Guðmundur Kári Stefánsson, PhD — CV

Henry Norris Russell Postdoctoral Fellow

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Education

2013-2019	**Penn State University:** Ph.D., Astronomy & Astrophysics (advisor: Suvrath Mahadevan) — Thesis: *Extreme Precision Photometry and Radial Velocimetry from the Ground*
2012	**Stanford University:** Summer International Honors Program
2010-2013	**University of Iceland:** B.S., Physics (Thesis: *Observational Constraints on Dark Energy*)

Awards & Honors

2019-Current	**Henry Norris Russell Postdoctoral Fellowship**, Princeton University
2020	**IAU PhD Thesis Prize Runner Up**, International Astronomical Union
2016-2019	**NASA Earth and Space Science Fellowhip (NESSF)**
2016, 2018, 2019	**Zaccheus Daniel Travel Award**, Penn State
2017	**Downsbrough Graduate Fellowship**, Penn State
2015	**Stephen B. Brumbach Fellowship in Astrophysics**, Penn State
2015	**Leifur Eiríksson Foundation Fellowship**
2014	**TA of the Year**, Penn State
2013	**G. P. Bjarnason Scholarship**, Univ. Iceland
2013	**Braddock-Roberts Fellowship**, Penn State
2013	**Fulbright Fellowship**, PhD program at Penn State
	Summer International Honors Scholarship Program, Stanford University
2011, 2012	**Icelandic Student Innovation Fund**, Summer research grant
2010	**41st International Physics Olympiad IPhO**, honorable mention
2010	**Accomplishment and Encouragement Fund**, Uni. Iceland

Professional Experience

Current 2019+	**Optical Characterization of HAT-PI** Along with the HAT-PI team, I am characterizing the optical quality the HAT-PI cameras, an all-sky camera for Las Campanas Observatory designed to detect exoplanets and transients.
Current 2018+	**Precision Rossiter McLaughlin Observations of M-dwarf Planetary Systems** I am conducting precision Rossiter-McLaughin Observations of M-dwarf planet systems using the Habitable-zone Planet Finder Spectrograph on the 10m Hobby-Eberly Telescope to study their formation and dynamical histories.
Current 2013+	**Approaching 1m/s radial velocity precision in the NIR with HPF** I have demonstrated that The Habitable-zone Planet Finder (HPF) is capable of delivering 1.5-2m/s radial velocities (RVs) on-sky—the current highest precision RVs in the near-infrared (NIR) (Metcalf et al. 2019).
Current 2016+	**Approaching 10cm/s radial velocity precision in the optical with NEID** I am a core member of the NEID hardware and science team, a high-resolution spectrograph installed on the 3.5m WIYN Telescope designed to survey nearby bright stars for rocky Earth-like planets.
Current 2016+	**Space-Quality Ground-based Photometry with Engineered Diffusers** I led the installation of an Engineered Diffuser on the ARC 3.5m telescope at APO demonstrating 62ppm precision in 30min bins—some of the highest photometry from the ground (Stefansson et al. 2017, 2018a,b, 2020a,b,c).
Current 2014+	**Precision Environmental Control for Precision RVs** I built and developed a number of the subsystems for the HPF and NEID Environmental Control Systems demonstrating sub-mK temperature stability long term (Stefansson et al. 2016a, b; Robertson et al. 2019).
2014-2015	**PlaneWave CDK24 0.6m Telescope Installation** I installed a PlaneWave CDK24 0.6m telescope at Davey Lab Observatory, a telescope used for teaching and research.
Summer 2013	**High Purity Germanium Detector Calibration at ISOLDE** I set up, operated, and characterized two High Purity Ge (HPGe) detectors for the ISOLDE experiment at CERN.

