

LAUREN M. WEISS

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Nieuwland Science Hall, Notre Dame, Indiana 46556, USA

PROFESSIONAL APPOINTMENTS

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| Assistant Professor | 2021-present |
| Department of Physics and Astronomy, University of Notre Dame, Notre Dame, IN USA | |
| Research Affiliate | 2021-present |
| Institute for Astronomy, University of Hawai‘i at Mānoa, Honolulu, HI USA | |
| Beatrice Watson Parrent Fellow | 2018-2021 |
| Institute for Astronomy, University of Hawai‘i at Mānoa, Honolulu, HI USA | |
| Trottier Fellow | 2016-2018 |
| Institut de Recherche sur les Exoplanètes, Université de Montréal, Montréal, QC Canada | |

EDUCATION

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| Ph.D. in Astronomy, University of California at Berkeley | 2011-2016 |
| M.Phil. in Astronomy, University of Cambridge | 2010-2011 |
| B.A. <i>cum laude</i> in Astronomy & Astrophysics, Harvard University | 2006-2010 |

GRANTS

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| NASA Exoplanet Research Program Award | 2022 |
| “The Origin of Earth: Lessons from Multi-Planet Systems” | |
| PI: L. M. Weiss, award: \$555,917 | |
| NASA TESS Guest Investigator Award | 2022 |
| “Precise Exoplanet Transits For The Brightest Stars Using Tess 20-Second Cadence Data” | |
| PI: D. Huber, award: \$70,000 | |
| University of Notre Dame <i>Moment to See, Courage to Act</i> Origins Initiative | 2021 |
| PI: L.M. Weiss, award: \$5,000 | |
| NASA Keck Key Strategic Mission Support Award | 2019-2021 |
| “Precise Masses and Densities of Kepler Transiting Planets in Multi-Planet Systems” | |
| PI: L.M. Weiss, award: \$2M total value from 16 Keck Nights + \$150,000 | |
| NASA Keck Key Strategic Mission Support Award | 2019-2021 |
| “The TESS-Keck Survey” | |
| CO-Is: N. Batalha, I. Crossfield, C. Dressing, B.J. Fulton, H. Isaacson, S. Kane, E. Petigura, P. Robinson, and L. M. Weiss. | |

AWARDS

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| Beatrice Watson Parrent Fellowship | 2018-2021 |
| Trottier Fellowship | 2016-2018 |
| Ken & Gloria Levy Fellowship | 2014-2016 |
| Outstanding Graduate Student Instructor Award | 2013 |
| Thomas Temple Hoopes Prize, Harvard University <i>for an outstanding senior thesis</i> | 2011 |
| Herchel Smith Harvard Scholarship | 2010 |
| National Science Foundation Graduate Research Fellowship | 2010 |
| Leo Goldberg Prize, Harvard University <i>for an outstanding junior thesis</i> | 2009 |
| Chambliss Astronomy Student Achievement Award, American Astronomical Society | 2009 |
| Intel Science Talent Search Semi-finalist | 2006 |
| Bausch & Lomb Award, University of Rochester | 2005 |

RESEARCH HIGHLIGHTS

- Discovered the distinction between [planets with rocky surfaces vs. gas-enveloped planets](#) at 1.5 Earth radii (487 citations)
- Discovered the [similar sizes and regular orbital spacings](#) of hundreds of exoplanets in coplanar, multi-planet systems (188 citations)
- Developed and led exoplanet population surveys with large-aperture ground-based telescopes: California-*Kepler* Survey [I](#), [II](#), [III](#), [IV](#), [V](#), [VI](#), [VIII](#), [IX](#) (2013-2020), TESS-Keck Survey [I–XI](#) (2019-present), *Kepler* Masses-in-Multis Survey (2019-present)
- Developed and improved software for self-consistent analysis of Doppler and transit-timing variations to discover planets and determine their masses and orbits [W20](#), [W17](#), [W16](#), [W13](#)
- Commissioned the [Automated Planet Finder](#), a 2.3m fully automated telescope at Lick Observatory, CA
- Trained 25 student observers in planet hunting techniques, W. M. Keck Observatory and Automated Planet Finder

PUBLICATIONS

Bibliography includes 88 refereed manuscripts with 4600+ citations, h-index=33 and 19 first-author and student-led articles. [NASA ADS](#), [Google Scholar](#)

Books and Invited Chapters

1. [Architectures of Compact Multi-planet Systems: Diversity and Uniformity](#), **Weiss, L. M.**, Millholland, S. C., Petigura, E. A., Adams, F. C., Batygin, K., Bloch, A. M., & Mordasini, C., *Protostars and Planets VII* (2023), **6 citations**

Most Impactful Journal Articles

6. [The California Legacy Survey. I. A Catalog of 178 Planets from Precision Radial Velocity Monitoring of 719 Nearby Stars over Three Decades](#), Rosenthal, L. J., Fulton, B. J., Hirsch, L. A., et al., *The Astrophysical Journal Supplements*, 255, 8 (2021) **70 citations**
5. [The California-Kepler Survey. V. Peas in a Pod: Planets in a Kepler Multi-planet System Are Similar in Size and Regularly Spaced](#), **Weiss, L. M.**, Marcy, G. W., Petigura, E. A., et al., *The Astronomical Journal*, 155, 48 (2018), **188 citations**
4. [The California-Kepler Survey. III. A Gap in the Radius Distribution of Small Planets](#), Fulton, B. J., Petigura, E. A., Howard, A. W., et al., *The Astronomical Journal*, 154, 109 (2017), **737 citations**
3. [The Mass-Radius Relation for 65 Exoplanets Smaller than 4 Earth Radii](#), **Weiss, L. M.**, & Marcy, G. W., *The Astrophysical Journal Letters*, 783, L6 (2014), **487 citations**
2. [Masses, Radii, and Orbits of Small Kepler Planets: The Transition from Gaseous to Rocky Planets](#), Marcy, G. W., Isaacson, H., Howard, A. W., et al., *The Astrophysical Journal Supplements*, 210, 20 (2014), **373 citations**
1. [The Mass of KOI-94d and a Relation for Planet Radius, Mass, and Incident Flux](#), **Weiss, L. M.**, Marcy, G. W., Rowe, J. F., et al., *The Astrophysical Journal*, 768, 14 (2013), **219 citations**

First-Author and Student-Led Journal Articles

19. [A Dynamical Systems Approach to the Theory of Circumbinary Orbits in the Circular Restricted Problem](#), Langford, A., & **Weiss, L. M.**, accepted for publication in the *Astronomical Journal* (2023)

