

REBEKAH ILENE DAWSON — CURRICULUM VITAE

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EXPERIENCE AND EDUCATION	2
SELECTED HONORS AND AWARDS	2
PEER-REVIEWED PUBLICATIONS	3
TEACHING EXPERIENCE (2015—present)	6
SELECTED PEDAGOGICAL TRAINING AND OUTCOMES	7
UNDERGRADUATE RESEARCH ADVISING	7
CONTRIBUTIONS TO DIVERSITY, EQUITY, & INCLUSION (2015—present)	8
CONTRIBUTIONS TO BRIDGING SUB-DISCIPLINES (2016—present)	10
EXTERNAL FUNDING AWARDED	11
GRADUATE STUDENT RESEARCH ADVISING	11
POSTDOCTORAL RESEARCH ADVISING	11
OTHER PROFESSIONAL SERVICE (2016—present)	11
OTHER PUBLIC OUTREACH (2016—present)	13
INVITED TALKS	13
CONTRIBUTED PRESENTATIONS	15

EXPERIENCE AND EDUCATION

CURRENT POSITION

Pennsylvania State University, University Park, Pennsylvania, USA

Assistant Professor of Astronomy & Astrophysics,	01/2016—06/2021
Shaffer Career Development Assistant/Associate Professor of Science,	08/2020—present
Associate Professor of Astronomy & Astrophysics,	06/2021—present
Astronomy & Astrophysics Associate Head for the Graduate Program,	08/2021 — 12/2022

PREVIOUS EXPERIENCE

Miller Institute for Basic Research in Science, Berkeley, California, USA

Miller Research Fellow, University of California Berkeley Department of Astronomy,
09/2013-12/2015

EDUCATIONAL BACKGROUND

Harvard University, Cambridge, Massachusetts, USA

Ph.D. Astronomy & Astrophysics (2013), **A.M.** Astronomy (2011)

Advisor: Ruth Murray-Clay, Thesis title: *On the Migratory Behavior of Planetary Systems*

Wellesley College, Wellesley, MA, USA

B.A. Astrophysics (2009), summa cum laude; departmental honors in Astrophysics

SELECTED HONORS AND AWARDS

- American Astronomical Society Helen B. Warner Prize (2021)
- American Astronomical Society Division of Planetary Science Harold C. Urey Prize (2020)
- Alfred P. Sloan Research Fellowship in Physics (2018)
- Bok Prize, Harvard University Department of Astronomy (2018)
- American Astronomical Society Annie Jump Cannon Award (2017)
- Fireman Award, Harvard University Department of Astronomy (2013)
- Block Award, Aspen Center for Physics (2013)
- American Astronomical Society Rodger Doxsey Travel Prize (2013)
- National Science Foundation Graduate Research Fellowship (2010-2013)
- American Astronomical Society Division on Dynamical Astronomy, student stipend award (2011)
- Certificate of Distinction in Teaching, Harvard University (2011)
- American Astronomical Society, Chambliss Student Astronomy Achievement (2010)
- Charles Duncan Prize in Astronomy, Wellesley College (2009)
- Phyllis Flemming Prize in Physics, Wellesley College (2009)
- Pi Beta Kappa national academic honors society (2009)
- Sigma Xi national scientific research honors society (2009)
- Durant Scholar, Wellesley College (2009)
- Schiff Fellowship, Wellesley College (2008-2009)
- Barry M. Goldwater Scholarship (national science scholarship) (2007-2009)
- Mary Gross Prize for Academic Excellence, Wellesley College (2007)

PEER-REVIEWED PUBLICATIONS

(self and advisees in **bold**)

First author:

1. *Precise transit and radial-velocity characterization of a resonant pair: a warm Jupiter TOI-216c and eccentric warm Neptune TOI-216b*, **Dawson, R.**, Huang, Brahm, et al. 2021, *Astronomical Journal*, 59, 223
2. *Robustly detecting changes in warm Jupiters' transit impact parameters*, **Dawson, R.** 2020, *Astronomical Journal*, 159, 223
3. *TOI-216b and TOI-216c: Two warm, large exoplanets in or slightly wide of the 2:1 orbital resonance*, **Dawson, R.**, Huang, Lissauer, & 32 others 2019, *Astronomical Journal*, 158, 65
4. *Origins of Hot Jupiters* (invited, refereed review), **Dawson, R.** and Johnson, J. 2018, *Annual Reviews in Astronomy & Astrophysics*, 56, 175
5. *Tightly-Packed Planetary Systems* (invited, refereed review), **Dawson, R.** 2017, *Springer Major References, The Handbook of Exoplanets*, 18 pp
6. *Correlations between compositions and orbits established by the giant impact era of planet formation*, **Dawson, R.**, Lee, E., & Chiang, E. 2016, *Astrophysical Journal*, 822, 54
7. *A metallicity recipe for rocky planets*, **Dawson, R.**, Chiang, E., & Lee, E. 2015, *MNRAS*, 453, 1571
8. *A paucity of proto-hot Jupiters on supereccentric orbits*, **Dawson, R.**, Murray-Clay, R.A., & Johnson, J.A. 2015, *Astrophysical Journal*, 798, 66
9. *A Class of Warm Jupiters with Mutually Inclined, Apsidally Misaligned, Close Friends*, **Dawson, R.** & Chiang, E. 2014, *Science*, 346, 6206, pp. 212-216
10. *On the tidal origin of hot Jupiter stellar obliquity trends*, **Dawson, R.**, 2014, *Astrophysical Journal Letters*, 790, L31
11. *Large eccentricity, low mutual inclination: the three-dimensional architecture of a hierarchical system of giant planets*, **Dawson, R.**, Johnson, J.A., Fabrycky, D., Foreman-Mackey, D., Murray-Clay, R., Buchave, L., Cargile, P., Clubb, K., Fulton, B., Hebb, L., Howard, A., Huber, H., Shporer, A., Valenti, J., 2014, *Astrophysical Journal*, 791, 89
12. *Giant planets orbiting metal-rich stars show signatures of planet-planet interactions*, **Dawson, R.** & Murray-Clay, R.A., 2013, *Astrophysical Journal Letters*, 767, L14
13. *The Photoeccentric Effect and Proto-Hot Jupiters II. KOI-1474.01, a candidate eccentric planet perturbed by an unseen companion*, **Dawson, R.**, Johnson, J.A., Morton, T., Crepp, J., Fabrycky, D., Murray-Clay, R., & Howard, A. 2012, *Astrophysical Journal*, 761, 163
14. *The Photoeccentric Effect and Proto-Hot Jupiters I. Measuring photometric eccentricities of individual transiting planets*, **Dawson, R.** & Johnson, J.A. 2012, *Astrophysical Journal*, 756, 122.
15. *Neptune's wild days: constraints from the eccentricity distribution of the classical Kuiper belt*, **Dawson, R.** & Murray-Clay, R. 2012, *Astrophysical Journal*, 750, 43.
16. *On the misalignment of the directly imaged planet β Pictoris b with the system's warped inner disk*, **Dawson, R.**, Murray-Clay, R., & Fabrycky, D., 2011, *Astrophysical Journal Letters*, 743, L17.
17. *Radial velocity planets de-aliased. A new, short period for Super-Earth 55 Cnc e*, **Dawson, R.** & Fabrycky, D., 2010, *Astrophysical Journal*, 722, 937-953.

