompson, S., Crass, J., Bechter, A., Bechter, E., Blake, C., **Halverson, S.**, Mayo, A., Beatty, T., Wright, J. T., Wise, A., Tanner, A., Eastman, J., Quinn, S., Fischer, D., Basu, S., Sanchez-Maes, S., Howard, A., Vahala, K., Wang, J., Diddams, S., Papp, S., Pope, B. J., Martin, E., & Murphy, S., White Paper Submitted to the National Academies Committee on Exoplanet Science Strategy, 2018

* A Fiber Fabry-Perot Interferometer as Stable Wavelength Reference for High-resolution Astronomical Spectrographs (poster), **Halverson, S.**, Mahadevan, S., Ramsey, L., OSA Workshop on Specialty Optical Fibers and their Applications, W3.3, 2013

The Habitable-zone Planet Finder (HPF): Achieving high precision radial velocities and mitigating stellar activity noise (poster), Mahadevan, S., Ramsey, L. W., Terrien, R., Robertson, P., Marchwinski, R. C., Hearty, F., Levi, E., Stefansson, G., Bender, C. F., **Halverson, S.**, Roy, A., Nelson, M., Schwab, C., American Astronomical Society, AAS Meeting 225, #258.23, 2015

V458 Vul 2007: A Fast Varying Nova In The Early Phase Of Evolution (poster), Rajabi, S., Muterspaugh, M. W., Lane, B.

F., Sirk, M. M., Browne, S., Ghasempour, A., **Halverson, S.**, Kelly, J. G., Williamson, M., American Astronomical Society, AAS Meeting 219, #436.16, 2010

Detectability of Earth-like Planets in Multi-Planet Systems: Preliminary Report, Traub, W. A., Beichman, C., Boden, A. F., Boss, A. P., Casertano, S., Catanzarite, J., Fischer, D., Ford, E. B., Gould, A., **Halverson, S.**, Howard, A., Ida, S., Kasdin, N. J., Laughlin, G. P., Levison, H. F., Lin, D., Makarov, V., Marr, J., Muterspaugh, M., Raymond, S. N., Savransky, D., Shao, M., Sozzetti, A., Zhai, C., EAS Publications Series, Volume 42, 2010

Preliminary Data Reduction Methods for TEDI: The Triplespec Exoplanet Discovery Instrument (poster), **Halverson, S.**, Muirhead, P., Muterspaugh, M., Edelstein, J., Bulletin of the American Astronomical Society, Vol. 42, p.287, 2010

* The SIM Exoplanet Analysis Experiment, an Undergraduate Perspective (poster), **Halverson, S.**, Muterspaugh, M., Howard, A., Wright, J., Sirk, M., Bulletin of the American Astronomical Society, Vol. 41, p.357, 2009

Refereed publications: [ADS Link](#)

Non-Refereed publications: [ADS Link](#)