18. *Kepler-102: Masses and Compositions for a Super-Earth and Sub-Neptune Orbiting an Active Star*, Brinkman, C. L., Cadman, J., **Weiss, L.**, et al., *The Astronomical Journal*,165,74 (2023)
17. *TOI-561 b: A Low Density Ultra-Short Period “Rocky” Planet around a Metal-Poor Star*, Brinkman, C., **Weiss, L. M.**, Dai, F., et al., arXiv e-prints,arXiv:2210.06665 (2022) **1 citation**
16. *The TESS-Keck Survey: Science Goals and Target Selection*, Chontos, A., Murphy, J. M. A., MacDougall, M. G., et al., *The Astronomical Journal*,163,297 (2022), **9 citations**
15. *The TESS-Keck Survey. XI. Mass Measurements for Four Transiting Sub-Neptunes Orbiting K Dwarf TOI-1246*, Turtelboom, E. V., **Weiss, L. M.**, Dressing, C. D., et al., *The Astronomical Journal*,163,293 (2022)
14. *TESS-Keck Survey. IX. Masses of Three Sub-Neptunes Orbiting HD 191939 and the Discovery of a Warm Jovian plus a Distant Substellar Companion*, Lubin, J., Van Zandt, J., Holcomb, R., et al., *The Astronomical Journal*,163,101 (2022), **5 citations**
13. *Long-period Jovian Tilts the Orbits of Two sub-Neptunes Relative to Stellar Spin Axis in Kepler-129*, Zhang, J., **Weiss, L. M.**, Huber, D., et al., *The Astronomical Journal*,162,89 (2021), **6 citations**
12. *The TESS-Keck Survey. II. An Ultra-short-period Rocky Planet and Its Siblings Transiting the Galactic Thick-disk Star TOI-561*, **Weiss, L. M.**, Dai, F., Huber, D., et al., *The Astronomical Journal*,161,56 (2021), **24 citations**
11. *The Discovery of the Long-Period, Eccentric Planet Kepler-88 d and System Characterization with Radial Velocities and Photodynamical Analysis*, **Weiss, L. M.**, Fabrycky, D. C., Agol, E., Mills, S. M., Howard, A. W., Isaacson, H., Petigura, E. A., Fulton, B., Hirsch, L., & Sinukoff, E., *The Astronomical Journal*,159,242 (2020), **9 citations**
10. *The Kepler Peas in a Pod Pattern is Astrophysical*, **Weiss, L. M.**, & Petigura, E. A., *The Astrophysical Journal Letters*,893,L1 (2020), **31 citations**
9. *Radial Velocity Discovery of an Eccentric Jovian World Orbiting at 18 au*, Blunt, S., Endl, M., **Weiss, L. M.**, et al., *The Astronomical Journal*,158,181 (2019), **19 citations**
8. *The California-Kepler Survey. VI. Kepler Multis and Singles Have Similar Planet and Stellar Properties Indicating a Common Origin*, **Weiss, L. M.**, Isaacson, H. T., Marcy, G. W., et al., *The Astronomical Journal*,156,254 (2018), **38 citations**
7. *The California-Kepler Survey. V. Peas in a Pod: Planets in a Kepler Multi-planet System Are Similar in Size and Regularly Spaced*, **Weiss, L. M.**, Marcy, G. W., Petigura, E. A., et al., *The Astronomical Journal*,155,48 (2018), **188 citations**
6. *New Insights on Planet Formation in WASP-47 from a Simultaneous Analysis of Radial Velocities and Transit Timing Variations*, **Weiss, L. M.**, Deck, K. M., Sinukoff, E., et al., *The Astronomical Journal*,153,265 (2017), **37 citations**
5. *Revised Masses and Densities of the Planets around Kepler-10*, **Weiss, L. M.**, Rogers, L. A., Isaacson, H. T., et al., *The Astrophysical Journal*,819,83 (2016), **55 citations**
4. *Three Super-Earths Orbiting HD 7924*, Fulton, B. J., **Weiss, L. M.**, Sinukoff, E., Isaacson, H., Howard, A. W., Marcy, G. W., Henry, G. W., Holden, B. P., & Kibrick, R. I., *The Astrophysical Journal*,805,175 (2015), **36 citations**
3. *Occurrence and core-envelope structure of 1-4× Earth-size planets around Sun-like stars*, Marcy, G. W., **Weiss, L. M.**, Petigura, E. A., Isaacson, H., Howard, A. W., & Buchhave, L. A., *Proceedings of the National Academy of Science*,111,12655 (2014), **72 citations**

2. *The Mass-Radius Relation for 65 Exoplanets Smaller than 4 Earth Radii*, Weiss, L. M., & Marcy, G. W., *The Astrophysical Journal Letters*,783,L6 (2014), **487 citations**
1. *The Mass of KOI-94d and a Relation for Planet Radius, Mass, and Incident Flux*, Weiss, L. M., Marcy, G. W., Rowe, J. F., et al., *The Astrophysical Journal*,768,14 (2013), **219 citations**

Full Bibliography

88. *Radial velocity confirmation of a hot super-Neptune discovered by TESS with a warm Saturn-mass companion*, Knudstrup, E., Gandolfi, D., Nowak, G., Persson, C. M., Furlan, E., Livingston, J., Matthews, E., Lundkvist, M. S., Winther, M. L., Rørsted, J. L., et al., *Monthly Notices of the Royal Astronomical Society*,519,5637 (2023) [\[doi\]](#)
87. *Kepler-102: Masses and Compositions for a Super-Earth and Sub-Neptune Orbiting an Active Star*, Brinkman, C. L., Cadman, J., Weiss, L., Gaidos, E., Rice, K., Huber, D., Claytor, Z. R., Bonomo, A. S., Buchhave, L. A., Collier Cameron, A., et al., *The Astronomical Journal*,165,74 (2023) [\[doi\]](#)
86. *TESS-Keck Survey. XIV. Two Giant Exoplanets from the Distant Giants Survey*, Van Zandt, J., Petigura, E. A., MacDougall, M., Gilbert, G. J., Lubin, J., Barclay, T., Batalha, N. M., Crossfield, I. J. M., Dressing, C., Fulton, B., et al., *The Astronomical Journal*,165,60 (2023) [\[doi\]](#)
85. *TOI-1136 is a Young, Coplanar, Aligned Planetary System in a Pristine Resonant Chain*, Dai, F., Masuda, K., Beard, C., Robertson, P., Goldberg, M., Batygin, K., Bouma, L., Lissauer, J. J., Knudstrup, E., Albrecht, S., et al., *The Astronomical Journal*,165,33 (2023) [\[doi\]](#)
84. *TOI 560: Two Transiting Planets Orbiting a K Dwarf Validated with iSHELL, PFS, and HIRES RVs*, El Mufti, M., Plavchan, P. P., Isaacson, H., Cale, B. L., Feliz, D. L., Reefe, M. A., Hellier, C., Stassun, K., Eastman, J., Polanski, A., et al., *The Astronomical Journal*,165,10 (2023) [\[doi\]](#)
83. *Evidence for the volatile-rich composition of a 1.5-Earth-radius planet*, Piaulet, C., Benneke, B., Almenara, J. M., Dragomir, D., Knutson, H. A., Thorngren, D., Peterson, M. S., Crossfield, I. J. M., M. -R. Kempton, E., Kubyshkina, D., et al., *Nature Astronomy* (2022) [\[doi\]](#)
82. *Tentative Evidence for Water Vapor in the Atmosphere of the Neptune-sized Exoplanet HD 106315c*, Kreidberg, L., Mollière, P., Crossfield, I. J. M., Thorngren, D. P., Kawashima, Y., Morley, C. V., Benneke, B., Mikal-Evans, T., Berardo, D., Kosiarek, M. R., et al., *The Astronomical Journal*,164,124 (2022) [\[doi\]](#)
81. *The California Legacy Survey. III. On the Shoulders of (Some) Giants: The Relationship between Inner Small Planets and Outer Massive Planets*, Rosenthal, L. J., Knutson, H. A., Chachan, Y., Dai, F., Howard, A. W., Fulton, B. J., Chontos, A., Crepp, J. R., Dalba, P. A., Henry, G. W., et al., *The Astrophysical Journal Supplements*,262,1 (2022) [\[doi\]](#)
80. *The TESS-Keck Survey. XIII. An Eccentric Hot Neptune with a Similar-mass Outer Companion around TOI-1272*, MacDougall, M. G., Petigura, E. A., Fetherolf, T., Beard, C., Lubin, J., Angelo, I., Batalha, N. M., Behrard, A., Blunt, S., Brinkman, C., et al., *The Astronomical Journal*,164,97 (2022) [\[doi\]](#)
79. *The First High-contrast Images of X-Ray Binaries: Detection of Candidate Companions in the γ Cas Analog RX J1744.7-2713*, Prasow-Émond, M., Hlavacek-Larrondo, J., Fogarty, K., Rameau, J., Guité, L.-S., Mawet, D., Gandhi, P., Rao, A., Steiner, J. F., Artigau, É., et al., *The Astronomical Journal*,164,7 (2022) [\[doi\]](#)