Second author:

18. *Statistical Analysis of the Dearth of Super-eccentric Jupiters in the Kepler Sample*, **Jackson, Dawson, Quarles, & Dong** 2022, *Astronomical Journal*, accepted/in press

19. *Stellar obliquities in exoplanetary systems*, Albrecht, S., **Dawson, R.**, & Winn, J., invited review, PASP, 134, 1038, id.082001
20. *Nature vs. Nurture: Investigating the Effects of Measurement Uncertainties in the Assessment of Potential Trends Between Planetary and Stellar Properties*, **Safsten, E. & Dawson, R.** 2022, *Astronomical Journal*, 163, 188
21. *Observable Predictions from Perturber-coupled High-eccentricity Tidal Migration of Warm Jupiters*, **Jackson, Dawson, Shannon,** & Petrovich 2021, *Astronomical Journal*, 161, 200
22. *Hot Jupiters: Origins, Structure, Atmospheres* (invited review), Fortney, J., **Dawson, R.**, & Komacek, T. 2021, *JGRE*, 126, e06629
23. *Chains of Planets in Mean Motion Resonances Arising from Oligarchic Growth*, **Morrison, S., Dawson, R., & MacDonald, M.** 2020, *Astrophysical Journal*, 904, 157
24. *Nature vs. nurture: a Bayesian framework for assessing apparent correlations between planetary orbital properties and stellar ages*, **Safsten, E., Dawson, R., & Wolfgang, A.**, *Astronomical Journal*, 140, 214
25. *A significant mutual inclination between the planets within the π Mensae system*, de Rosa, R., **Dawson, R.** & E. Nielsen, *Astronomy & Astrophysics*, 640, A73
26. *Forming Diverse Super-Earth Systems in Situ*, **MacDonald, M., Dawson, R., Morrison, S., Lee, E., & Khandelwal, A.** 2020, *Astrophysical Journal*, 891, 20
27. *Debris Disks in Multi-Planet Systems: Are Our Inferences Compromised by Unseen Planets?* **Dong, J., Dawson, R., Shannon, A., and Morrison, S.** 2020, *Astrophysical Journal*, 889, 47
28. *The Origin of Kepler-419b: A Path to Tidal Migration Via Four-body Secular Interactions*, **Jackson J., Dawson, R., and Zalesky, J.** 2019, *Astronomical Journal*, 157, 166
29. *Three Pathways for Observed Resonant Chains*, **MacDonald M. & Dawson, R.** 2018, *Astronomical Journal*, 156, 5.
30. *Limits on the number of primordial Scattered Disk objects at Pluto mass and higher from the absence of their dynamical signatures on the present day trans-Neptunian Populations*, **Shannon, A. & Dawson, R.** 2018, *MNRAS*, 480. 1870.
31. *Stability and Occurrence Rate Constraints on the Planetary Sculpting Hypothesis for "Transitional" Disks*, Dong, R. & **Dawson, R.** 2016, *Astrophysical Journal*, 825, 77
32. *Resonances, chaos, and short-term interactions among the inner Uranian satellites*, French, R.G., **Dawson, R.**, & Showalter, M. 2015, *Astronomical Journal*, 149, 142
33. *Advances in Exoplanet Science from Kepler*, Lissauer, J., **Dawson, R.**, & Tremaine, S. 2014, *Nature*, 513, 336
34. *Neptune on tiptoes: dynamical histories that preserve the cold classical Kuiper belt*, Wolff, S., **Dawson, R.** & Murray-Clay R. 2012, *Astrophysical Journal*, 746, 171
- Third+ author**
35. *Longterm Stability of Planetary Systems formed from a Transitional Disk*, **Bowens, R., Shannon, A., Dawson, R., & Dong, J.**, *Astrophysical Journal*, accepted/in press
36. *Millimeter Dust Emission and Planetary Dynamics in the HD 106906 System*, Fehr, A., Hughes, M., **Dawson, R.**, et al., *Astrophysical Journal*, 939, 56
37. *NEID Rossiter-McLaughlin Measurement of TOI-1268b: A Young Warm Saturn Aligned with Its Cool Host Star*, **Dong, J.**, Huang, C., Zhou, G., **Dawson, R.**, et al. 2022, *Astrophysical Journal Letters*, 926, 7
38. *TOI-3362b: A Proto Hot Jupiter Undergoing High-eccentricity Tidal Migration*, **Dong, J.**, Huang, C., Zhou, G., **Dawson, R.**, et al. 2021, *Astrophysical Journal Letters*, 920, 16

