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Citizenship: United States

Education:

The Ohio State University
Department of Astronomy

M.S. 2003; Ph.D. 2007
Advisor: Richard Pogge

Princeton University
Department of Astrophysical Sciences

A.B., *cum laude* 2000
Advisor: Michael Strauss

Professional Positions:

Lehigh University, Department of Physics

- Associate Professor 2018-present
- Assistant Professor 2013-2018

Fisk University, Department of Life and Physical Sciences

- Fisk/Vanderbilt Bridge Program Mentoring Postdoctoral Researcher 2012-2013

Vanderbilt University, Department of Physics and Astronomy

- VIDA Postdoctoral Fellow 2007-2013
- Research Assistant Professor 2008-2013

Other Positions:

Answerthink, Inc., Business Intelligence Division
• Consultant

2000-2001

Teaching:

Lehigh University

- ASTR 372/472: *Exoplanets* Fall 2018
- ASTR/EES 090: *Life From Stardust: The Origin of the Earth and the Biosphere* (First-year Seminar) Fall 2017
- ASTR 105: *Introduction to Planetary Astronomy* Fall 2017, '16, '15, '14, '13
- Special lectures for EES 200 (*Earth History*) and CSE 198 (*Introduction to Data Science*), once each semester 2014-present
- ASTR 302: *Modern Astrophysics II* Spring 2018, '17 '15
- PHY 215: *Classical Mechanics* Spring 2016, '14
- PHY 350: *Special Topics in Astrophysics* Spring 2015
- PHY 372: *Introduction to Astrobiology* Spring 2013

Fisk/Vanderbilt Bridge Program

- Instructor for General GRE Exam Preparation Fall 2012

Vanderbilt University

- AST 307: *Star Formation, Planet Formation, and Exoplanet Detection* Fall 2010
- AST 322: *Methods in Observational and Computational Astronomy* Fall 2009

Publications

Stars (*) indicate papers led by students under my supervision

Refereed Published Papers:

1. **Pepper, J.**, Krupińska, O. D., Stassun, K. G., et al., 2019, "What Does a Successful Postdoctoral Fellowship Publication Record Look Like?", *Publications of the Astronomical Society of Pacific*, 131, 4501
2. Grieves, N., Ge, J., Thomas, N., et al., 2018, "Chemo-kinematics of the Milky Way from the SDSS-III MARVELS survey", *Monthly Notices of the Royal Astronomical Society*, 481, 3244
3. Huang, C. X., Burt, J., Vanderburg, A., et al., 2018, "TESS Discovery of a Transiting Super-Earth in the pi Mensae System", *The Astrophysical Journal Letters*, 868, 39
4. Ziegler, C., Law, N. M., Baranec, C., et al., 2018, "Measuring the Recoverability of Close Binaries in Gaia DR2 with the Robo-AO Kepler Survey", *The Astronomical Journal*, 156, 259
5. Barclay, T., **Pepper, J.**, & Quintana, E. V. 2018, "A Revised Exoplanet Yield from the Transiting Exoplanet Survey Satellite (TESS)", *The Astrophysical Journal Supplement Series*, 239, 2
6. Collins, K. A., Collins, K. I., **Pepper, J.**, et al., 2018, "The KELT Follow-up Network and Transit False-positive Catalog: Pre-vetted False Positives for TESS", *The Astronomical Journal*, 156, 234
7. Stassun, K. G., Oelkers, R. J., **Pepper, J.**, et al., 2018, "The TESS Input Catalog and Candidate Target List", *The Astronomical Journal*, 156, 102
8. Martioli, E., Colón, K. D., Angerhausen, D., et al., 2018, "A survey of eight hot Jupiters in secondary eclipse using WIRCam at CFHT", *Monthly Notices of the Royal Astronomical Society*, 474, 4264
9. Johnson, M. C., Rodriguez, J. E., Zhou, G., et al., 2018, "KELT-21b: A Hot Jupiter Transiting The Rapidly-Rotating Metal-Poor Late-A Primary Of A Likely Hierarchical Triple System", *The Astronomical Journal*, 155, 100
10. * Labadie-Bartz, J., Chojnowski, S. D., Whelan, D. G., et al., 2018, "Outbursts and Disk Variability in Be Stars", *The Astronomical Journal*, 155, 53
11. Ansdell, M., Oelkers, R. J., Rodriguez, J. E., et al., 2018, "Identification of Young Stellar Variables with KELT for K2 II: The Upper Scorpius Association", *Monthly Notices of the Royal Astronomical Society*, 473, 1231
12. Oelkers, R. J., Rodriguez, J. E., Stassun, K. G., et al., 2018, "Variability Properties of Four Million Sources in the TESS Input Catalog Observed with the Kilodegree Extremely Little Telescope Survey", *The Astronomical Journal*, 155, 39
13. Siverd, R. J., Collins, K. A., Zhou, G., et al., 2017, "KELT-19Ab: A P~4.6 Day Hot Jupiter Transiting a Likely Am Star with a Distant Stellar Companion", *The Astronomical Journal*, 155, 35
14. Stassun, K. G., Corsaro, E., **Pepper, J.**, et al., 2018, "Empirical, Accurate Masses and Radii of Single Stars with TESS and Gaia", *The Astronomical Journal*, 155, 22
15. * Siorattanakul, K., Engle, S., **Pepper, J.**, et al., 2017, "Period Variations for the Cepheid VZ Cyg", *The Astronomical Journal*, 154, 217
16. Temple, L. Y., Hellier, C., Albrow, M. D., et al., 2017, "WASP-167b/KELT-13b: joint discovery of a hot Jupiter transiting a rapidly rotating F1V star", *Monthly Notices of the Royal Astronomical Society*, 471, 2743
17. Lund, M. B., Rodriguez, J. E., Zhou, G., et al., 2017, "KELT-20b: A Giant Planet with a Period of P ~ 3.5 days Transiting the V ~ 7.6 Early A Star HD 185603", *The Astronomical Journal*, 154, 194