78. *The TESS-Keck Survey: Science Goals and Target Selection*, Chontos, A., Murphy, J. M. A., MacDougall, M. G., Fetherolf, T., Van Zandt, J., Rubenzahl, R. A., Beard, C., Huber, D., Batalha, N. M., Crossfield, I. J. M., et al., *The Astronomical Journal*,163,297 (2022) [\[doi\]](#)
77. *The TESS-Keck Survey. XI. Mass Measurements for Four Transiting Sub-Neptunes Orbiting K Dwarf TOI-1246*, Turtelboom, E. V., Weiss, L. M., Dressing, C. D., Nowak, G., Pallé, E., Beard, C., Blunt, S., Brinkman, C., Chontos, A., Claytor, Z. R., et al., *The Astronomical Journal*,163,293 (2022) [\[doi\]](#)
76. *An Aligned Orbit for the Young Planet V1298 Tau b*, Johnson, M. C., David, T. J., Petigura, E. A., Isaacson, H. T., Van Zandt, J., Ilyin, I., Strassmeier, K., Mallonn, M., Zhou, G., Mann, A. W., et al., *The Astronomical Journal*,163,247 (2022) [\[doi\]](#)
75. *Scaling K2. V. Statistical Validation of 60 New Exoplanets From K2 Campaigns 2-18*, Christiansen, J. L., Bhure, S., Zink, J. K., Hardegree-Ullman, K. K., Adkins, B. D., Hedges, C., Morton, T. D., Bieryla, A., Ciardi, D. R., Cochran, W. D., et al., *The Astronomical Journal*,163,244 (2022) [\[doi\]](#)
74. *Confirmation of the Long-period Planet Orbiting Gliese 411 and the Detection of a New Planet Candidate*, Hurt, S. A., Fulton, B., Isaacson, H., Rosenthal, L. J., Howard, A. W., Weiss, L. M., & Petigura, E. A., *The Astronomical Journal*,163,218 (2022) [\[doi\]](#)
73. *The California-Kepler Survey. X. The Radius Gap as a Function of Stellar Mass, Metallicity, and Age*, Petigura, E. A., Rogers, J. G., Isaacson, H., Owen, J. E., Kraus, A. L., Winn, J. N., MacDougall, M. G., Howard, A. W., Fulton, B., Kosiarek, M. R., et al., *The Astronomical Journal*,163,179 (2022) [\[doi\]](#)
72. *A Second Planet Transiting LTT 1445A and a Determination of the Masses of Both Worlds*, Winters, J. G., Cloutier, R., Medina, A. A., Irwin, J. M., Charbonneau, D., Astudillo-Defru, N., Bonfils, X., Howard, A. W., Isaacson, H., Bean, J. L., et al., *The Astronomical Journal*,163,168 (2022) [\[doi\]](#)
71. *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., Stefánsson, G., Mahadevan, S., Radzom, B., Giacalone, S., Wu, Z.-Y., Esposito, T. M., et al., *The Astrophysical Journal Letters*,926,L8 (2022) [\[doi\]](#)
70. *TESS-Keck Survey. IX. Masses of Three Sub-Neptunes Orbiting HD 191939 and the Discovery of a Warm Jovian plus a Distant Substellar Companion*, Lubin, J., Van Zandt, J., Holcomb, R., Weiss, L. M., Petigura, E. A., Robertson, P., Akana Murphy, J. M., Scarsdale, N., Batygin, K., Polanski, A. S., et al., *The Astronomical Journal*,163,101 (2022) [\[doi\]](#)
69. *The TESS-Keck Survey. VIII. Confirmation of a Transiting Giant Planet on an Eccentric 261 Day Orbit with the Automated Planet Finder Telescope*, Dalba, P. A., Kane, S. R., Dragomir, D., Villanueva, S., Collins, K. A., Jacobs, T. L., LaCourse, D. M., Gagliano, R., Kristiansen, M. H., Omohundro, M., et al., *The Astronomical Journal*,163,61 (2022) [\[doi\]](#)
68. *HD 207897 b: A dense sub-Neptune transiting a nearby and bright K-type star*, Heidari, N., Boisse, I., Orell-Miquel, J., Hébrard, G., Acuña, L., Hara, N. C., Lillo-Box, J., Eastman, J. D., Arnold, L., Astudillo-Defru, N., et al., *Astronomy & Astrophysics*,658,A176 (2022) [\[doi\]](#)
67. *Another Superdense Sub-Neptune in K2-182 b and Refined Mass Measurements for K2-199 b and c*, Akana Murphy, J. M., Kosiarek, M. R., Batalha, N. M., Gonzales, E. J., Isaacson, H., Petigura, E. A., Weiss, L. M., Grunblatt, S. K., Ciardi, D. R., Fulton, B., et al., *The Astronomical Journal*,162,294 (2021) [\[doi\]](#)
66. *The TESS-Keck Survey. VI. Two Eccentric Sub-Neptunes Orbiting HIP-97166*, MacDougall, M. G., Petigura, E. A., Angelo, I., Lubin, J., Batalha, N. M., Beard, C., Behrard, A., Blunt,