39. *A pair of warm giant planets near the 2:1 mean motion resonance around the K-dwarf star TOI-2202*, Trifonov, Brahm, Espinoza, & 35 others incl. **Dawson R.**, *Astronomical Journal*, 162, 283
40. *A Preponderance of Perpendicular Planets*, Albrecht, Marcussen, Winn, **Dawson**, & Knudstrup, *Astrophysical Journal Letters*, 916, 1
41. *Warm Jupiters in TESS Full-Frame Images: A Catalog and Observed Eccentricity Distribution for Year 1*, **Dong**, Huang, **Dawson**, et al., *Astrophysical Journal Supplements*, 255, 6
42. *A backward-spinning star with two coplanar planets*, Hjorth, M., Albrecht, S., Hirano, T., Winn, J., **Dawson, R.**, Zanazzi, J., Knudstrup, E., & Bato, B. 2021, *PNAS*, 118, 2017418118
43. *The Habitable Zone Planet Finder reveals a high mass and low obliquity for the young Neptune K2-25b*, Stefansson, G., Mahadevan, S., Manet, M., & 27 others incl. **Dawson, R.** 2020, *Astronomical Journal*, 160, 192
44. *A warm Jupiter transiting an M dwarf: A TESS single transit event confirmed with the Habitable-zone Planet Finder*, Cañas, C., Stefansson, G., Kanodia, S. & 30 others incl. **Dawson, R.** 2020, *Astronomical Journal*, 160, 147
45. *OSSOS: Constraining migration models with the 2:1 resonance using the Outer Solar System Origin Survey*, Y. T. Chen, B. Gladman, K. Vok, & 13 others et al. incl. **Dawson, R.** 2019, *Astronomical Journal*, 158, 214
46. *The orbital eccentricity of small planet systems*, van Eylen, V., Albrecht, S., Huang, X. & 8 others incl. **Dawson, R.** 2019, *Astronomical Journal*, 157, 61
47. *The Gemini Planet Imager Exoplanet Survey: Giant Planet and Brown Dwarf Demographics from 10—100 AU*, E. Nielsen, R. de Rosa, Bruce Macintosh, & 65 others incl. **Dawson, R.** 2018, *Astronomical Journal*, 158, 13
48. *Dynamical Constraints on the HR 8799 Planets with GPI*, Wang, J., Graham, J., **Dawson, R.** & 52 others 2018, *Astronomical Journal*, 156, 192
49. *OSSOS IX: TWO OBJECTS IN NEPTUNE’S 9:1 RESONANCE – IMPLICATIONS FOR RESONANCE STICKING IN THE SCATTERING POPULATION*, Volk, K., Murray-Clay, R., Gladman, B., & 14 others incl. **Dawson, R.** 2018, *Astronomical Journal*, 155, 260
50. *OSSOS: VII. 800+ trans-Neptunian objects --- the complete data release*, Bannister, M., Gladman, B., Kavelaars, J., & 43 others incl. **Dawson, R.**, 2018, *Astrophysical Journal Suppl.*, 236, 18
51. *Discovery of a Substellar Companion to the Nearby Debris Disk Host HR 2562*, Konopacky, Q., Rameau, J., Duchene, G., & 54 others incl. **Dawson, R.**, 2016, *Astrophysical Journal Letters*, 829, L4
1. *β Pictoris’s Inner Disk in Polarized Light and New Orbital Parameters for β Pictoris b*, Millar-Blanchaer, M., Graham, J., Pueyo, L., Kalas, P., **Dawson, R.**, & 58 others, 2015, *Astrophysical Journal*, 811, 18
52. *Discovery and spectroscopy of the young Jupiter-like planet 51 Eri b with the Gemini Planet Imager*, Macintosh, Graham, J., Barman, T., & 85 others incl. **Dawson, R.**, 2015, *Science*, 350, 64
53. *How low can you go? The photoeccentric effect for planets of various sizes*, Price, E., Rogers, L., Johnson, J.A., & **Dawson, R.**, 2015, *Astrophysical Journal*, 799, 17
54. *A Combined Very Large Telescope and Gemini Study of the Atmosphere of the Directly Imaged Planet, β Pictoris b*, Currie, T, Burrows, A., Madhusudhan, N., & 10 others incl. **Dawson, R.**, 2013, *Astrophysical Journal*, 776, 15
55. *Kepler-63b: A Giant Planet in a Polar Orbit around a Young Sun-like Star*, Sanchis-Ojeda, R., Winn, J. N., Marcy, G. W., & 19 others incl. **Dawson, R.**, 2013, *Astrophysical Journal*, 775, 54
56. *A Super-Earth transiting a naked eye star*, Winn, J., Matthews, J., **Dawson, R.**, & 11 others, 2011, *Astrophysical Journal Letters*, 737, L18.

TEACHING EXPERIENCE (2015—present)

- Astronomy 1, Astronomical Universe, Spring 2021: online general education undergraduate course for non-majors; developed new assessment questions to improve alignment of assessment with course activities and learning objectives
- Astronomy 5, The Sky and Planets, Fall 2017: general education undergraduate course for non-majors; introduced undergraduate Learning Assistants who facilitated group activities; designed lectures with integrated active learning activities; developed classroom-within-a-classroom structure; awarded Schreyer Institute New Faculty Grant “Enhancing Active Learning in Astronomy 5”
- Astronomy 420W, Planets and Planetary Systems, Fall 2022 and Astronomy 475W, Stars and Galaxies, Fall 2019, Fall 2021: writing-across-the-curriculum course for majors; integrated scaffolded practitioner activities including journal article analyses; developed mastery-based specifications grade scheme; designed lectures with integrated active learning activities
- Astronomy 577/585, Exoplanets, Spring 2016, 2018, 2020, 2022: graduate-level elective; developed and approved by Faculty Senate as a new course; integrated scaffolded practitioner activities including journal article analyses, order-of-magnitude calculations, simulation code development, mini research projects, ethics case studies
- Astronomy 589, Seminar in Current Astronomical Research, Fall 2016: graduate-level elective seminar; designed active learning, including small group discussions and written analyses of journal articles and chalkboard student presentations
- Astronomy 597, Evolution of the Biosphere, Spring 2018: graduate-level interdisciplinary astrobiology course; adapted seminar to emphasize small group discussion
- Interdisciplinary Undergraduate Guest Lecturer: Developed active learning activities to connect detections of planets to other disciplines
 - Meteorology 466: Planetary Atmospheres
 - Biology/Geoscience 474: Astrobiology
 - Data Science 200: Introduction to Data Science
 - *Statistical, Mathematical and Computational Methods for Astronomy, Undergraduate Workshop*, 2016
- Individual study supervisor for 8 graduate students and 2 undergraduates
- Workshop Lecturer:
 - *Origins of Hot Jupiters*, ESO Exoplanet Atmospheres Workshop, 2021 (invited)
 - *Measuring Eccentricities from Light Curves*, KITP Seminar, May 14, 2019
 - *Exoplanet Dynamics Tutorial*, The Technologies for Exo-Planetary Science Summer School Workshop, Montreal, 2017 (invited)
 - *Disks and Dynamics Tutorial*, Gemini Planet Imager meeting, 2016
 - *Introduction to Exoplanet Data*, Program on Statistical, Mathematical and Computational Methods for Astronomy, 2016 (invited)
- Invited Public Lecturer
 - Guilford Technical Community College Jo Cline Memorial Astronomy Lecture, “Beyond Eta Earth,” 2022
 - Penn State Workshop for In-service High School Teachers: 2017, 2018
 - Penn State Frontiers of Science, “The Birth of Habitable Planets,” 2018
 - Penn State Astronomy on Tap, “TRAPPIST 1 Planetary System: Your New Tiny Red Home,” 2017
 - UC Berkeley Science@Cal, “Exoplanet Surprises,” 2015