18. Osborn, H. P., Rodriguez, J. E., Kenworthy, M. A., et al., 2017, "Periodic eclipses of the young star PDS 110 discovered with WASP and KELT photometry", *Monthly Notices of the Royal Astronomical Society*, 471, 740
19. Rodriguez, J. E., Ansdell, M., Oelkers, R. J., et al., 2017, "Identification of Young Stellar Variables with KELT for K2. I. Taurus Dippers and Rotators", *The Astrophysical Journal*, 898, 97
20. Lubin, J. B., Rodriguez, J. E., Zhou, G., et al., 2017, "A Bright Short Period M-M Eclipsing Binary from the KELT Survey: Magnetic Activity and the Mass-Radius Relationship for M Dwarfs", *The Astrophysical Journal*, 844, 134
21. Beatty, T. G., Stevens, D. J., Collins, K. A., et al., 2017, "Determining Empirical Stellar Masses and Radii from Transits and Gaia Parallaxes as Illustrated by Spitzer Observations of KELT-11b", *The Astronomical Journal*, 154, 25
22. Gaudi, B. S., Stassun, K. G., Collins, K. A., et al., 2017, "A giant planet undergoing extreme-ultraviolet irradiation by its hot massive-star host", *Nature*, 546, 514
23. McLeod, K. K., Rodriguez, J. E., Oelkers, R. J., et al., 2017, "KELT-18b: Puffy Planet, Hot Host, Probably Perturbed", *The Astronomical Journal*, 153, 263
24. * Labadie-Bartz, J., **Pepper, J.**, McSwain, M. V., et al., 2017, "Photometric Variability of the Be Star Population", *The Astronomical Journal*, 153, 252
25. **Pepper, J.**, Rodriguez, J. E., Collins, K. A., et al., 2017, "KELT-11b: A Highly Inflated Sub-Saturn Exoplanet Transiting the V = 8 Subgiant HD 93396", *The Astronomical Journal*, 153, 215
26. Molnár, L., Derekas, A., Szabó, R., et al., 2017, "V473 Lyr, a modulated, period-doubled Cepheid, and U TrA, a double-mode Cepheid, observed by MOST", *Monthly Notices of the Royal Astronomical Society*, 406, 4009
27. Jacklin, S. R., Lund, M. B., **Pepper, J.**, Stassun, K. G. 2017, "Transiting Planets with LSST. III. Detection Rate per Year of Operation", *The Astronomical Journal*, 153, 186
28. Stevens, D. J., Collins, K. A., Gaudi, B. S., et al., 2017, "KELT-12b: A P~5 day, Highly Inflated Hot Jupiter Transiting a Mildly Evolved Hot Star", *The Astronomical Journal*, 153, 178
29. **Pepper, J.**, Gillen, E., Parviainen, H., et al., 2017, "A Low-mass Exoplanet Candidate Detected by K2 Transiting the Praesepe M Dwarf JS 183", *The Astronomical Journal*, 153, 177
30. Chojnowski, S. D., Wisniewski, J. P., Whelan, D. G., et al., 2017, "High-resolution H-band Spectroscopy of Be Stars with SDSS-III/APOGEE. II. Line Profile and Radial Velocity Variability", *The Astronomical Journal*, 153, 174
31. Oberst, T. E., Rodriguez, J. E., Colón, K. D., et al., 2017, "KELT-16b: A Highly Irradiated, Ultra-short Period Hot Jupiter Nearing Tidal Disruption", *The Astronomical Journal*, 153, 97
32. Rodriguez, J. E., Zhou, G., Cargile, P. A., et al., 2017, "The Mysterious Dimmings of the T Tauri Star V1334 Tau", *The Astrophysical Journal*, 836, 209
33. Torres, G., McGruder, C. D., Siverd, R. J., Rodriguez, J. E., **Pepper, J.**, Stevens, D. J., Stassun, K. G., Lund, M. B., James, D. 2017, "Absolute Dimensions of the Eccentric Eclipsing Binary V541 Cygni", *The Astrophysical Journal*, 836, 177
34. Kennedy, G. M., Kenworthy, M. A., **Pepper, J.**, Rodriguez, J. E., Siverd, R. J., Stassun, K. G., Wyatt, M. C. 2017, "The transiting dust clumps in the evolved disc of the Sun-like UXor RZ Psc", *Royal Society Open Science*, 5, 60652
35. * Rodriguez, J. E., Stassun, K. G., Cargile, P., et al., 2016, "DM Ori: A Young Star Occulted by a Disturbance in Its Protoplanetary Disk", *The Astrophysical Journal*, 831, 74
36. Zhou, G., Rodriguez, J. E., Collins, K. A., et al., 2016, "KELT-17b: A Hot-Jupiter Transiting an A-star in a Misaligned Orbit Detected with Doppler Tomography", *The Astronomical Journal*, 152, 136