- S., Brinkman, C., Chontos, A., et al., *The Astronomical Journal*,162,265 (2021) [\[doi\]](#)
65. *Wolf 503 b: Characterization of a Sub-Neptune Orbiting a Metal-poor K Dwarf*, Polanski, A. S., Crossfield, I. J. M., Burt, J. A., Nowak, G., López-Morales, M., Mortier, A., Poretti, E., Behrard, A., Benneke, B., Blunt, S., et al., *The Astronomical Journal*,162,238 (2021) [\[doi\]](#)
 64. *TESS-Keck Survey. V. Twin Sub-Neptunes Transiting the Nearby G Star HD 63935*, Scarsdale, N., Murphy, J. M. A., Batalha, N. M., Crossfield, I. J. M., Dressing, C. D., Fulton, B., Howard, A. W., Huber, D., Isaacson, H., Kane, S. R., et al., *The Astronomical Journal*,162,215 (2021) [\[doi\]](#)
 63. *TOI-431/HIP 26013: a super-Earth and a sub-Neptune transiting a bright, early K dwarf, with a third RV planet*, Osborn, A., Armstrong, D. J., Cale, B., Brahm, R., Wittenmyer, R. A., Dai, F., Crossfield, I. J. M., Bryant, E. M., Adibekyan, V., Cloutier, R., et al., *Monthly Notices of the Royal Astronomical Society*,507,2782 (2021) [\[doi\]](#)
 62. *Detection and Bulk Properties of the HR 8799 Planets with High-resolution Spectroscopy*, Wang, J. J., Ruffio, J.-B., Morris, E., Delorme, J.-R., Jovanovic, N., Pezzato, J., Echeverri, D., Finnerty, L., Hood, C., Zanazzi, J. J., et al., *The Astronomical Journal*,162,148 (2021) [\[doi\]](#)
 61. *Long-period Jovian Tilts the Orbits of Two sub-Neptunes Relative to Stellar Spin Axis in Kepler-129*, Zhang, J., Weiss, L. M., Huber, D., Blunt, S., Chontos, A., Fulton, B. J., Grunblatt, S., Howard, A. W., Isaacson, H., Kosiarek, M. R., et al., *The Astronomical Journal*,162,89 (2021) [\[doi\]](#)
 60. *TKS X: Confirmation of TOI-1444b and a Comparative Analysis of the Ultra-short-period Planets with Hot Neptunes*, Dai, F., Howard, A. W., Batalha, N. M., Beard, C., Behrard, A., Blunt, S., Brinkman, C. L., Chontos, A., Crossfield, I. J. M., Dalba, P. A., et al., *The Astronomical Journal*,162,62 (2021) [\[doi\]](#)
 59. *California Legacy Survey. II. Occurrence of Giant Planets beyond the Ice Line*, Fulton, B. J., Rosenthal, L. J., Hirsch, L. A., Isaacson, H., Howard, A. W., Dedrick, C. M., Sherstyuk, I. A., Blunt, S. C., Petigura, E. A., Knutson, H. A., et al., *The Astrophysical Journal Supplements*,255,14 (2021) [\[doi\]](#)
 58. *The California Legacy Survey. I. A Catalog of 178 Planets from Precision Radial Velocity Monitoring of 719 Nearby Stars over Three Decades*, Rosenthal, L. J., Fulton, B. J., Hirsch, L. A., Isaacson, H. T., Howard, A. W., Dedrick, C. M., Sherstyuk, I. A., Blunt, S. C., Petigura, E. A., Knutson, H. A., et al., *The Astrophysical Journal Supplements*,255,8 (2021) [\[doi\]](#)
 57. *Understanding the Impacts of Stellar Companions on Planet Formation and Evolution: A Survey of Stellar and Planetary Companions within 25 pc*, Hirsch, L. A., Rosenthal, L., Fulton, B. J., Howard, A. W., Ciardi, D. R., Marcy, G. W., Nielsen, E., Petigura, E. A., de Rosa, R. J., Isaacson, H., et al., *The Astronomical Journal*,161,134 (2021) [\[doi\]](#)
 56. *The TESS-Keck Survey. IV. A Retrograde, Polar Orbit for the Ultra-low-density, Hot Super-Neptune WASP-107b*, Rubenzahl, R. A., Dai, F., Howard, A. W., Chontos, A., Giacalone, S., Lubin, J., Rosenthal, L. J., Isaacson, H., Batalha, N. M., Crossfield, I. J. M., et al., *The Astronomical Journal*,161,119 (2021) [\[doi\]](#)
 55. *Giant Outer Transiting Exoplanet Mass (GOT 'EM) Survey. I. Confirmation of an Eccentric, Cool Jupiter with an Interior Earth-sized Planet Orbiting Kepler-1514*, Dalba, P. A., Kane, S. R., Isaacson, H., Giacalone, S., Howard, A. W., Rodriguez, J. E., Vanderburg, A., Eastman, J. D., Kraus, A. L., Dupuy, T. J., et al., *The Astronomical Journal*,161,103 (2021) [\[doi\]](#)
 54. *The TESS-Keck Survey. II. An Ultra-short-period Rocky Planet and Its Siblings Transiting the Galactic Thick-disk Star TOI-561*, Weiss, L. M., Dai, F., Huber, D., Brewer, J. M., Collins,

- K. A., Ciardi, D. R., Matthews, E. C., Ziegler, C., Howell, S. B., Batalha, N. M., et al., *The Astronomical Journal*,161,56 (2021) [\[doi\]](#)
53. *Physical Parameters of the Multiplanet Systems HD 106315 and GJ 9827*, Kosiarek, M. R., Berardo, D. A., Crossfield, I. J. M., Laguna, C., Piaulet, C., Akana Murphy, J. M., Howell, S. B., Henry, G. W., Isaacson, H., Fulton, B., et al., *The Astronomical Journal*,161,47 (2021) [\[doi\]](#)
52. *The Occurrence of Rocky Habitable-zone Planets around Solar-like Stars from Kepler Data*, Bryson, S., Kunimoto, M., Kopparapu, R. K., Coughlin, J. L., Borucki, W. J., Koch, D., Aguirre, V. S., Allen, C., Barentsen, G., Batalha, N. M., et al., *The Astronomical Journal*,161,36 (2021) [\[doi\]](#)
51. *The CARMENES search for exoplanets around M dwarfs. LP 714-47 b (TOI 442.01): populating the Neptune desert*, Dreizler, S., Crossfield, I. J. M., Kossakowski, D., Plavchan, P., Jeffers, S. V., Kemmer, J., Luque, R., Espinoza, N., Pallé, E., Stassun, K., et al., *Astronomy & Astrophysics*,644,A127 (2020) [\[doi\]](#)
50. *The TESS-Keck Survey. III. A Stellar Obliquity Measurement of TOI-1726 c*, Dai, F., Roy, A., Fulton, B., Robertson, P., Hirsch, L., Isaacson, H., Albrecht, S., Mann, A. W., Kristiansen, M. H., Batalha, N. M., et al., *The Astronomical Journal*,160,193 (2020) [\[doi\]](#)
49. *A super-Earth and a sub-Neptune orbiting the bright, quiet M3 dwarf TOI-1266*, Demory, B.-O., Pozuelos, F. J., Gómez Maqueo Chew, Y., Sabin, L., Petrucci, R., Schroffenegger, U., Grimm, S. L., Sestovic, M., Gillon, M., McCormac, J., et al., *Astronomy & Astrophysics*,642,A49 (2020) [\[doi\]](#)
48. *The Multiplanet System TOI-421*, Carleo, I., Gandolfi, D., Barragán, O., Livingston, J. H., Persson, C. M., Lam, K. W. F., Vidotto, A., Lund, M. B., Villarreal D'Angelo, C., Collins, K. A., et al., *The Astronomical Journal*,160,114 (2020) [\[doi\]](#)
47. *The Gaia-Kepler Stellar Properties Catalog. II. Planet Radius Demographics as a Function of Stellar Mass and Age*, Berger, T. A., Huber, D., Gaidos, E., van Saders, J. L., & Weiss, L. M., *The Astronomical Journal*,160,108 (2020) [\[doi\]](#)
46. *Dynamical Packing in the Habitable Zone: The Case of Beta CVn*, Kane, S. R., Turnbull, M. C., Fulton, B. J., Rosenthal, L. J., Howard, A. W., Isaacson, H., Marcy, G. W., & Weiss, L. M., *The Astronomical Journal*,160,81 (2020) [\[doi\]](#)
45. *California-Kepler Survey. IX. Revisiting the Minimum-mass Extrasolar Nebula with Precise Stellar Parameters*, Dai, F., Winn, J. N., Schlaufman, K., Wang, S., Weiss, L., Petigura, E. A., Howard, A. W., & Fang, M., *The Astronomical Journal*,159,247 (2020) [\[doi\]](#)
44. *The Discovery of the Long-Period, Eccentric Planet Kepler-88 d and System Characterization with Radial Velocities and Photodynamical Analysis*, Weiss, L. M., Fabrycky, D. C., Agol, E., Mills, S. M., Howard, A. W., Isaacson, H., Petigura, E. A., Fulton, B., Hirsch, L., & Sinukoff, E., *The Astronomical Journal*,159,242 (2020) [\[doi\]](#)
43. *The TESS-Keck Survey. I. A Warm Sub-Saturn-mass Planet and a Caution about Stray Light in TESS Cameras*, Dalba, P. A., Gupta, A. F., Rodriguez, J. E., Dragomir, D., Huang, C. X., Kane, S. R., Quinn, S. N., Bieryla, A., Esquerdo, G. A., Fulton, B. J., et al., *The Astronomical Journal*,159,241 (2020) [\[doi\]](#)
42. *Updated Parameters and a New Transmission Spectrum of HD 97658b*, Guo, X., Crossfield, I. J. M., Dragomir, D., Kosiarek, M. R., Lothringer, J., Mikal-Evans, T., Rosenthal, L., Benneke, B., Knutson, H. A., Dalba, P. A., et al., *The Astronomical Journal*,159,239 (2020) [\[doi\]](#)