SELECTED PEDAGOGICAL TRAINING AND OUTCOMES

- Astrobites Education Study Fall 2022, integrated Astrobites blog activity into course, interviewed with researcher, and administered pre/post surveys and collected student work on behalf of researcher, to assess effectiveness of Astrobites in improving students' engagement with astronomical research
- Penn State Course Design Academy, Summer 2022, designed question-based course with transparent, authentic assignments and aligned and equitable assessments
- Penn State Evidence-Based Teaching Academy, May 2021, developed misconception-addressing active learning activities and specifications grading scheme
- Penn State Eberly College of Science Mentoring Workshop, October 2019, developed strategies for more effective mentoring of research students
- Penn State New Faculty Colleagues teaching peer-mentoring group, 2016—2017, monthly discussions of Brookfield's *The Skillful Teacher*; incorporated class discussion strategies
- Penn State ASTRO 602 Astronomy Pedagogy Seminar taught by Julia Kregenow, Fall 2016, auditor, developed active learning activities for introductory astronomy
- Penn State Rock Ethics Institute Faculty Workshop, May 2016, learned pedagogical active learning approaches for integrating ethics into courses; December 2016: presented outcomes to Rock Ethics Institute leadership and peer faculty
- Harvard Astronomy 302 Scientists Teaching Science taught by Phil Sadler, Spring 2012, student, designed and performed mini-research project on in-service teachers' pre-conceptions of light and color

UNDERGRADUATE RESEARCH ADVISING

- Penn State Women in Science and Engineering Research and Minority Undergraduate Research Experience for First Years: designed and advised projects
 - Julietta Lucci (mechanical engineering major), "Influence of outer giant planets on inner solar systems," co-advised with graduate student Phoebe Sandhaus, Spring 2022—present
 - Claire DiPerna (aerospace engineering major), "Orbital resonances in planetary systems," co-advised with graduate student Jiayin Dong, Spring 2021 — Spring 2022
 - Jonathon Hope (aerospace engineering major), "Planetary migration," co-advised with graduate student Jiayin Dong, Spring 2021 — Spring 2022
- Undergraduate honors theses
 - Rory Bowens (Penn State), 2018—2019, "Long term stability of transitional disk sculpting planetary systems," co-advised with Andrew Shannon. Current position: PhD student at University of Michigan, publication: Bowens et al., submitted
 - Arjun Khandelwal (Haverford College), 2016—2017, "Recovery of long-period transiting planets." Current position: Research assistant at Haverford College, publication: MacDonald et al. incl. Khandelwal 2020, *Astronomical Journal*
- Penn State undergraduate honors projects: review articles synthesizing literature
 - Robert Frazier, Fall 2022, "An Overview of the Small Planet Radius Gap and its Possible Mechanisms"
 - Aurelia Bankston, Fall 2022, "Is Kepler-452b Habitable?"
 - Robert Frazier, Fall 2021, "Influence of Stellar Properties on Formation of Life"

- Hannah Grzybowski, Fall 2021, “Connection Between Exoplanet and Stellar Characterization”
- Phoebe McClincy, Fall 2019, “Neutron Stars in Multi-messenger Astronomy”
- Cullen Blake, Fall 2019, “Influence of Galactic Properties on Planetary Habitability”
- Laurel Weiss, Fall 2019, “Effect of Stellar Properties on the Circumstellar Habitable Zone”
- Intermediate and Advanced Undergraduate Research Projects
 - Cody Shakespeare (Penn State, Astronomy & Astrophysics major, senior), Spring—Summer 2020, “Effects of giant planets on small planets’ formation,” Current position: PhD student at UNLV
 - Shirin Zaidi (Penn State, Planetary Science major), Fall 2017 — Spring 2019, “Deposition of Material from Enceladus on Trojan Moons,” co-advised with primary advisor Sarah Morrison, awarded first place in Physical Sciences category at the 2019 Undergraduate Exhibition, Current position: Intern at US House Committee on Space, Science and Technology
 - Michael Penwarden (Penn State, Astronomy & Astrophysics major), Fall 2017 — Spring 2019, “Eccentricity Excitation in the Habitable Zone,” co-advised with primary advisor Sarah Morrison. Current position: PhD student at University of Utah.
 - Paige Campbell (Penn State, Meteorology major, sophomore), Spring 2016 — Spring 2017, “Host star metallicity dependence of high eccentricity migration.” Current position: Entrepreneur
 - Diana Kossakowski (UC Berkeley, junior), “Tidal realignment of stars by hot Jupiters.” Fall 2015, Current position: PhD student at Max Planck Institute for Astronomy
 - Sofia Sheikh (UC Berkeley, junior), “Constraints on super-eccentric proto-hot Jupiters missed by the Kepler pipeline,” Spring—Summer 2015, Current position: NSF MPS-ASCEND Postdoctoral Fellow at UC Berkeley
 - Joseph Zalesky (UC Berkeley, sophomore), “The role of a third planet in the dynamical evolution of the Kepler-419 system,” Spring 2014 — Fall 2014, Current position: Publication: Jackson, Dawson, & Zalesky 2019, Current position: PhD student at Arizona State
 - Eric Mukherjee (Caltech sophomore), “Constraining Planetesimal Formation Mechanisms from Planetary Debris Disks,” Summer 2012, co-advised with Ruth Murray-Clay, my role: designing project and advising day-day.