37. Campante, T. L., Schofield, M., Kuszlewicz, J. S., et al., 2016, "The Asteroseismic Potential of TESS: Exoplanet-host Stars", *The Astrophysical Journal*, 830, 138
38. Kostov, V. B., Orosz, J. A., Welsh, W. F., et al., 2016, "Kepler-1647b: The Largest and Longest-period Kepler Transiting Circumbinary Planet", *The Astrophysical Journal*, 827, 86
39. * Kuhn, R. B., Rodriguez, J. E., Collins, K. A., et al., 2016, "KELT-10b: the first transiting exoplanet from the KELT-South survey - a hot sub-Jupiter transiting a $V = 10.7$ early G-star", *Monthly Notices of the Royal Astronomical Society*, 459, 4281
40. Hippke, M., Angerhausen, D., Lund, M. B., **Pepper, J.**, Stassun, K. G., 2016, "A Statistical Analysis of the Accuracy of the Digitized Magnitudes of Photometric Plates on the Timescale of Decades with an Application to the Century-long Light Curve of KIC 8462852", *The Astrophysical Journal*, 825, 73
41. * Rodriguez, J. E., Colón, K. D., Stassun, K. G., et al., 2016, "KELT-14b and KELT-15b: An Independent Discovery of WASP-122b and a New Hot Jupiter", *The Astronomical Journal*, 151, 138
42. * Rodriguez, J. E., Stassun, K. G., Lund, M. B., et al., 2016, "An Extreme Analogue of ϵ Aurigae: An M-giant Eclipsed Every 69 Years by a Large Opaque Disk Surrounding a Small Hot Source", *The Astronomical Journal*, 151, 123
43. Troup, N. W., Nidever, D. L., De Lee, N., et al., 2016, "Companions to APOGEE Stars. I. A Milky Way-spanning Catalog of Stellar and Substellar Companion Candidates and Their Diverse Hosts", *The Astronomical Journal*, 151, 3
44. Kirk, B., Conroy, K., Prša, A., et al., 2016, "Kepler Eclipsing Binary Stars. VII. The Catalog of Eclipsing Binaries Found in the Entire Kepler Data Set", *The Astronomical Journal*, 151, 68
45. * Lund, M. B., Siverd, R. J., **Pepper, J.**, Stassun, K. G. 2016, "Metrics for Optimization of Large Synoptic Survey Telescope Observations of Stellar Variables and Transients", *Publications of the Astronomical Society of Pacific*, 128, 500
46. Mack, C. E., III, Stassun, K. G., Schuler, S. C., Hebb, L., & **Pepper, J.**, 2016 "Detailed Abundances of Planet-hosting Wide Binaries. II. HD80606+HD80607", *The Astrophysical Journal*, 818, 54
47. Bastien, F. A., Stassun, K. G., Basri, G., & **Pepper, J.**, 2016 "A Granulation "Flicker"-based Measure of Stellar Surface Gravity", *The Astrophysical Journal*, 818, 43
48. Eastman, J. D., Beatty, T. G., Siverd, R. J., et al. 2016, "KELT-4Ab: An Inflated Hot Jupiter Transiting the Bright ($V \sim 10$) Component of a Hierarchical Triple", *The Astronomical Journal*, 151, 45
49. * Rodriguez, J. E., Reed, P. A., Siverd, R. J., **Pepper, J.**, et al., 2016, "Recurring Occultations of RW Aurigae by Coagulated Dust in the Tidally Disrupted Circumstellar Disk", *The Astronomical Journal*, 151, 29
50. LaCourse, D. M., Jek, K. J., Jacobs, T. L., et al. 2015, "Kepler eclipsing binary stars - VI. Identification of eclipsing binaries in the K2 Campaign 0 data set", *Monthly Notices of the Royal Astronomical Society*, 452, 356
51. Wisniewski, J. P., Chojnowski, S. D., Davenport, J. R. A., Bartz, J., **Pepper, J.**, et al. 2015, "Characterizing the Rigidly Rotating Magnetosphere Stars HD 345439 and HD 23478", *The Astrophysical Journal Letters*, 811, 26
52. Fulton, B. J., Collins, K. A., Gaudi, B. S., Stassun, K. G., **Pepper, J.**, et al. 2015, "KELT-8b: A Highly Inflated Transiting Hot Jupiter and a New Technique for Extracting High-precision Radial Velocities from Noisy Spectra", *The Astrophysical Journal*, 810, 30