41. *The Kepler Peas in a Pod Pattern is Astrophysical*, Weiss, L. M., & Petigura, E. A., *The Astrophysical Journal Letters*,893,L1 (2020) [\[doi\]](#)
40. *Evidence for Spin-Orbit Alignment in the TRAPPIST-1 System*, Hirano, T., Gaidos, E., Winn, J. N., Dai, F., Fukui, A., Kuzuhara, M., Kotani, T., Tamura, M., Hjorth, M., Albrecht, S., et al., *The Astrophysical Journal Letters*,890,L27 (2020) [\[doi\]](#)
39. *K2-19b and c are in a 3:2 Commensurability but out of Resonance: A Challenge to Planet Assembly by Convergent Migration*, Petigura, E. A., Livingston, J., Batygin, K., Mills, S. M., Werner, M., Isaacson, H., Fulton, B. J., Howard, A. W., Weiss, L. M., Espinoza, N., et al., *The Astronomical Journal*,159,2 (2020) [\[doi\]](#)
38. *Radial Velocity Discovery of an Eccentric Jovian World Orbiting at 18 au*, Blunt, S., Endl, M., Weiss, L. M., Cochran, W. D., Howard, A. W., MacQueen, P. J., Fulton, B. J., Henry, G. W., Johnson, M. C., Kosiarek, M. R., et al., *The Astronomical Journal*,158,181 (2019) [\[doi\]](#)
37. *Planetesimals around stars with TESS (PAST) - I. Transient dimming of a binary solar analogue at the end of the planet accretion era*, Gaidos, E., Jacobs, T., LaCourse, D., Vanderburg, A., Rappaport, S., Berger, T., Pearce, L., Mann, A. W., Weiss, L., Fulton, B., et al., *Monthly Notices of the Royal Astronomical Society*,488,4465 (2019) [\[doi\]](#)
36. *Discovery of a White Dwarf Companion to HD 159062*, Hirsch, L. A., Ciardi, D. R., Howard, A. W., Marcy, G. W., Ruane, G., Gonzalez, E., Blunt, S., Crepp, J. R., Fulton, B. J., Isaacson, H., et al., *The Astrophysical Journal*,878,50 (2019) [\[doi\]](#)
35. *A Hot Saturn Orbiting an Oscillating Late Subgiant Discovered by TESS*, Huber, D., Chaplin, W. J., Chontos, A., Kjeldsen, H., Christensen-Dalsgaard, J., Bedding, T. R., Ball, W., Brahm, R., Espinoza, N., Henning, T., et al., *The Astronomical Journal*,157,245 (2019) [\[doi\]](#)
34. *The California-Kepler Survey. VIII. Eccentricities of Kepler Planets and Tentative Evidence of a High-metallicity Preference for Small Eccentric Planets*, Mills, S. M., Howard, A. W., Petigura, E. A., Fulton, B. J., Isaacson, H., & Weiss, L. M., *The Astronomical Journal*,157,198 (2019) [\[doi\]](#)
33. *Long-period Giant Companions to Three Compact, Multiplanet Systems*, Mills, S. M., Howard, A. W., Weiss, L. M., Steffen, J. H., Isaacson, H., Fulton, B. J., Petigura, E. A., Kosiarek, M. R., Hirsch, L. A., & Boisvert, J. H., *The Astronomical Journal*,157,145 (2019) [\[doi\]](#)
32. *K2-291b: A Rocky Super-Earth in a 2.2 day Orbit*, Kosiarek, M. R., Blunt, S., López-Morales, M., Crossfield, I. J. M., Sinukoff, E., Petigura, E. A., Gonzales, E. J., Poretti, E., Malavolta, L., Howard, A. W., et al., *The Astronomical Journal*,157,116 (2019) [\[doi\]](#)
31. *Bright Opportunities for Atmospheric Characterization of Small Planets: Masses and Radii of K2-3 b, c, and d and GJ3470 b from Radial Velocity Measurements and Spitzer Transits*, Kosiarek, M. R., Crossfield, I. J. M., Hardegree-Ullman, K. K., Livingston, J. H., Benneke, B., Henry, G. W., Howard, W. S., Berardo, D., Blunt, S., Fulton, B. J., et al., *The Astronomical Journal*,157,97 (2019) [\[doi\]](#)
30. *Deep Exploration of Eridani with Keck Ms-band Vortex Coronagraphy and Radial Velocities: Mass and Orbital Parameters of the Giant Exoplanet*, Mawet, D., Hirsch, L., Lee, E. J., Ruffio, J.-B., Bottom, M., Fulton, B. J., Absil, O., Beichman, C., Bowler, B., Bryan, M., et al., *The Astronomical Journal*,157,33 (2019) [\[doi\]](#)
29. *The California-Kepler Survey. VI. Kepler Multis and Singles Have Similar Planet and Stellar Properties Indicating a Common Origin*, Weiss, L. M., Isaacson, H. T., Marcy, G. W., Howard, A. W., Petigura, E. A., Fulton, B. J., Winn, J. N., Hirsch, L., Sinukoff, E., Rowe, J. F., et al., *The Astronomical Journal*,156,254 (2018) [\[doi\]](#)