Professional Talks (11 select)

1. "*Improving Precision Radial Velocities in the NIR*", Center for Computational Astrophysics, New York, USA, March 11th, 2020
2. "*Precision NIR RM Effect Observations with the Habitable-zone Planet Finder*", Extreme Solar Systems IV, Reykjavik, Iceland, August 20th, 2019
3. "*Precision NIR RM Effect Observations with the Habitable-zone Planet Finder*", Extreme Precision Radial Velocities IV, Grindelwald, Switzerland, March 21st, 2019
4. "*Extreme Precision Photometry and Radial Velocimetry for K2, TESS and Beyond*", Exoplanet Lunch Talk, Princeton University, September 17th, 2018
5. "*Extreme Precision Photometry and Radial Velocimetry for K2, TESS and Beyond*", **Invited Seminar**, Space Sciences Lab, Berkeley, September 14th, 2018
6. "*Extreme Precision Photometry and Radial Velocimetry for K2, TESS and Beyond*", **Invited Exoplanet Seminar**, California Institute of Technology, September 12th, 2018
7. "*First precision radial velocities in the Near-Infrared with the Habitable-zone Planet Finder Spectrograph*", Emerging Researchers in Exoplanet Science IV, Penn State, June 22nd, 2018
8. "*Exoplanets and life in the universe: developing new technologies to better detect exoplanets from the ground*, public talk, University of Iceland, September 21st, 2017
9. "*Instrumentation Challenges in the 10cm/s Era: Precision Environmental Control*", **invited breakout session**, Extreme Precision Radial Velocities III, Penn State, August 15th, 2017
10. "*Breaking the milli-Kelvin Spectrograph Temperature Stability*", **invited talk**, Extreme Precision Radial Velocities IV, Penn State, August 14th, 2017
11. "*Diffuser-assisted Photometry to Achieve Space-Like Precision from the Ground with Telescopes Large and Small*", Emerging Researchers in Exoplanet Science Symposium II, Cornell University, June 12, 2016

Laboratory Skills & Training

— Optics, detectors, fibers in the optical/NIR
— Vacuum hardware, He leak checking
— Machine Shop Experience
— Python, SolidWorks, Zemax, HTML/CSS

Observing Experience

WIYN 3.5m: NEID	5 commissioning nights
HET 10m: HPF	25 commissioning nights
ARC 3.5m	>45 half nights
HET 10m: LRS-2	9 hours of PI time
PSU 24inch	Numerous nights

Select Outreach and Service

Jan 2020	**Nobel Prize in Physics: Exoplanets** Public talk, National History Museum of Iceland
Current (2014+)	**HPF & NEID Blogs:** (hpf.psu.edu): 8 articles, and 4 videos
2017,2019	**Radio Inteviews:** *Morgunútvarpið, Samfélagið*, Icelandic public radio
2017,2019	**Newspaper Inteviews:** *Vísir*, Icelandic newspaper
2017	**Solar Eclipse Viewing:** Volunteering during solar eclipse on August 21st
2014-2016	**@astrobites**: Alumni (wrote $>$ 20 articles), a daily astronomy literature journal
2014, 2015	**Public Observing:** Numerous nights with 10", 12", and 24" telescopes, Penn State
2013, 2014, 2015	**Astro-Fest, Astro-Night:** Public observing, planetarium, make-a-comet, Penn State
2013, 2014, 2015	**Astro-Night:** Public observing, planetarium, Penn State
2014	**Exploration U:** Community Science Night, State College
2012, 2013	**University Day:** Experimental Physics Demonstrations, Uni. Iceland

Press Releases

Aug 2020	Surprisingly Dense Exoplanet Challenges Planet Formation Theories
Feb 2020	Sub-Neptune-sized planet validated with the Habitable-zone Planet Finder
Oct 2017	You can see that from here - Press Release on Engineered Diffuser Technology

Teaching

2013,14	**Instructor**, Astro 11, Penn State
2014	**TA**, Astro 1, Astro 5, Astro 6, Penn State
2013	**TA**, Astro 1, Astro 1, Astro 10, Penn State
2012,13	**TA**, Physics 2, Physics-305G, Uni. Iceland
2012	**Private Tutor**, Physics 1V, Nobel 101