53. Alam, S., Albareti, F. D., Allende Prieto, C., et al. 2015, "The Eleventh and Twelfth Data Releases of the Sloan Digital Sky Survey: Final Data from SDSS-III", *The Astrophysical Journal Supplement Series*, 219, 12
54. Jacklin, S., Lund, M. B., **Pepper, J.**, & Stassun, K. G. 2015, "Transiting Planets with LSST. II. Period Detection of Planets Orbiting 1 M_{\odot} Hosts", *The Astronomical Journal*, 150, 34
55. * Rodriguez, J. E., **Pepper, J.**, Stassun, K. G., et al. 2015, "V409 Tau as Another AA Tau: Photometric Observations of Stellar Occultations by the Circumstellar Disk", *The Astronomical Journal*, 150, 32
56. Bieryla, A., Collins, K., Beatty, T. G., et al. 2015, "KELT-7b: A Hot Jupiter Transiting a Bright $V = 8.54$ Rapidly Rotating F-star", *The Astronomical Journal*, 150, 12
57. Paegert, M., Stassun, K. G., De Lee, N., **Pepper, J.**, et al. 2015, "Target Selection for the SDSS-III MARVELS Survey", *The Astronomical Journal*, 149, 186
58. Fleming, S. W., Mahadevan, S., Deshpande, R., et al. 2015, "The APOGEE Spectroscopic Survey of Kepler Planet Hosts: Feasibility, Efficiency, and First Results", *The Astronomical Journal*, 149, 143
59. Ricker, G. R., Winn, J. N., Vanderspek, R., et al., 2014, "Transiting Exoplanet Survey Satellite (TESS)", *Journal of Astronomical Telescopes, Instruments, and Systems*, 1, 1
60. Goobar, A., Kromer, M., Siverd, R., Stassun, K. G., **Pepper, J.**, et al. 2015, "Constraints on the Origin of the First Light from SN 2014J", *The Astrophysical Journal*, 799, 106
61. Siverd, R. J., Goobar, A., Stassun, K. G., **Pepper, J.** 2015, "Observations of the M82 SN 2014J with the Kilodegree Extremely Little Telescope", *The Astrophysical Journal*, 799, 105
62. * Lund, M. B., **Pepper, J.**, Stassun, K. G. 2015, "Transiting Planets With LSST. I. Potential for LSST Exoplanet Detection", *The Astronomical Journal*, 149, 16
63. Ghezzi, L., Dutra-Ferreira, L., Lorenzo-Oliveira, D., et al., 2014, "Accurate Atmospheric Parameters at Moderate Resolution Using Spectral Indices: Preliminary Application to the MARVELS Survey", *The Astronomical Journal*, 148, 105
64. Bastien, F. A., Stassun, K. G., **Pepper, J.**, 2014, "Larger Planet Radii Inferred from Stellar "Flicker" Brightness Variations of Bright Planet-host Stars", *The Astrophysical Journal Letters*, 788, 9
65. Ahn, C. P., Alexandroff, R., Allende Prieto, C., et al., 2014, "The Tenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Apache Point Observatory Galactic Evolution Experiment", *The Astrophysical Journal Supplement*, 211, 17
66. Beatty, T. G., Collins, K. A., Fortney, J., et al., 2014, "Spitzer and z' Secondary Eclipse Observations of the Highly Irradiated Transiting Brown Dwarf KELT-1b", *The Astrophysical Journal*, 783, 112
67. Burke, C. J., Bryson, S. T., Mullally, F., et al., 2014, "Planetary Candidates Observed by Kepler IV: Planet Sample from Q1-Q8 (22 Months)", *The Astrophysical Journal Supplement*, 210, 19
68. Terrien, R. C., Mahadevan, S., Deshpande, R., et al., 2014, "New Red Jewels in Coma Berenices", *The Astrophysical Journal*, 782, 61
69. Cargile, P. A., James, D. J., **Pepper, J.**, Kuhn, R. B., Siverd, R., Stassun, K. G. 2014, "Evaluating Gyrochronology on the Zero-age-main-sequence: Rotation Periods in the Southern Open Cluster Blanco 1 from the KELT-South Survey", *The Astrophysical Journal*, 782, 29
70. Collins, K. A., Eastman, J. D., Beatty, T. G., Siverd, R. J., Gaudi, B. S., **Pepper, J.**, Kielkopf, J. F., et al. 2014, "KELT-6b: A $P \sim 7.9$ Day Hot Saturn Transiting a Metal-poor Star with a Long-period Companion", *The Astronomical Journal*, 147, 39