28. *Characterizing K2 Candidate Planetary Systems Orbiting Low-mass Stars. III. A High Mass and Low Envelope Fraction for the Warm Neptune K2-55b*, Dressing, C. D., Sinukoff, E., Fulton, B. J., Lopez, E. D., Beichman, C. A., Howard, A. W., Knutson, H. A., Werner, M., Benneke, B., Crossfield, I. J. M., et al., *The Astronomical Journal*,156,70 (2018) [\[doi\]](#)
27. *HAT-P-11: Discovery of a Second Planet and a Clue to Understanding Exoplanet Obliquities*, Yee, S. W., Petigura, E. A., Fulton, B. J., Knutson, H. A., Batygin, K., Bakos, G. Á., Hartman, J. D., Hirsch, L. A., Howard, A. W., Isaacson, H., et al., *The Astronomical Journal*,155,255 (2018) [\[doi\]](#)
26. *The California-Kepler Survey. IV. Metal-rich Stars Host a Greater Diversity of Planets*, Petigura, E. A., Marcy, G. W., Winn, J. N., Weiss, L. M., Fulton, B. J., Howard, A. W., Sinukoff, E., Isaacson, H., Morton, T. D., & Johnson, J. A., *The Astronomical Journal*,155,89 (2018) [\[doi\]](#)
25. *The California-Kepler Survey. V. Peas in a Pod: Planets in a Kepler Multi-planet System Are Similar in Size and Regularly Spaced*, Weiss, L. M., Marcy, G. W., Petigura, E. A., Fulton, B. J., Howard, A. W., Winn, J. N., Isaacson, H. T., Morton, T. D., Hirsch, L. A., Sinukoff, E. J., et al., *The Astronomical Journal*,155,48 (2018) [\[doi\]](#)
24. *Constraints on the Obliquities of Kepler Planet-hosting Stars*, Winn, J. N., Petigura, E. A., Morton, T. D., Weiss, L. M., Dai, F., Schlaufman, K. C., Howard, A. W., Isaacson, H., Marcy, G. W., Justesen, A. B., et al., *The Astronomical Journal*,154,270 (2017) [\[doi\]](#)
23. *Seeing Double with K2: Testing Re-inflation with Two Remarkably Similar Planets around Red Giant Branch Stars*, Grunblatt, S. K., Huber, D., Gaidos, E., Lopez, E. D., Howard, A. W., Isaacson, H. T., Sinukoff, E., Vanderburg, A., Nofi, L., Yu, J., et al., *The Astronomical Journal*,154,254 (2017) [\[doi\]](#)
22. *Three's Company: An Additional Non-transiting Super-Earth in the Bright HD 3167 System, and Masses for All Three Planets*, Christiansen, J. L., Vanderburg, A., Burt, J., Fulton, B. J., Batygin, K., Benneke, B., Brewer, J. M., Charbonneau, D., Ciardi, D. R., Collier Cameron, A., et al., *The Astronomical Journal*,154,122 (2017) [\[doi\]](#)
21. *The California-Kepler Survey. III. A Gap in the Radius Distribution of Small Planets*, Fulton, B. J., Petigura, E. A., Howard, A. W., Isaacson, H., Marcy, G. W., Cargile, P. A., Hebb, L., Weiss, L. M., Johnson, J. A., Morton, T. D., et al., *The Astronomical Journal*,154,109 (2017) [\[doi\]](#)
20. *The California-Kepler Survey. II. Precise Physical Properties of 2025 Kepler Planets and Their Host Stars*, Johnson, J. A., Petigura, E. A., Fulton, B. J., Marcy, G. W., Howard, A. W., Isaacson, H., Hebb, L., Cargile, P. A., Morton, T. D., Weiss, L. M., et al., *The Astronomical Journal*,154,108 (2017) [\[doi\]](#)
19. *The California-Kepler Survey. I. High-resolution Spectroscopy of 1305 Stars Hosting Kepler Transiting Planets*, Petigura, E. A., Howard, A. W., Marcy, G. W., Johnson, J. A., Isaacson, H., Cargile, P. A., Hebb, L., Fulton, B. J., Weiss, L. M., Morton, T. D., et al., *The Astronomical Journal*,154,107 (2017) [\[doi\]](#)
18. *K2-66b and K2-106b: Two Extremely Hot Sub-Neptune-size Planets with High Densities*, Sinukoff, E., Howard, A. W., Petigura, E. A., Fulton, B. J., Crossfield, I. J. M., Isaacson, H., Gonzales, E., Crepp, J. R., Brewer, J. M., Hirsch, L., et al., *The Astronomical Journal*,153,271 (2017) [\[doi\]](#)
17. *New Insights on Planet Formation in WASP-47 from a Simultaneous Analysis of Radial Velocities and Transit Timing Variations*, Weiss, L. M., Deck, K. M., Sinukoff, E., Petigura,