CONTRIBUTIONS TO DIVERSITY, EQUITY, & INCLUSION (2015—present)

- **Penn State Astronomy & Astrophysics Associate Head for the Graduate Program** (also listed in Current Position): Successfully advocated to increase graduate student stipends to meet cost-of-living; led redesign of qualifying exam to increase accessibility for students with learning disabilities; designed and led senior-junior graduate student mentoring program; led and organized faculty-grad mentoring program; revised student handbook to increase inclusivity and transparency; designed and organized Career Seminars for graduate and undergraduate students; partnered with Climate & Diversity Committee to increase faculty-student interactions, Fall 2021—Fall 2022

- **Penn State Rainbow Science Network:** participated in trainings and worked to develop an inclusive research team culture for LGBT+ research advisees, 2020—present
- **Penn State Next STEPS:** department rep on new college-level committee for building and sustaining a diverse committee, 2019—present
 - Co-designed and facilitated workshops on diversity, equity, and inclusion in faculty hiring and developed hiring rubrics
 - Co-designed and piloted Launch program for new faculty members including developing trainings and resources; chaired Launch committee for new faculty member
 - Contributed to advocacy to administration for better hiring practices and contributed feedback to graduate admissions and tenure and promotion workshops
- **Formal Mentor/Mentee to Advance Women in Science**
 - Wellesley College Alumnae Network Mentor (via videoconferencing, 2017—present
 - Penn State Women Science Faculty Mixed-Seniority Mentoring Lunch, monthly participant, 2016—present
 - Penn State Women in Statistics and Data Science Mentor, 2021
 - Kavli Institute Women Physicist Mixed-Seniority Mentoring Lunch, weekly, Spring 2019
 - Penn State Commission for Women Mentee, 2017—2018
 - Job shadowing mentor to high school junior from economically disadvantaged community, 2017
- **Designed DEI ethics cases study active learning activities** and incorporated them into graduate and advanced undergraduate courses; Topics: Impacts of construction of the Thirty Meter Telescope on indigenous Hawaiian community; citation and discussion of journal articles with lead author guilty of sexual harassment, 2016—present
- **American Association for Physics Teachers eAlliance Peer Mentor/Mentee**
 - Served as peer mentor and mentee on topics including undergraduate research advising, promoting equity, inclusion, and diversity, goal setting, and work-life balance, biweekly virtual meetings (2017—present)
 - Documented discussion topics and participated in interviews with social scientist for study on effective mentoring (2017—2022)
 - Established and co-organized a peer mentoring group focused on tenure-track women physics faculty, 2017
- **Changing the Future Women’s Leadership Program:**
 - Developed leadership vision that prioritizes building a diverse and inclusive community; participated in and co-organized mixed-seniority mentoring group for women science faculty, Spring 2022
 - Co-organized and participated in monthly peer mentoring Success Circle, Fall 2022
- **Participant in DEI-enhancing conferences:** National Society of Black Physicists (2021, 2022); Women in Astronomy IV (2017); Inclusive Astronomy (2015)
- **Penn State TEAM-UP:** served on departmental committee designing and implementing American Institute for Physics TEAM-UP recommendations for improving recruitment and retention of African American students
- **Upward Bound Math and Science Program, advisor/supervisor** of physics preparation summer class for low income, potential first-generation-to-college high school students taught by Penn State graduate students and undergraduates, 2017—2020

- **Co-authored department recommendation for graduate admissions reform** with colleague Stephanie Wissel, advocating removal of GRE requirement from admissions on the basis of pedagogical research on race and gender disparities in high stakes testing, 2020
- **Participant in DEI-enhancing workshops and discussion groups**
 - **Penn State Toward a More Inclusive Astronomy discussion group**, took part in monthly discussions on understanding experiences of astronomers with marginalized identities, 2016—present
 - **Working with Students in Distress**, learned strategies to improve accessibility for students with mental health disabilities, 2019
 - **Thinking Critically About Inclusion**: learned strategy for improving inclusivity of undergraduate programs, 2018
 - **Strong Women, Strategic Performance**, developed amplified speaking voice and plan for advocating for graduate admissions reforms, 2016
 - **Founder/Co-Organizer, Social Justice and Climate Discussion Group**, UC Berkeley Astronomy Department, 2015
- **Guest Lecturer at Harvard University Banneker Institute**, summer research program for students from marginalized backgrounds, taught order-of-magnitude approaches and activities, 2015

CONTRIBUTIONS TO BRIDGING SUB-DISCIPLINES (2016—present)

- **Meeting-within-a Meeting Organizer**, Multi-faceted Views of Planet Formation, American Astronomical Society, June 14-18, 2022: brought together experts in planetary disks, planetary atmospheres, and planet demographics to present and discuss in panels connections to planet formation
- **Member**: Large UV/Optical/Infrared Surveyor (LUVOIR) Science Definition Team (2016—2020): team-developed science case for next generation space telescope concept in preparation for the Decadal Survey; my role focused developing the science case for planet formation and evolution and bridging connections to solar system science
- **Planet-Star Connections in the Era of TESS and Gaia** (May 2019, [chair](#)): brought together experts in stellar astronomy and planetary astronomy to chart a path for addressing challenges in detection, characterization, and evolution with presentations and panel discussions
- **Program Coordinator, Kavli Institute for Theoretical Physics program**, Better Stars, Better Planets: Exploiting the Stellar-Exoplanetary Synergy, April 15—June 28, 2019, co-developed competitively-selected proposal and program, including designing and facilitating format for cross-disciplinary conversations; co-developed virtual follow-up conference Exostar Redux (August 2020)
- **Meeting-within-a Meeting Organizer**, Inner Solar Systems, American Astronomical Society, Austin, TX, June 5-6th, 2017: brought together experts on planetary dynamics, planetary disks, and instrumentation to address outstanding questions in the origins of planets close to their stars
- **Visiting Research Fellow, Program on Statistical, Mathematical and Computational Methods for Astronomy**: Developed collaborations with statisticians on challenges in interpreting exoplanet populations and time series,

designed and led workshop for statistics students on astronomical data and challenges,
February 2017