71. Bastien, F. A., Stassun, K. G., **Pepper, J.**, Wright, J. T., Aigrain, S., Basri, G., Johnson, J. A., Howard, A. W., Walkowicz, L. M., 2014, "Radial Velocity Variations of Photometrically Quiet, Chromospherically Inactive Kepler Stars: A Link between RV Jitter and Photometric Flicker", *The Astronomical Journal*, 147, 29
72. Cegla, H. M., Stassun, K. G., Watson, C. A., Bastien, F. A., **Pepper, J.**, 2014, "Estimating Stellar Radial Velocity Variability from Kepler and GALEX: Implications for the Radial Velocity Confirmation of Exoplanets", *The Astrophysical Journal*, 780, 104
73. * Rodriguez, J. E., **Pepper, J.**, Stassun, K. G., Siverd, R. J., Cargile, P., Beatty, T. G., Gaudi, B. S., 2013, "Occultation of the T Tauri Star RW Aurigae A by its Tidally Disrupted Disk", *The Astronomical Journal*, 146, 112
74. Jiang, P., Ge, J., Cargile, P., et al., 2013, "Very Low Mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. IV. A Candidate Brown Dwarf or Low-mass Stellar Companion to HIP 67526", *The Astrophysical Journal*, 146, 65
75. Bastien, F. A., Stassun, K. G., Basri, G., **Pepper, J.**, 2013, "An observational correlation between stellar brightness variations and surface gravity", *Nature*, 500, 427
76. **Pepper, J.**, Siverd, R., Beatty, T. G., et al., 2013, "KELT-3b: A Hot Jupiter Transiting a $V=9.8$ Late F Star", *The Astrophysical Journal*, 773, 64
77. Burger, D., Stassun, K. G., **Pepper, J.**, Siverd, R. J., Paegert, M., De Lee, N. M., Robinson, W., H., 2013, "Filtergraph: An interactive web application for visualization of astronomy datasets", *Astronomy and Computing*, 2, 40
78. Wright, J. T., Roy, A., Mahadevan, S., et al. 2013, "MARVELS-1: A Face-on Double-lined Binary Star Masquerading as a Resonant Planetary System and Consideration of Rare False Positives in Radial Velocity Planet Searches", *The Astrophysical Journal*, 770, 119
79. De Lee, N., Ge, J., Crepp, J. R., et al., 2013, "Very Low Mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. V. A Low Eccentricity Brown Dwarf from the Driest Part of the Desert, MARVELS-6b", *The Astronomical Journal*, 145, 155
80. Mack, C. E., III, Ge, J., Deshpande, R., et al., 2013, "A Cautionary Tale: MARVELS Brown Dwarf Candidate Reveals Itself to be a Very Long Period, Highly Eccentric Spectroscopic Stellar Binary", *The Astronomical Journal*, 145, 139
81. Ma, B., Ge, J., Barnes, R., et al., 2013, "Very-low-mass Stellar and Substellar Companions to Solar-like Stars from Marvels. III. A Short-period Brown Dwarf Candidate around an Active G0IV Subgiant", *The Astronomical Journal*, 145, 20
82. Ahn, C. P., Alexandroff, R., Allende Prieto, C., et al., 2012, "The Ninth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Baryon Oscillation Spectroscopic Survey", *The Astrophysical Journal Supplement*, 203, 21
83. Siverd, R., Beatty, T. G., **Pepper, J.**, et al., 2012, "KELT-1b: A Strongly Irradiated, Highly Inflated, Short-Period 27 Jupiter Mass Companion Transiting a mid-F Star", *The Astrophysical Journal*, 761, 123
84. Kinemuchi, K., Barclay, T., Fanelli, M., **Pepper, J.**, Still, M., Howell, S. B., 2012, "Demystifying Kepler Data: A Primer for Systematic Artifact Mitigation", *Publications of the Astronomical Society of the Pacific*, 124, 963
85. Beatty, T. G., **Pepper, J.**, Siverd, R. J., et al., 2012, "KELT-2Ab: A Hot Jupiter Transiting the Bright ($V = 8.77$) Primary Star of a Binary System", *The Astrophysical Journal*, 756L, 39
86. Fleming, S. W., Ge, J., Barnes, R., et al., 2012, "Very Low Mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. II. A Short-period Companion Orbiting an F Star with

- Evidence of a Stellar Tertiary and Significant Mutual Inclination”, *The Astronomical Journal*, 144, 72
87. Wisniewski, J. P., Ge, J., Crepp, J. R., et al., 2012, “Very Low Mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. I. A Low-mass Ratio Stellar Companion to TYC 4110-01037-1 in a 79 Day Orbit”, *The Astronomical Journal*, 143, 107
 88. **Pepper, J.**, Kuhn, R. B., Siverd, R., James, D. J., & Stassun, K., 2012, “The KELT-South Telescope”, *Publications of the Astronomical Society of the Pacific*, 124, 230
 89. Muirhead, P. S., Johnson, J. A., Apps, K., et al., 2012, “Characterizing the Cool KOIs III. KOI-961: A Small Star with Large Proper Motion and Three Small Planets”, *The Astronomical Journal*, 747, 144
 90. Eisenstein, D. J., Weinberg, D. H., Agol, E., 2011, “SDSS-III: Massive Spectroscopic Surveys of the Distant Universe, the Milky Way, and Extra-Solar Planetary Systems”, *The Astronomical Journal*, 142, 72
 91. Prsa, A., **Pepper, J.**, & Stassun, K. G. 2011, “Expected Large Synoptic Survey Telescope (LSST) Yield of Eclipsing Binary Stars”, *The Astronomical Journal*, 142, 52
 92. Lee, B. L., Ge, J., Fleming, S. W., et al., 2011, “MARVELS-1b: A Short-period, Brown Dwarf Desert Candidate from the SDSS-III Marvels Planet Search”, *The Astrophysical Journal*, 728, 32
 93. Fleming, S. W., Ge, J., Mahadevan, S., et al., 2010, “Discovery of a Low-Mass Companion to a Metal-Rich F Star with the MARVELS Pilot Project”, *The Astrophysical Journal*, 718, 1186
 94. **Pepper, J.**, Stanek, K. Z., Pogge, R. W., Latham, D. W., DePoy, D. L., Siverd, R., Poindexter, S., & Sivakoff, G. R. 2008, “A Photometric Survey for Variables and Transits in the Field of Praesepe with the Kilodegree Extremely Little Telescope”, *The Astronomical Journal*, 135, 907
 95. **Pepper, J.**, Pogge, R. W., DePoy, D. L., Marshall, J. L., Stanek, K. Z., Stutz, A. M., Poindexter, S., Siverd, R., O’Brien, T. P., Trueblood, M., & Trueblood, P. 2007, “The Kilodegree Extremely Little Telescope (KELT): A Small Robotic Telescope for Large-Area Synoptic Surveys”, *Publications of the Astronomical Society of the Pacific*, 119, 923
 96. Peebles, M. S., Bonanos, A. Z., DePoy, D. L., Stanek, K. Z., **Pepper J.**, Pogge, R. W., Pinsonneault, M. H., & Sellgren, K. 2006, “The Nature of the Variable Galactic Center Source GCIRS 16SW Revisited: A Massive Eclipsing Binary”, *The Astrophysical Journal Letters*, 654, L61
 97. **Pepper, J.** & Burke, C. J. 2006, “Survey for Transiting Extrasolar Planets in Stellar Systems IV: Variables in the Field of NGC 1245”, *The Astronomical Journal*, 132, 1177
 98. **Pepper J.** & Gaudi, B. S. 2006, “Towards the Detection of Transiting Hot Earths and Hot Neptunes in Galactic Open Clusters”, *Acta Astronomica*, 56, 183
 99. **Pepper J.** & Gaudi, B.S. 2005, “Searching for Transiting Planets in Stellar Systems”, *The Astrophysical Journal*, 631, 581
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 101. Gould, A., **Pepper, J.**, & Depoy, D. L. 2003, “Sensitivity of Transit Searches to Habitable Planets”, *The Astrophysical Journal*, 594, 533
 102. **Pepper, J.**, Gould, A. & Depoy, D. L. 2003, “Using All-Sky Surveys to Find Planetary Transits”, *Acta Astronomica*, 53, 213