- E. A., Agol, E., Lee, E. J., Becker, J. C., Howard, A. W., Isaacson, H., Crossfield, I. J. M., et al., *The Astronomical Journal*,153,265 (2017) [\[doi\]](#)
16. *KELT-18b: Puffy Planet, Hot Host, Probably Perturbed*, McLeod, K. K., Rodriguez, J. E., Oelkers, R. J., Collins, K. A., Bieryla, A., Fulton, B. J., Stassun, K. G., Gaudi, B. S., Penev, K., Stevens, D. J., et al., *The Astronomical Journal*,153,263 (2017) [\[doi\]](#)
 15. *Two Small Transiting Planets and a Possible Third Body Orbiting HD 106315*, Crossfield, I. J. M., Ciardi, D. R., Isaacson, H., Howard, A. W., Petigura, E. A., Weiss, L. M., Fulton, B. J., Sinukoff, E., Schlieder, J. E., Mawet, D., et al., *The Astronomical Journal*,153,255 (2017) [\[doi\]](#)
 14. *Four Sub-Saturns with Dissimilar Densities: Windows into Planetary Cores and Envelopes*, Petigura, E. A., Sinukoff, E., Lopez, E. D., Crossfield, I. J. M., Howard, A. W., Brewer, J. M., Fulton, B. J., Isaacson, H. T., Ciardi, D. R., Howell, S. B., et al., *The Astronomical Journal*,153,142 (2017) [\[doi\]](#)
 13. *Mass Constraints of the WASP-47 Planetary System from Radial Velocities*, Sinukoff, E., Howard, A. W., Petigura, E. A., Fulton, B. J., Isaacson, H., Weiss, L. M., Brewer, J. M., Hansen, B. M. S., Hirsch, L., Christiansen, J. L., et al., *The Astronomical Journal*,153,70 (2017) [\[doi\]](#)
 12. *Three Temperate Neptunes Orbiting Nearby Stars*, Fulton, B. J., Howard, A. W., Weiss, L. M., Sinukoff, E., Petigura, E. A., Isaacson, H., Hirsch, L., Marcy, G. W., Henry, G. W., Grunblatt, S. K., et al., *The Astrophysical Journal*,830,46 (2016) [\[doi\]](#)
 11. *197 Candidates and 104 Validated Planets in K2's First Five Fields*, Crossfield, I. J. M., Ciardi, D. R., Petigura, E. A., Sinukoff, E., Schlieder, J. E., Howard, A. W., Beichman, C. A., Isaacson, H., Dressing, C. D., Christiansen, J. L., et al., *The Astrophysical Journal Supplements*,226,7 (2016) [\[doi\]](#)
 10. *Revised Masses and Densities of the Planets around Kepler-10*, Weiss, L. M., Rogers, L. A., Isaacson, H. T., Agol, E., Marcy, G. W., Rowe, J. F., Kipping, D., Fulton, B. J., Lissauer, J. J., Howard, A. W., et al., *The Astrophysical Journal*,819,83 (2016) [\[doi\]](#)
 9. *A Low Stellar Obliquity for WASP-47, a Compact Multiplanet System with a Hot Jupiter and an Ultra-short Period Planet*, Sanchis-Ojeda, R., Winn, J. N., Dai, F., Howard, A. W., Isaacson, H., Marcy, G. W., Petigura, E., Sinukoff, E., Weiss, L., Albrecht, S., et al., *The Astrophysical Journal Letters*,812,L11 (2015) [\[doi\]](#)
 8. *Three Super-Earths Orbiting HD 7924*, Fulton, B. J., Weiss, L. M., Sinukoff, E., Isaacson, H., Howard, A. W., Marcy, G. W., Henry, G. W., Holden, B. P., & Kibrick, R. I., *The Astrophysical Journal*,805,175 (2015) [\[doi\]](#)
 7. *A Nearby M Star with Three Transiting Super-Earths Discovered by K2*, Crossfield, I. J. M., Petigura, E., Schlieder, J. E., Howard, A. W., Fulton, B. J., Aller, K. M., Ciardi, D. R., Lépine, S., Barclay, T., de Pater, I., et al., *The Astrophysical Journal*,804,10 (2015) [\[doi\]](#)
 6. *Time-Varying Potassium in High-Resolution Spectra of the Type Ia Supernova 2014j*, Graham, M. L., Valenti, S., Fulton, B. J., Weiss, L. M., Shen, K. J., Kelly, P. L., Zheng, W., Filippenko, A. V., Marcy, G. W., Howell, D. A., et al., *The Astrophysical Journal*,801,136 (2015) [\[doi\]](#)
 5. *Occurrence and core-envelope structure of 1-4 \times Earth-size planets around Sun-like stars*, Marcy, G. W., Weiss, L. M., Petigura, E. A., Isaacson, H., Howard, A. W., & Buchhave, L. A., *Proceedings of the National Academy of Science*,111,12655 (2014) [\[doi\]](#)
 4. *The Mass-Radius Relation for 65 Exoplanets Smaller than 4 Earth Radii*, Weiss, L. M., & Marcy, G. W., *The Astrophysical Journal Letters*,783,L6 (2014) [\[doi\]](#)

3. *Masses, Radii, and Orbits of Small Kepler Planets: The Transition from Gaseous to Rocky Planets*, Marcy, G. W., Isaacson, H., Howard, A. W., Rowe, J. F., Jenkins, J. M., Bryson, S. T., Latham, D. W., Howell, S. B., Gautier, T. N., Batalha, N. M., et al., *The Astrophysical Journal Supplements*,210,20 (2014) [\[doi\]](#)
2. *The Mass of KOI-94d and a Relation for Planet Radius, Mass, and Incident Flux*, Weiss, L. M., Marcy, G. W., Rowe, J. F., Howard, A. W., Isaacson, H., Fortney, J. J., Miller, N., Demory, B.-O., Fischer, D. A., Adams, E. R., et al., *The Astrophysical Journal*,768,14 (2013) [\[doi\]](#)
1. *Monitoring H α Emission and Continuum of UXORs: RR Tauri*, Bedell, M., Villaume, A., Weiss, L., Sliski, D., Strelitski, V., Walker, G., Williams, J., Henden, A., & Krajci, T., *The Astronomical Journal*,142,164 (2011) [\[doi\]](#)

Dissertations

4. *The Masses and Orbital Dynamics of Exoplanets*, Ph.D. Thesis 2016
University of California, Berkeley, advisors G. Marcy, A. Howard
3. *Young, Low-Mass Stars and their Companions in NGC 2362*, M. Phil. Thesis 2011
University of Cambridge, advisor S. Hodgkin
2. *Exploring Exoplanets*, Senior Thesis 2010
Harvard University, advisor D. Charbonneau
1. *Searching for Dark Matter beyond the WMAP Haze*, Junior Thesis 2009
Harvard University, advisor D. Finkbeiner

TALKS & COLLOQUIA (SELECTED)

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| Protostars and Planets VII, Kyoto, Japan (<i>invited chapter</i>) | 2023 |
| American Astronomical Society 241, Seattle, WA | 2023 |
| Committee on Space Research Scientific Meeting, Athens, Greece (<i>invited, virtual</i>) | 2022 |
| Cooperative Institute for Dynamic Earth Research, Santa Barbara, CA (<i>invited lecture</i>) | 2022 |
| Astronomy Colloquium, California Institute of Technology, Pasadena, CA | 2022 |
| Astronomy Colloquium, University of Goettingen, Goettingen, Germany (Virtual) | 2021 |
| Physics Colloquium, University of Notre Dame, South Bend, IN (Virtual) | 2021 |
| Astrophysics Colloquium, U. Wisconsin-Madison, Madison, WI (Virtual) | 2021 |
| Astrophysics Colloquium, MIT, Cambridge, MA (Virtual) | 2021 |
| American Astronomical Society 237, TESS Atmospheres Special Session (Virtual) | 2021 |
| American Astronomical Society 237, Exoplanets I Session (Virtual) | 2021 |
| Physics Colloquium, Universidad Adolfo Ibáñez, Santiago, Chile (Virtual) | 2020 |
| Physics Colloquium, Tsung-Dao Lee Institute, Shanghai, China (Virtual) | 2020 |
| PLATO Exoplanet Science Meeting (Virtual) | 2020 |
| KITP ExoStars Redux Meeting, Santa Barbara, CA (<i>invited, virtual</i>) | 2020 |
| TESS Science Team Meeting #23 (Virtual) | 2020 |
| Exoplanet Demographics, Pasadena, CA (<i>invited review</i>) | 2020 |
| American Astronomical Society 235, Honolulu, HI | 2020 |
| Physics Colloquium, University of Michigan, Ann Arbor, MI | 2019 |
| AAS Division of Planetary Science, Geneva, Switzerland | 2019 |
| Disks2Planets, Ringberg Castle, Germany (<i>invited</i>) | 2019 |
| Extreme Solar Systems IV, Reykjavik, Iceland | 2019 |
| Physics Colloquium, University of Hawaii at Mānoa, Honolulu, HI | 2019 |
| Kepler Science Conference V, Glendale, CA (<i>invited review</i>) | 2019 |
| Geophysics Colloquium, University Hawaii at Mānoa, Honolulu, HI | 2018 |