EXTERNAL FUNDING AWARDED

- NASA Exoplanet Research Program (XRP), *Assessing the Hallmarks of Migration and In Situ Formation in Multi-Exoplanet Systems*, **PI: Rebekah Dawson**, CO-Is: Sarah Morrison, Angie Wolfgang, \$402,596, 2018-2021
- NASA TESS Guest Investigator Program, *Detection and Characterization of Warm Jupiters*, **PI: Rebekah Dawson**, CO-Is: Chelsea Huang, Billy Quarles, Jack Lissauer, Thomas Beatty, \$50,000, 2018-2020
- ORAU Ralph E. Powe Junior Faculty Enhancement Award, *Debris Disk as Signposts in Multi-Planet Systems*, **PI: Rebekah Dawson**, \$10,000, 2018-2019
- NASA Exoplanet Research Program (XRP), *Warm Large Exoplanets*, **PI: Rebekah Dawson**, CO-Is: Billy Quarles, Jack Lissauer, \$326,019, 2016-2018

GRADUATE STUDENT RESEARCH ADVISING

- **Spring 2020 — present**, Phoebe Sandhaus, “Dynamics of multi-planet systems.”
- **Spring 2018 — present**, Emily Safsten, “Time Evolution of Exoplanet Systems.”
Defense planned for Spring/Summer 2023.
- **Summer 2017 — Summer 2022**, Jiayin Dong, “Dynamics of of planetary systems and debris disks.” Awarded PhD in Summer 2022. Current position: Flatiron Postdoctoral Fellow
- **Summer 2016 — Summer 2022**, Jonathan Jackson, “Origins of warm Jupiters.”
Awarded PhD in Summer 2022. Current position: Teaching Postdoctoral Fellow at Wesleyan University
- **Fall 2016 — Spring 2021**, Mariah MacDonald, “Super-Earth formation and dynamics.” Awarded PhD in Spring 2021. Current position: assistant professor at The College of New Jersey
- **Spring 2019 — Spring 2020**, Luis Nunez, “Warm Jupiter tidal migration.” Current position: Teach for America Fellow

POSTDOCTORAL RESEARCH ADVISING

- **Fall 2019 — Spring 2020**, Angie Wolfgang (assistant research professor), “Testing time evolution of exoplanet populations.” Current position: senior data scientist at SiteZeus
- **Fall 2017 — Summer 2019**, Sarah Morrison (postdoc), “Planetary dynamics and migration.” Current position: assistant professor at Missouri State
- **Fall 2016 — Summer 2019**, Andrew Shannon (research associate, assistant research professor), “Formation and dynamics of planets and debris disks.” Current position: senior analyst at Canada Mortgage and Housing Corporation

OTHER PROFESSIONAL SERVICE (2016—present)

See also [Contributions to Diversity, Equity, and Inclusion](#) and [Bridging Sub-disciplines](#)

- **External PhD Examiner:** Antranik Sefilian (Cambridge University, March 2022)

- **Scientific Organizing Committee Member:** Extreme Precision Radial Velocity Workshop (August 2017), Habitable Worlds 2017: A System Science Workshop (November 2017), TESS Science Conference (July 2019), Toward Other Earths 3 (Summer 2020; conference postponed due to COVID), Exoplanets III (Spring 2022)
- **Member:** Gemini Planet Imager Steering Committee (2017—present)
- **Member:** American Astronomical Society Division on Dynamical Astronomy Nominating Committee (2021—present)
- **Member:** Nancy Roman Science Investigation Team, “Characterizing Extrasolar Planetary Systems with the WFIRST Coronagraph” (2016)
- **Referee** Astrophysical Journal Letters (2012-present), Astrophysical Journal (2013-present), Icarus (2013-present), MNRAS (2015-present), Nature (2014-present), PASP (2016-present), PNAS (2016-present), Science (2014-present)
- **Panelist/Reviewer/Panel Chair:** NASA (2013-present), NSF (2014-present), NOAO (2021—present)

OTHER UNIVERSITY AND DEPARTMENT SERVICE (2016—present)

See also [Contributions to Diversity, Equity, and Inclusion](#) and [Bridging Sub-disciplines](#)

- **Academic Advisor** Matthias He, Malinda Baer, Stephen Kerby, Chad Pozarycki, Samuel Ruth, Douglas Stout, Jeremy Chen, Dylan Dirkmaat, Charles Hapich, Brenda Jones, Maya Marcy, Arjina Islam, Mya Crews, Adam Stone, LinZi Zheng
- **Departmental Committees:** Penn State Astronomy colloquium and departmental talks committee, *chair* (2017-2018), Penn State Astronomy Graduate Admissions Committee (2016-2018, 2019–2021), Penn State Astronomy Graduate Program Committee (2016-2017; 2018-2021; *chair*, 2021—2022), Penn State Astronomy Climate Committee (2018–2019)
- **Organizer:** Penn State Center for Exoplanets and Habitable Worlds Seminar (2016-2017), Career Seminars (2021—present)
- **Comprehensive Exam Committee Member:** Mark Wells (August 2017), Noah Tuchow (December 2017), Matthias He (May 2018), Mariah MacDonald (May 2018), Jonathan Jackson (May 2018), Caleb Cañas (August 2018), Sofia Sheikh (March 2019), Emily Safsten (April 2019), Jiayin Dong (April 2019), Christian Gilbertson (April 2019), Alan Reyes (July 2019), Brianna Zawadski (March 2020)
- **Second Year Project Reader:** Matthias He (December 2018), Brianna Zawadski (December 2019), Megan Delamer (December 2022)
- **PhD Committee Member:** Jason Curtis (August 2016), Mariah MacDonald (May 2018—January 2021; *chair*), Matthias He (May 2018 — February 2022), Sofia Sheikh (March 2019—June 2021), Jacob Luhn (June 2019—June 2021), Jonathan Jackson (May 2018—June 2022; *chair*), Caleb Cañas (August 2018–April 2022), Jiayin Dong (April 2019 — June 2022; *chair*), Malinda Baer (June 2021 — August 2022), Elizabeth Melton (September 2020 — December 2022), Emily Safsten (April 2019 — present; *chair*), Christian Gilbertson (September 2019—present), Brianna Zawadski (March 2020 — present), Winter Parts (August 2022 — present)