Invited Review Chapters

- **Pepper, J.**, Stassun, K., & Gaudi, B. S. 2018, “KELT: The Kilodegree Extremely Little Telescope, a Survey for Exoplanets Transiting Bright, Hot Stars”, Invited review chapter, to appear in “Handbook of Exoplanets”, edited by H. J. Deeg and J. A. Belmonte

White Papers

- Ciardi, D. R., Pepper, J., Colón, K. D., Kane, S. R. 2018, “Study Analysis Group (SAG) 17: Final Report Resources Needed for Planetary Confirmation and Characterization”, SAG report for the Exoplanet Exploration Program Analysis Group (ExoPAG)
- Muna, D., Alexander, M., Allen, A., et al., 2016, “The Astropy Problem”, Community white paper
- Najita, J., Willman, B., Finkbeiner, D. P., et al., 2016, “Maximizing Science in the Era of LSST: A Community-Based Study of Needed US Capabilities”, A Report of the Kavli Futures Symposium organized by NOAO and LSST
- Kraus, S., Monnier, J. D., Ireland, M. J., 2016, “Planet Formation Imager (PFI): science vision and key requirements”, Proceedings of the SPIE, 9907, 1
- Liu, C. T., Willman, B., **Pepper, J.**, et al., 2014, “Maximizing LSST's Scientific Return: Ensuring Participation from Smaller Institutions”, White paper submitted to the National Research Council Committee on a Strategy to Optimize the U.S. OIR System in the Era of the LSST
- Welsh, W., Bloemen, S., Conroy, K., et al., 2013, “Kepler's Unparalleled Exploration of the Time Dimension”, Kepler Mission Extension White Paper
- Prsa, A., Guinan, E. F., Devinney, E. J., et al., 2009, “Fully Automated Approaches to Analyze Large-Scale Astronomy Survey Data”, Astro2010: The Astronomy and Astrophysics Decadal Survey, Technology Development Papers, no. 25
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Refereed Conference Proceedings

- * Labadie-Bartz, J. **Pepper, J.**, Chojnowski, S. D., McSwain, M. V. 2017, “Photometric variability of the Be star population with the KELT survey”, *The Lives and Death-Throes of Massive Stars*, Proceedings of the International Astronomical Union, IAU Symposium, 329, 418
- Rodriguez, J. E., **Pepper, J.**, Stassun, K. G., 2016, “First Results from the Disk Eclipse Search with KELT (DESK) Survey”, *Young Stars & Planets Near the Sun*, Proceedings of the International Astronomical Union, IAU Symposium, 314, 167
- * Rodriguez, J. E., **Pepper, J.**, Stassun, K., et al., 2013, “Occultation of the T Tauri Star RW Aurigae A by its Tidally Disrupted Disk”, *Giants of Eclipse*, AAS Topical Conference Series, Vol. #3. Bulletin of the American Astronomical Society, Vol. 45, 8, 401.03
- Siverd, R. J., **Pepper, J.**, Stanek, K., et al., 2009, “KELT: A Wide-Field Survey of Bright Stars for Transiting Planets”, *Transiting Planets*, Proceedings of the International Astronomical Union, IAU Symposium, 253, 350
- **Pepper, J.**, Pogge R., DePoy, D. L., et al., 2007, “Early Results from the KELT Transit Survey”, *Transiting Extrasolar Planets Workshop*, Astronomical Society of the Pacific Conference Series, 36627