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| Keck Science Meeting, Pasadena, CA | 2018 |
| Exoplanets II, Cambridge, UK | 2018 |
| Physics & Astronomy Colloquium, University of Rochester, Rochester, NY | 2018 |
| Astronomy Colloquium, University of California, Los Angeles, CA | 2018 |
| Astronomy Colloquium, Université de Montréal, QC, Canada | 2018 |
| Astronomy Colloquium, Queen's University, Kingston, Ontario, Canada | 2018 |
| Exoplanet Formation, Shanghai, China (<i>invited</i>) | 2017 |
| Planet Formation around the Snowline, Toyko, Japan (<i>invited</i>) | 2017 |
| Physics & Astronomy Colloquium, University of Rochester, Rochester, NY | 2017 |
| Formation and Dynamics of Exoplanets, Aspen, CO | 2017 |
| Exoplanets I, Davos, Switzerland | 2016 |
| Center for Integrative Planetary Science, UC Berkeley, CA | 2016 |
| Symposium for Habitability, University of Bern, Switzerland (<i>invited</i>) | 2016 |
| Keck Science Meeting, Los Angeles, CA | 2015 |
| From Super-Earths to Brown Dwarfs: Who's Who? Paris, France | 2015 |
| Extreme Solar Systems III, Waikoloa, HI | 2015 |
| American Astronomical Society 225, Seattle, WA | 2015 |
| Towards Other Earths II, Porto, Portugal, | 2014 |
| American Astronomical Society 223, National Harbor, MD | 2014 |
| Planet Validation Workshop, Marseille, France | 2013 |
| Exoplanets in Multi-body Systems in the Kepler Era, Aspen, CO | 2013 |
| American Astronomical Society 221, Long Beach, CA | 2013 |

OBSERVING EXPERIENCE

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| W. M. Keck Observatory | > 160 nights |
| Automated Planet Finder | > 300 nights |

SCIENTIFIC ADVISING

Postdoctoral

Dr. Matthias Yang He, U. Notre Dame Aug. 2022-present

Graduate

Coleman (Alex) Thomas, U. Notre Dame June 2022-present

David Shaw, U. Notre Dame Jan. 2022-present

Jingwen Zhang, NASA FINESST Graduate Fellow, U. Hawai'i, *PhD thesis* 2020-present

Casey Brinkman, NSF Graduate Research Fellow, U. Hawai'i, *PhD thesis* 2019-present

Jack Lubin, UC Irvine 2020-2022

Emma Turtelboom, UC Berkeley 2020-2022

Sarah Blunt, Caltech 2018-2019

Undergraduate & High School

Aaron Householder, NSF REU Fellow (at Notre Dame), Yale 2022-present

Andrew Langford, U. Notre Dame, *honors senior thesis* 2021-present

Laura Daclison, Maunakea Scholar, Waipahu High School, Waipahu, HI 2018-2019

Thomas Vandal, Trottier Summer Fellow, U. Montréal 2018

Merrin Peterson, Trottier Summer Fellow, McGill University 2017

SERVICE

Scientific Organizing Committee for Extreme Solar Systems V, Christchurch, New Zealand 2024

Instructor of Record for the Galvin Scholars Program 2023

Serving Pell-grant eligible and first-generation college students in building academic community

NASA Hubble Time Allocation Committee external reviewer 2023

NASA Hubble Postdoctoral Fellowship panel reviewer 2022-2023

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| Origins, U. Notre Dame | 2021-present |
| Selected for development for MSCA, Provost's Office | 2021 |
| Incorporated into Notre Dame IAS theme "The Long Run" | 2023-2024 |
| Dept. of Physics & Astronomy Committees: | |
| Graduate Recruitment | 2022-2023 |
| Outreach | 2022-2023 |
| Colloquium | 2021-2022 |
| W. M. Keck Observatory Science Strategic Planning Meeting, Pasadena | 2021 |
| 15-year visioning for the future of Keck Observatory and Maunakea | |
| Reviewer for Swiss National Science Foundation | 2021 |
| University of Hawaii/IfA Telescope Allocation Panel Member | 2019-2020 |
| NSF NOAO/NOIRLab Telescope Allocation Panel Member | 2018-2020 |
| NASA ADAP Panel Member & Chair | 2018 |
| NASA ADAP Panel Member | 2017 |
| Referee for: Science Advances, Nature Astronomy, The Astronomical Journal, The Astrophysical Journal, The Astrophysical Journal Letters, Astronomy & Astrophysics | 2014-present |

POPULAR PRESS

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| Author for <i>Scientific American</i> | |
| "Our Solar System is Even Stranger than We Thought," 70,000+ Views | 2018 |
| Scientific Press Releases: | |
| "A Rocky Planet around one of our Galaxy's Oldest Stars" | 2021 |
| "Newly Discovered Exoplanet Dethrones Former King of the Kepler-88 System" | 2020 |
| "Planets around Other Stars are like Peas in a Pod" | 2018 |
| Inaugural Chair of the Editorial Board & Author for <i>astrobites</i> | 2011-2013 |
| Co-Host & Sound Editor of <i>The Astropod</i> , the official astronomy podcast of the University of Cambridge | 2010-2011 |

BROADER IMPACTS (SELECTED)

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| Science Consultant for Dramatic Play "Silent Sky" | 2022 |
| South Bend Civic Theater, South Bend, IN | |
| QuarkNet High School Teacher Mentoring, South Bend, IN | 2022 |
| Public Star Parties & Outreach Events, 5000+ cumulative attendees | 2006-present |
| Michigan Dark Sky Party | 2022 |
| AAS Star Party on the Beach, 1000+ visitors, Honolulu, HI | 2020 |
| Institute for Astronomy Mānoa Open House, 1000+ visitors, Honolulu, HI | 2019 |
| Astronomy on Tap, Montréal, Canada | 2017 |
| Star Party Guide, University of Cambridge, Cambridge, UK, 1000+ visitors | 2010-2011 |
| Star Tour Guide, Maria Mitchell Observatory, Nantucket, MA, 1500+ visitors | 2008 |
| <u>Public Lectures</u> | |
| Notre Dame <i>Scientia</i> "Talk Science" Seminar | 2021 |
| NASA Universe of Learning Seminar (virtual) | 2021 |
| Guest Lecture, W. M. Keck Observatory, Waimea, HI (virtual) | 2020 |
| Guest Lecture, Punahou High School, Honolulu, HI | 2019 |
| Public Lecture, McGill University, Montréal, Canada | 2018 |
| Guest Lecture, Box, Inc., Redwood City, CA | 2017 |
| Public Lecture, Université de Montréal, Montréal, Canada | 2017 |
| Public Lecture, UC Berkeley, Berkeley, CA | 2016 |
| Public Lecture, Bay Area Science Festival, Berkeley, CA | 2014 |
| <u>Diversity, Equity & Inclusion</u> | |
| Future Faculty Panel, University of Notre Dame | 2022 |

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| Maunakea Scholars Mentor, Honolulu, HI | 2018-2019 |
| Girl Scouts of America Star Party, Honolulu, HI | 2018 |
| American Assoc. of University Women Expanding Your Horizons, Saint Mary's College, CA | 2016 |
| Girl Scouts of America Star Party, Rochester, NY | 2006 |
| Leadership of the Student Astronomers at Harvard/Radcliffe, Cambridge, MA | 2007-2010 |

LANGUAGES

English (fluent)
 Spanish (conversational)
 French (conversational)

PROFESSIONAL REFERENCES

1. **Andrew Howard**, Professor
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 California Institute of Technology, Pasadena, CA USA
2. **Daniel Huber**, Assistant Professor
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