OTHER PUBLIC OUTREACH (2016—present)

See also [Teaching Experience](#)

- **2022**, Author, *Star Huggers: The Mystery of Hot Jupiters*, Sky & Telescope feature article and cover story, October 2022 issue
- **2020 August 11—14**, Penn State Virtual Astrofest: public lecturer “Telling the Story of Life in the Cosmos with the Space Telescope of the Future”; volunteer, Ask an Astronomer; created scale of the solar system video demonstration
- **2017 July 12–14**, Penn State AstroFest: public lecturer, “TRAPPIST 1 Planetary System: Your New Tiny Red Home”; volunteer, exoplanet demonstrations and astronomy art
- **2017 April 17**, Take Your Children to Work Day activity leader, Penn State
- **2017 March 29**, Aspen Science Cafe panelist; shared career and research and answered question from members of the public (invited)
- **2016 July 16 - 17**, Penn State AstroFest: public lecturer, “Giant planet surprises” & Astronomy Idol; volunteer, exoplanet demonstrations and activities for children

INVITED TALKS

Invited Colloquia, Seminars, Lunch Talks

1. Wellesley College Sarah Frances Whiting Lecture, November 17, 2022
2. Tsinghua University, Astronomy Colloquium, October 19, 2022
3. Johns Hopkins University and Space Telescope Science Institute Joint Colloquium, March 16, 2022
4. University of Arizona Theoretical Astrophysics Program Colloquium, February 14, 2022
5. University of Minnesota Colloquium, February 2, 2022
6. University of Maryland Colloquium, September 29, 2021
7. Konkoly Observatory Astronomy Seminar, June 3, 2021
8. Cambridge Exoplanet Seminar, May 26, 2020
9. NExSS Seminar, February 19, 2020
10. McGill Space Sciences Seminar, November 26, 2019
11. UCSB Lunch Talk, June 4, 2019
12. Harvard Colloquium, March 28, 2019
13. Aarhus Stellar Astrophysics Centre Seminar, May 11th, 2018
14. Columbia Colloquium, March 21st, 2018
15. University of Chicago Colloquium, March 7th, 2018
16. Stochastic Modeling and Computing Seminar, Penn State Statistics, February 22nd, 2018
17. CIERA Seminar, February 13th, 2018
18. NASA JPL, January 4th, 2018
19. KIPAC Astrophysics Colloquium, May 18th, 2017
20. LUVOIR Seminar, June 29th, 2016
21. University of Pittsburgh Seminar, April 8th, 2016
22. Yale Colloquium, March 31st, 2016
23. Lowell Observatory Colloquium, March 10th, 2016
24. University of Nevada at Las Vegas Seminar, February 5th, 2016
25. Carnegie DTM Seminar, January 28th, 2016
26. Carnegie Observatories Colloquium, December 8th, 2015

27. Harvard ITC Colloquium, October 29th, 2015
28. Harvard ITC Lunch, October 29th, 2015
29. SETI-Ames Dynamics Lunch, October 21st, 2015
30. ETH Zurich Institute for Astronomy Seminar, October 13th, 2015
31. University of Colorado Boulder Astrophysical and Planetary Sciences Colloquium, September 21st, 2015
32. UC Berkeley Astronomy Colloquium, September 14th, 2015
33. UC Berkeley Department Lunch, September 14th, 2015
34. CITA Seminar, April 22nd, 2015
35. UC Davis Geology Seminar, April 8th, 2015
36. Thunch Talk, Princeton, November 20th, 2014
37. Astronomy Colloquium, Caltech, November 5th, 2014
38. Astronomy Seminar, Penn State, October 30th, 2014
39. Astrophysics Colloquium, MIT, October 28th, 2014
40. Astronomy Colloquium, University of Illinois, September 30th, 2014
41. Astronomy Colloquium, University of Washington, June 5th, 2014
42. Center for the Origin, Dynamics, and Evolution of the Planets Seminar, University of California Santa Cruz, May 30th, 2014
43. Astronomy Colloquium, University of California Santa Cruz, March 12th, 2014
44. Astrophysics Seminar, New York University, March 7th, 2014
45. SETI Institute Seminar, SETI Institute, January 21st, 2014
46. Astronomy Colloquium, University of California Los Angeles, December 4th, 2013.
47. Seminar, University of Bern, July 22nd, 2013
48. Center for Astrophysics and Habitable Worlds Seminar, Penn State, March 15th, 2013
49. Seminar, MPA Heidelberg, June 9th 2011

Invited Conference Talks

57. *Multi-Faceted Planetary Systems* (opening plenary), North Carolina Astronomers' Meeting, virtual, September 2022
58. *Multi-Faceted Planetary Systems* (plenary), American Astronomical Society Meeting, virtual, June 2022
59. *Origins of Inner Solar Systems*, American Astronomical Society Division of Planetary Science, virtual, October 2021
60. *Establishing the Diversity of Planetary System Architectures*, Exoplanets III, virtual, July 29, 2020
61. *Beyond Eta Earth: Exoplanets as a Window on the History and Habitability of Planetary Systems* (opening plenary), 40th Annual Central Pennsylvania Consortium, virtual, April 2020
62. *Beyond Eta Earth: Exoplanets as a Window on the History and Habitability of Planetary Systems* (opening plenary), Gordon Origins of Life Conference, Galveston, Texas, January 2020
63. *The Future of Exoplanet Science*, CEHW 10th Anniversary, April 2nd, 2019
64. *Art and Architecture of Planetary Systems*, Transiting Exoplanets Conference, Keele, UK, July 18th, 2017
65. *Inner Solar Systems* (plenary), American Astronomical Society, Austin, Texas, June 2017
66. *Forming small planets around small stars*, Opportunity M workshop, Cambridge, Massachusetts, August 29th, 2016
67. *The critical role of residual gas in establishing planetary orbits and compositions.*, Exoplanets 1, Davos, Switzerland, July 6th, 2016.