Student Mentoring

2020+	**S. Jones:** Photometry, Spectroscopy
2018-2020	**M. Maney:** Photometry, Transits
2018	**R. Bowens, B. DeMarcy:** Independent Transit Research Project
2016,17,18	**Y. Li:** Photometry producing 1 RNAAS article & 1 AJ paper

1st Author Publications

[1] **Stefansson, G.**, C. Cañas, J. Wisniewski, P. Robertson, S. Mahadevan, M. Maney, S. Kanodia, C. Beard, C. F. Bender, P. Brunt, J. C. Clemens, W. Cochran, S. A. Diddams, M. Endl, E. B. Ford, C. Fredrick, S. Halverson, F. Hearty, L. Hebb, J. Huehnerhoff, J. Jennings, K. Kaplan, E. Levi, E. Lubar, A. J. Metcalf, A. Monson, B. Morris, J. P. Ninan, C. Nitroy, L. Ramsey, A. Roy, C. Schwab, S. Sigurdsson, R. Terrien, and J. T. Wright. "A Sub-Neptune-sized Planet Transiting the M2.5 Dwarf G 9-40: Validation with the Habitable-zone Planet Finder". In: *AJ* 159.3, 100 (Mar. 2020), p. 100. arXiv: 1912.00291 [astro-ph.EP].

[2] **Stefansson, G.**, R. Kopparapu, A. Lin, S. Mahadevan, C. Cañas, S. Kanodia, J. Ninan, W. Cochran, M. Endl, L. Hebb, J. Wisniewski, A. Gupta, M. Everett, C. Bender, S. Diddams, E. Ford, C. Fredrick, S. Halverson, F. Hearty, E. Levi, M. Maney, A. Metcalf, A. Monson, L. Ramsey, P. Robertson, A. Roy, C. Schwab, R. Terrien, and J. Wright. "A Mini-Neptune and a Venus-Zone Planet in the Radius Valley Orbiting the Nearby M2-dwarf TOI-1266: Validation with the Habitable-zone Planet Finder". In: ***AJ (in press)*** (June 2020). arXiv: 2006.11180 [astro-ph.EP].

[3] **Stefansson, G.**, S. Mahadevan, M. Maney, J. P. Ninan, P Robertson, J. Rajagopal, F. Haase, L Allen, E. B. Ford, J. Winn, A. Wolfgang, R. I. Dawson, J. Wisniewski, C Bender, C. Cañas, W. Cochran, S. Diddams, C. Fredrick, S. Halverson, F. Hearty, L. Hebb, S. Kanodia, E. Levi, A. Metcalf, A. Monson, L. Ramsey, A. Roy, C. Schwab, R. Terrien, and J. T. Wright. "The Habitable-zone Planet Finder Reveals A High Mass and a Low Obliquity for the Young Neptune K2-25b". In: ***AJ (in press)*** (July 2020). arXiv: 2007.12766 [astro-ph.EP].

[4] **Stefansson, G. K.**, S. Mahadevan, J. Wisniewski, Y. Li, L. Hebb, B. Morris, S Halverson, A. Monson, and P. Robertson. "Extreme precision photometry from the ground with beam-shaping diffusers for K2, TESS, and beyond". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 10702. SPIE. Aug. 2018, p. 10702.

[5] **Stefansson, G.**, Li, Y., Mahadevan, S., Wisniewski, J., Hebb, L., Morris, B., Huehnerhoff, J., and Hawley, S. "Diffuser-assisted Photometric Follow-up Observations of the Neptune-sized Planets K2-28b and K2-100b". In: *The Astronomical Journal* 156.6 (2018), p. 266.