- **Pepper, J.**, Gould A., DePoy, D. L., 2003, "KELT: The Kilodegree Extremely Little Telescope", *The Search for Other Worlds*, American Institute of Physics, Fourteenth Astrophysics Conference, 713, 185

Fellowships:

- Vanderbilt Initiative in Data-intensive Astrophysics (VIDA) Postdoctoral Fellowship 2007-2013
- Ohio State Dean's Distinguished University Fellowship 2001-2007

Scholarly Presentations

Invited Conference Presentations

Know Thy Star, Know Thy Planet, NExSci Conference, Pasadena, CA 2017

Invited Colloquia

NASA Goddard Space Flight Center, Greenbelt, MD 2018
Jet Propulsion Laboratory, Pasadena, CA 2018
Pennsylvania State University, State College, PA 2018
Moravian College, Bethlehem, PA 2017
DeSales University, Allentown, PA 2017
San Diego State University, San Diego, CA 2017
Muhlenberg College, Allentown, PA 2017
Cornell University, Ithaca, NY 2017
Dickinson College, Carlisle, PA 2016
Franklin and Marshall College, Lancaster, PA 2016
The College of New Jersey, Trenton, NJ 2016
Lafayette College, Easton, PA 2016
Princeton University, Princeton, NJ 2015
NASA Goddard Space Flight Center, Greenbelt, MD 2015
University of Colorado – Boulder, Boulder, CO 2015
Rutgers University, New Brunswick, NJ 2014
University of Delaware, Newark, DE 2014
University of Toledo, Toledo, OH 2014
Drexel University, Philadelphia, PA 2014
University of Rochester, Rochester, NY 2014
University of California – Los Angeles, IPLEX group 2013
Lehigh University, EES Department 2013
Pennsylvania State University, State College, PA 2013
University of Wyoming, Laramie, WY 2013
Case Western Reserve University, Cleveland, OH 2012
Carnegie Institution of Washington,
Department of Terrestrial Magnetism, Washington, DC 2012
University of Alabama – Huntsville, Huntsville, AL 2012
Lehigh University, Bethlehem, PA 2011
Villanova University, Villanova, PA 2011
Massachusetts Institute of Technology, Cambridge, MA 2011
NASA Exoplanet Science Institute, Pasadena, CA 2011
Swarthmore College, Swarthmore, PA 2011
NASA Goddard Space Flight Center, Greenbelt, MD 2010
University of Louisville, Louisville, KY 2010
University of Florida, Gainesville, FL 2009
Western Kentucky University, Bowling Green, KY 2009
University of Alabama – Huntsville, Huntsville, AL 2008
NASA Ames Research Center, Mountain View, CA 2007
The University of Cape Town, South Africa 2007
Harvard University, Cambridge, MA 2006

Leadership and Service to Profession

- AAS Agent for Lehigh University 2013-present
- Transiting Exoplanet Survey Satellite (TESS) 2013-present
 - Target Selection Working Group, co-chair
- Director and Co-PI of the KELT Transit Survey 2004-present
- Large Synoptic Survey Telescope (LSST) 2012-2018
 - Transiting Exoplanet subgroup of TVS Working Group, chair
 - Variable Stars subgroup of MWSP Working Group, co-chair
- Science Analysis Group (SAG #17) for NASA Exoplanet Program 2016-2018
Analysis Group (ExoPAG), Co-chair
- Planets Around Hot Stars Conference, Nashville, TN 2018
 - Scientific Organizing Committee
- Poster judge at American Astronomical Society national meetings 2017, '18
- KELT Project Workshop 2018, 17, '16, '15, '13, '11
 - Organizer and Chair of Scientific Organizing Committee
- NASA Grants Program Review Panel 2017, '16, '14, '13a, '13b, '10
- NSF Grants Program Review Panel 2017a, '17b, '16, '13
- Opticon Network Time Allocation Committee 2016
- Fifth Hotwiring the Transient Universe Conference (HTU #5) 2016
on Time Domain Astronomy
 - Scientific Organizing Committee
- NASA Time Allocation Committee of the Keck Telescope 2014-2015
- Planet Formation Imager (PFI) 2014-2015
 - Planetary Architectures Working Group, chair
- *Kepler* Eclipsing Binary Working Group 2010-2015
- MARVELS project of the Sloan Digital Sky Survey-III 2011-2014
 - Official Architect
- *Kepler* Threshold Crossing Event Review Team 2012-2013
- 2012 Sagan Summer Workshop, Caltech 2012
 - Scientific Organizing Committee
- *Kepler* External Users' Panel 2010-2012
- Ohio State Council of Graduate Students representative to the 2005-2006
University Senate
- Ohio State Department of Astronomy representative to Council 2002-2005
of Graduate Students
- Member of the American Astronomical Society (AAS), the International Astronomical Union (IAU), the American Association of Variable Star Observers (AAVSO), Lehigh Valley Amateur Astronomical Society (LVAAS)
- Manuscript referee for *The Monthly Notices of the Royal Astronomical Society*, *The Astrophysical Journal*, *Publications of the Astronomical Society of the Pacific*, and *The Astronomical Journal*.