[6] **Stefansson, G.**, S. Mahadevan, L. Hebb, J. Wisniewski, J. Huehnerhoff, B. Morris, S. Halverson, M. Zhao, J. Wright, J. O'rourke, H. Knutson, S. Hawley, S. Kanodia, Y. Li, L. M. Z. Hagen, L. J. Liu, T. Beatty, C. Bender, P. Robertson, J. Dembicky, C. Gray, W. Ketzeback, R. McMillan, and T. Rudyk. "Toward Space-like Photometric Precision from the Ground with Beam-shaping Diffusers". In: *ApJ* 848, 9 (Oct. 2017), p. 9. arXiv: 1710.01790 [astro-ph.IM].

[7] **Stefánsson, G. K.**, F. R. Hearty, P. M. Robertson, E. I. Levi, S. Mahadevan, T. B. Anderson, A. J. Monson, C. F. Bender, S. P. Halverson, Y. Li, L. W. Ramsey, A. Roy, C. Schwab, R. C. Terrien, M. J. Nelson, and B. Blank. "Ultra-stable temperature and pressure control for the Habitable-zone Planet Finder spectrograph". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 9908. SPIE. Aug. 2016, p. 990871.

[8] **Stefansson, G.**, F. Hearty, P. Robertson, S. Mahadevan, T. Anderson, E. Levi, C. Bender, M. Nelson, A. Monson, B. Blank, S. Halverson, C. Henderson, L. Ramsey, A. Roy, C. Schwab, and R. Terrien. "A Versatile Technique to Enable Sub-milli-Kelvin Instrument Stability for Precise Radial Velocity Measurements: Tests with the Habitable-zone Planet Finder". In: *ApJ* 833, 175 (Dec. 2016), p. 175. arXiv: 1610.06216 [astro-ph.IM].

[9] **Stefansson, G. K.**, D. Bjarnason, and K. Leosson. "Fabrication of integrated optical and microfluidic devices". In: *Raust* (2011).

2ND AUTHOR PUBLICATIONS

[1] C. I. Cañas, **Stefansson, G.**, S. Kanodia, S. Mahadevan, W. D. Cochran, M. Endl, P. Robertson, C. F. Bender, J. P. Ninan, C. Beard, J. Lubin, A. F. Gupta, M. E. Everett, A. Monson, R. F. Wilson, H. M. Lewis, M. Brewer, S. R. Majewski, L. Hebb, R. I. Dawson, S. A. Diddams, E. B. Ford, C. Fredrick, S. Halverson, F. Hearty, S. S. J. Lin, A. J. Metcalf, J. Rajagopal, L. W. Ramsey, A. Roy, C. Schwab, R. C. Terrien, and J. T. Wright. "A Warm Jupiter Transiting an M Dwarf: A TESS Single-transit Event Confirmed with the Habitable-zone Planet Finder". In: *AJ* 160.3, 147 (Sept. 2020), p. 147. arXiv: 2007.07098 [astro-ph.EP].

[2] J. P. Ninan, **Stefansson, G.**, S. Mahadevan, C. Bender, P. Robertson, L. Ramsey, R. Terrien, J. Wright, S. A. Diddams, S. Kanodia, W. Cochran, M. Endl, E. B. Ford, C. Fredrick, S. Halverson, F. Hearty, J. Jennings, K. Kaplan, E. Lubar, A. J. Metcalf, A. Monson, C. Nitroy, A. Roy, and C. Schwab. "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". In: *ApJ* 894.2, 97 (May 2020), p. 97. arXiv: 1910.02070 [astro-ph.EP].

[3] P. Robertson, **Stefansson, G.**, S. Mahadevan, M. Endl, W. D. Cochran, C. Beard, C. F. Bender, S. A. Diddams, N. Duong, E. B. Ford, C. Fredrick, S. Halverson, F. Hearty, E. Holcomb, L. Juan, S. Kanodia, J. Lubin, A. J. Metcalf, A. Monson, J. P. Ninan, J. Palafoutas, L. W. Ramsey, A. Roy, C. Schwab, R. C. Terrien, and J. T. Wright. "Persistent Starspot Signals on M Dwarfs: Multiwavelength Doppler Observations with the Habitable-zone Planet Finder and Keck/HIRES". In: *ApJ* 897.2, 125 (July 2020), p. 125. arXiv: 2005.09657 [astro-ph.SR].