Public Outreach Talks:

Da Vinci Science Center, Allentown, PA	2018
New Jersey Astronomical Association High Bridge, NJ	2018
Emmaus High School, Emmaus, NY	2018
Eastchester High School, Eastchester, NY	2018
Edison Middle School, Berlin Heights, OH	2018
Amateur Astronomers, Inc., Cranford, NJ	2017
Chicago Latin School, Chicago, IL	2017
Moravian Village Community, Bethlehem, PA	2017
Washington Borough Public Library, Warren County, NJ	2017
United Astronomy Clubs of New Jersey, Hope, NJ	2017
Delaware Valley Amateur Astronomers, Radnor, PA	2017
Berks County Amateur Astronomical Society, Lancaster, PA	2016
New Jersey Astronomical Association, High Bridge, NJ	2016
Lehigh Valley Amateur Astronomy Association, Bethlehem, PA	2016
Da Vinci Science Center, Allentown, PA	2016
North Warren Regional High School, Blairstown, NJ	2015
Lehigh TEDx, Bethlehem, PA	2015
Kutztown University, Kutztown, PA	2015
Maple Avenue Middle School, Littlestown, PA	2015
North West Jersey Amateur Astronomers, Blairstown, NJ	2015
Lehigh Valley Amateur Astronomical Society Bethlehem, PA	2015
D. E. Shaw, New York City, NY	2014
Tri-State Astronomers, Hagerstown, MD	2014
Two Sigma Investments, New York City, NY	2013
Cleveland Museum of Natural History, Cleveland, OH	
Invited Speaker at <i>Frontiers of Astronomy</i> Public Lecture Series	2012

Student Mentoring and Advising:

Postdoctoral Associates Supervised

- Knicole Colón – Lehigh University
(currently staff scientist at NASA Goddard Space Flight Center) 2013-2015
- Martin Paegert – Vanderbilt University
(currently a staff scientist at Harvard) 2009-2013

PhDs completed – Outside advisor / Co-advisor

- Rudolph Kuhn – University of Cape Town
(currently staff astronomer at South Africa Astronomical Observatory) PhD 2014
- Joseph Rodriguez Jr. – Vanderbilt University
(currently a postdoc at Harvard) PhD 2016
- Michael Lund – Vanderbilt University
(currently a postdoc at Vanderbilt) PhD 2017

PhD Student Primary Adviser / Committee Chair

- Jonathan Labadie-Bartz – Lehigh University
(Postdoc at the University of Delaware) PhD 2017
- Somayeh Khakpash – Lehigh University 2016-present

- Xinyu Yao – Lehigh University 2017-present
- Rebecca Bowers – Lehigh University 2014-2016

Other Graduate Student Advising

- Robert Siverd – Vanderbilt University, PhD committee member 2018-present
- Alex Arnold – Lehigh University, PhD committee member 2017-present
- Richard Hanes – Lehigh University, PhD committee member 2017-present
- Daniel Minguez – Lehigh University, EES Department
Independent Research Project 2013-2014
- Fabienne Bastien – Fisk/Vanderbilt Bridge Program
(currently faculty at Penn State University) 2010-2012
- Trey Mack – Fisk/Vanderbilt Bridge Program 2009-2011
(currently postdoctoral fellow at Leibnitz Institute for Astrophysics, Potsdam, Germany)

Undergraduate Students

- Brooke Glassman – Lehigh University: Ind. study, ASTR 273 Fall 2018
- Henrietta Lukacs – Lehigh University: Ind. study, ASTR 273 Fall 2018
- Oliwia Krupinka – Lehigh University: Ind. study, ASTR 273 Spring 2018, Fall 2018
- Mallory Harris – New College of Florida: Lehigh REU program Summer 2018
- Peter Gibson – Willamette University: Lehigh REU program Summer 2017
- Elle Ojala – Western Washington University: Lehigh REU program Summer 2017
- Brittani Costa – Moravian College: Lehigh REU program Summer 2017
- Denis Tilipman – Lehigh University: Ind. study, PHY 273 Spring 2017
- Krittanon Sirorattanakul – Lehigh University: Ind. study, PHY 273
 - 4 semesters, Fall 2015-Spring 2017
- Lauren Miller – Lehigh University: Ind. study, PHY 273 Fall 2016
- Tyler Richey-Yowell – Dickinson College: Lehigh REU program Summer 2016
- Sabrina DeSoto - Quest University: Lehigh REU program Summer 2016
- Marc Laflamme – Lehigh University: Ind. study, PHY 273 Fall 2015, Spring 2016
- Valerie Bernstein – Villanova University: Lehigh REU program Summer 2015
- Marcus Keil – University of Oklahoma: Lehigh REU program Summer 2015
- Lorena Mezini – Stony Brook University: Lehigh REU program Summer 2015
- Akshay Demany – Lehigh University: Special Topics course Spring 1015
- Yssavo Comacho – Lehigh University: Independent study, PHY 273 Fall 2014
- Alex Arnold – University of Arkansas: Lehigh REU program Summer 2014
- Benjamin Kimock – Dickinson College: Lehigh REU program Summer 2014
- Staci Klein – Lehigh University: Independent study, PHY 273 Fall 2014
- Anna Carr, Lehigh University: Lehigh REU program Summer 2013
- Allyn Durbin – Villanova University: Vanderbilt REU program Summer 2011
- Alex Richert, University of Hawaii – Hilo: Vanderbilt REU program Summer 2010