[4] C. I. Cañas, **Stefansson, G.**, A. J. Monson, J. K. Teske, C. F. Bender, S. Mahadevan, C. Aerts, R. L. Beaton, R. P. Butler, K. R. Covey, J. D. Crane, N. De Lee, M. R. Dıaz, S. W. Fleming, D. A. Garcıa-Hernández, F. R. Hearty, J. A. Kollmeier, S. R. Majewski, C. Nitschelm, D. P. Schneider, S. A. Shectman, K. G. Stassun, A. Tkachenko, S. X. Wang, S. Wang, J. C. Wilson, and R. F. Wilson. "TOI-150: A Transiting Hot Jupiter in the TESS Southern CVZ". In: *ApJL* 877.2, L29 (June 2019), p. L29. arXiv: 1902.09710 [astro-ph.EP].

[5] C. von Essen, **Stefansson, G.**, M. Mallonn, T. Pursimo, A. A. Djupvik, S. Mahadevan, H. Kjeldsen, J. Freudenthal, and S. Dreizler. "First light of engineered diffusers at the Nordic Optical Telescope reveal time variability of the optical eclipse depth of WASP-12b". In: *Astronomy & Astrophysics* 628, A115 (Aug. 2019), A115. arXiv: 1904.05362 [astro-ph.EP].

[6] Y. Li, **Stefansson, G.**, P. Robertson, A. Monson, C. Cañas, and S. Mahadevan. "A Candidate Transit Event around Proxima Centauri". In: *Research Notes of the American Astronomical Society* 1, 49 (Dec. 2017), p. 49. arXiv: 1712.04483 [astro-ph.EP].

[7] I. Slovinsky, **Stefansson, G. K.**, A. Kossoy, and K. Leosson. "Propagation Loss of Long-Range Surface Plasmon Polariton Gold Stripe Waveguides in the Thin-Film Limit". In: *Plasmonics* 8.4 (2013), pp. 1613–1619.

COAUTHORED PUBLICATIONS

[1] S. Kanodia, C. I. Cañas, **Stefansson, G. K.**, J. P. Ninan, L. Hebb, A. S. J. Lin, H. Baran, M. Maney, R. C. Terrien, S. Mahadevan, W. D. Cochran, M. Endl, J. Dong, C. F. Bender, S. A. Diddams, E. B. Ford, C. Fredrick, S. Halverson, F. Hearty, A. J. Metcalf, A. Monson, L. W. Ramsey, P. Robertson, A. Roy, C. Schwab, and J. T. Wright. "TOI-1728b: The Habitable-zone Planet Finder Confirms a Warm Super-Neptune Orbiting an M-dwarf Host". In: *ApJ* 899.1, 29 (Aug. 2020), p. 29. arXiv: 2006.14546 [astro-ph.EP].

[2] K. W. F. Lam, J. Korth, K. Masuda, S. Csizmadia, P. Eigmüller, **Stefansson, G. K.**, M. Endl, S. Albrecht, P. Robertson, R. Luque, J. H. Livingston, T. Hirano, R. A. Sobrino, O. Barragán, J. Cabrera, I. Carleo, A. Chaushev, W. D. Cochran, F. Dai, J. Leon, H. J. Deeg, A. Erikson, M. Esposito, M. Fridlund, A. Fukui, D. Gandolfi, I. Georgieva, L. Gonzalez Cuesta, S. Grziwa, E. W. Guenther, A. P. Hatzes, D. Hidalgo, M. Hjorth, P. Kabath, E. Knudstrup, M. N. Lund, S. Mahadevan, S. Mathur, P. Montañes Rodrıguez, F. Murgas, N. Narita, D. Nespral, P. Niraula, E. Palle, M. Pätzold, C. M. Persson, J. Prieto-Arranz, H. Rauer, S. Redfield, I. Ribas, M. Skarka, A. M. S. Smith, J. Subjak, and V. Eylen. "It Takes Two Planets in Resonance to Tango around K2-146". In: *AJ* 159.3, 120 (Mar. 2020), p. 120. arXiv: 1907.11141 [astro-ph.EP].

[3] C. Obermeier, J. Steuer, H. Kellermann, R. P. Saglia, T. Henning, A. Riffeser, U. Hopp, **Stefansson, G. K.**, C. Cañas, J. Ninan, S. Mahadevan, H. Isaacson, A. W. Howard, J. Livingston, J. Koppenhoefer, and R. Bender. "Following the TraCS of exoplanets with Pan-Planets: Wendelstein-1b and Wendelstein-2b". In: *A&A* 639, A130 (July 2020), A130. arXiv: 2005.13560 [astro-ph.EP].

[4] A. Roy, S. Halverson, S. Mahadevan, **Stefansson, G. K.**, A. Monson, S. E. Logsdon, C. F. Bender, C. H. Blake, E. Golub, A. Gupta, K. P. Jaehnig, S. Kanodia, K. Kaplan, M. W. McElwain, J. P. Ninan, J. Rajagopal, P. Robertson, C. Schwab, R. C. Terrien, S. X. Wang, M. J. Wolf, and J. T. Wright. "Solar Contamination in Extreme-precision Radial-velocity Measurements: Deleterious Effects and Prospects for Mitigation". In: *AJ* 159.4, 161 (Apr. 2020), p. 161. arXiv: 2002.09468 [astro-ph.IM].

[5] S. Kanodia, A. Wolfgang, **Stefansson, G. K.**, B. Ning, and S. Mahadevan. "Mass-Radius Relationship for M Dwarf Exoplanets: Comparing Nonparametric and Parametric Methods". In: *ApJ* 882.1, 38 (Sept. 2019), p. 38. arXiv: 1903.00042 [astro-ph.EP].

[6] A. J. Metcalf, T Anderson, C. F. Bender, S. Blakeslee, W. Brand, D. R. Carlson, W. D. Cochran, S. A. Diddams, M. Endl, C. Fredrick, S. Halverson, D. D. Hickstein, F. Hearty, J. Jennings, S. Kanodia, K. F. Kaplan, E. Levi, E. Lubar, S. Mahadevan, A. Monson, J. P. Ninan, C. Nitroy, S. Osterman, S. B. Papp, F. Quinlan, L. Ramsey, P. Robertson, A. Roy, C. Schwab, S. Sigurdsson, K. Srinivasan, **Stefansson, G.**, D. A. Sterner, R. Terrien, A. Wolszczan, J. T. Wright, and G. Ycas. "Stellar spectroscopy in the near-infrared with a laser frequency comb". In: *Optica* 6.2 (Feb. 2019), p. 233. arXiv: 1902.00500 [astro-ph.EP].

[7] J. P. Ninan, S. Mahadevan, **Stefansson, G.**, C. Bender, A. Roy, K. F. Kaplan, C. Fredrick, A. J. Metcalf, A. Monson, R. Terrien, L. W. Ramsey, and S. A. Diddams. "Impact of crosshatch patterns in H2RGs on high precision radial velocity measurements: Exploration of measurement and mitigation paths with HPF". In: *Accepted for publication in ISPA 2018*, arXiv:1903.06614 (Mar. 2019), arXiv:1903.06614. arXiv: 1903.06614 [astro-ph.IM].

[8] P. Robertson, T. Anderson, **Stefansson, G.**, F. R. Hearty, A. Monson, S. Mahadevan, S. Blakeslee, C. Bender, J. P. Ninan, D. Conran, E. Levi, E. Lubar, A. Cole, A. Dykhouse, S. Kanodia, C. Nitroy, J. Smolsky, D. Tuggle, B. Blank, M. Nelson, C. Blake, S. Halverson, C. Henderson, K. F. Kaplan, D. Li, S. E. Logsdon, M. W. McElwain, J. Rajagopal, L. W. Ramsey, A. Roy, C. Schwab, R. Terrien, and J. T. Wright. "Ultrastable environment control for the NEID spectrometer: design and performance demonstration". In: *Journal of Astronomical Telescopes, Instruments, and Systems* 5, 015003 (Jan. 2019), p. 015003. arXiv: 1902.07729 [astro-ph.IM].

[9] S. Kanodia, S. Mahadevan, L. W. Ramsey, **Stefansson, G. K.**, A. J. Monson, F. Hearty, S. Blakeslee, E. Lubar, C. F. Bender, J. P. Ninan, D. Sterner, A. Roy, S. P. Halverson, and P. M. Robertson. "Overview of the spectrometer optical fiber feed for the habitable-zone planet finder". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 10702. SPIE. Aug. 2018, p. 10702.

[10] J. P. Ninan, C. F. Bender, S. Mahadevan, E. B. Ford, A. J. Monson, K. F. Kaplan, R. C. Terrien, A. Roy, P. M. Robertson, S. Kanodia, and **Stefansson, G.** "The Habitable-Zone Planet Finder: improved flux image generation algorithms for H2RG up-the-ramp data". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 10709. Aug. 2018.

[11] C. F. Bender, P. Robertson, **Stefansson, G. K.**, A. Monson, T. Anderson, S. Halverson, F. Hearty, E. Levi, S. Mahadevan, M. Nelson, L. Ramsey, A. Roy, C. Schwab, M. Shetrone, and R. Terrien. "The instrument control software package for the Habitable-Zone Planet Finder spectrometer". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 9913. SPIE. Aug. 2016, p. 991338.

[12] S. Halverson, R. Terrien, S. Mahadevan, A. Roy, C. Bender, **Stefánsson, G. K.**, A. Monson, E. Levi, F. Hearty, C. Blake, M. McElwain, C. Schwab, L. Ramsey, J. Wright, S. Wang, Q. Gong, and P. Roberston. "A comprehensive radial velocity error budget for next generation Doppler spectrometers". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 9908. SPIE. Aug. 2016, 99086P. arXiv: 1607.05634 [astro-ph.IM].

[13] P. M. Robertson, F. R. Hearty, T. B. Anderson, **Stefánsson, G. K.**, E. I. Levi, C. F. Bender, S. Mahadevan, S. P. Halverson, A. J. Monson, L. W. Ramsey, A. Roy, C. Schwab, R. C. Terrien, M. J. Nelson, and B. Blank. "A system to provide sub-milliKelvin temperature control at T 300K for extreme precision optical radial velocimetry". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 9908. SPIE. Aug. 2016, p. 990862.

[14] C. Schwab, N. Jovanovic, T. Feger, M. Bakovic, Y. V. Gurevich, J. Stürmer, R. Apodaca, L. Vanzi, S. Rukdee, J. S. Lawrence, D. W. Coutts, N. Cvetojevic, S. Mahadevan, **Stefánsson, G. K.**, S. P. Halverson, and O. Guyon. "Adaptive optics fed single-mode spectrograph for high-precision Doppler measurements in the near-infrared". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 9912. SPIE. July 2016, p. 991274.

[15] F. Hearty, E. Levi, M. Nelson, S. Mahadevan, A. Burton, L. Ramsey, C. Bender, R. Terrien, S. Halverson, P. Robertson, A. Roy, B. Blank, K. Blanchard, and **Stefansson, G.** "Environmental control system for Habitable-zone Planet Finder (HPF)". In: vol. 9147. SPIE. 2014, pp. 914752-914752–11.

[16] S. Mahadevan, L. W. Ramsey, R. Terrien, S. Halverson, A. Roy, F. Hearty, E. Levi, **Stefansson, G. K.**, P. Robertson, C. Bender, C. Schwab, and M. Nelson. "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". In: *Ground-based and Airborne Instrumentation for Astronomy V*. Vol. 9147. SPIE. July 2014, 91471G.