68. *Characterizing Kepler's transiting planets in the presence of correlated noise.*, Statistical Challenges in Modern Astronomy VI, Pittsburgh, Pennsylvania, June 9th, 2016
69. *Time Domain Challenges for Exoplanets.*, AAS Special on Time Domain Methodologies, Kissimmee, Florida, January 2016.
70. *Planetary Systems and their Evolution*, U.S. Radio/Millimeter/Submillimeter Science Futures in the 2020s, Chicago, December 2015
71. *New Views on Inner Solar Systems and Extreme Planets* (plenary), American Astronomical Society Division for Planetary Science, October 2015
72. *Giant planet formation and migration scenarios* (review talk), OHP 2015 : Twenty years of giant exoplanets, Saint-Michel-l'Observatoire, France, October 5-9, 2015.
73. *The interplay between aliasing and stellar activity.*, the Extreme Precision Radial Velocities Workshop, New Haven, Connecticut, July 5-8, 2015.
74. *Planet Migration and Its Collateral Effects* (Discussion Leader), Gordon Conference on the Origins of Solar Systems, Mount Holyoke, Massachusetts, June 28-July 3, 2015.
75. *TTV Planets: Farm to Table.*, KITP: Physics of Exoplanets, Santa Barbara, California, February 23-27, 2015.
76. *Warm Jupiters as failed hot Jupiters.*, AAS Special on Short Period Planets, Seattle, Washington, January 2015.
77. *The role of metallicity in establishing giant planet dynamics.*, Towards Other Earths II: The Planet-Star Connection, Porto, Portugal, September 15th-19th, 2014.
78. *The Legacy of Giant Planet Dynamical Histories.*, Exoplanets in the Post-Kepler Era, Cambridge, Massachusetts, May 20th-21st, 2013.
79. *Upheaval in Systems of Giant Planets*, Women in AeroSpace Symposium, Cambridge, Massachusetts, April 17th-19th, 2013.

CONTRIBUTED PRESENTATIONS

Contributed Seminars and Lunch Talks

1. *Hallmarks of Migration*, Penn State Tuesday Lunch, February 28, 2017.
2. *Origins of Planetary Systems*, Penn State Tuesday Lunch, April 12th, 2016.
3. *Lessons from Exceptional Exoplanets*, UC Berkeley Miller Lunch, October 20th, 2015.
4. *Insights from Exoplanet Exceptions*, KITP Physics of Earths Workshop, December 5th, 2015.
5. *The astronomy of exoplanets*, UC Berkeley Astronomy Department Lunch, October 9th, 2014.
6. *New Constraints on Planet Formation: A Tale of Two Conferences*, UC Berkeley Center for Integrative Planetary Science Seminar, September 24th, 2014.
7. *Tidal dissipation of hot Jupiter spin-orbit alignment*, UC Berkeley Astronomy Department Lunch, April 29th, 2014.
8. *Planetary tidal migration*, Center for Integrative Planetary Science Seminar, UC Berkeley, November 18th, 2013.
9. *The Legacy of Giant Planet Dynamical Histories in the Post-Kepler Era*, UC Berkeley Astronomy Department Lunch, October 17th, 2013.
10. *The origin of hot Jupiters*, Center for Integrative Planetary Science Seminar, UC Berkeley, October 9th, 2013.
11. *On the Migratory Behavior of Planetary Systems*, Raytheon Technical Seminar Series, July 10th, 2013.
12. *The search for super-eccentric proto-hot Jupiters*, Planet Lunch, Harvard CfA, January 22nd, 2013.

13. *Some assembly required: Nature's instruction booklet for planetary migration*, Wunch Talk, Princeton, December 5th, 2012
14. *Neptune's Wild Days: Evidence from the Classical Kuiper Belt*, Institute for Advanced Study Bahcall Lunch, December 4th, 2012.
15. *Radial velocities de-aliased*, Princeton Exoplanets Lunch, December 3rd, 2012.
16. *A paucity of proto-hot Jupiters on super-eccentric orbits*, ITC Lunch, November 28th, 2012.
17. *Some assembly required: Nature's instruction booklet for planetary migration*, Planet and Star Formation Seminar, University of California Berkeley, November 7th, 2012
18. *Some assembly required: Nature's instruction booklet for planetary migration*, Theoretical Astrophysics Program Colloquium, University of Arizona Tucson, October 22nd, 2012
19. *Some assembly required: Nature's instruction booklet for planetary migration*, CIERA Special Seminar, Northwestern, October 4th, 2012
20. *The Big Planet that Couldn't: The Mystery of the Warped Disk Beta Pictoris*, Graduate Predoc Forum, November 16th, 2011.
21. *Constraints on the Dynamical History of the Solar System*, ITC Lunch, Harvard CfA, April 1st, 2011.

Contributed Conference Talks

23. *Precise Characterization of a 2:1 Resonant Pair: The Warm Jupiter TOI-216c and Eccentric Warm Neptune TOI-216b*, Division of Dynamical Astronomy, Online, May 17, 2021
24. *Testing the Origins of Close-In Exoplanet Populations*, the SAMSI ASTRO Transition Workshop, Research Triangle Park, NC, May 8th, 2017.
25. *The Critical Role of Residual Gas in Establishing Super-Earths' Compositions and Orbital Architectures*, Formation and Dynamical Evolution of Exoplanets, Aspen, Colorado, March 31st, 2017.
26. *Mitigating bias in testing the origins of warm Jupiters via constraints on transit duration variations*, the American Astronomical Society Meeting #229, Grapevine, Texas, January 7th, 2017.
27. *Formation of Super-Earths and Mini-Neptunes*, the Statistical, Mathematical and Computational Methods for Astronomy Program on Exoplanet Populations, October 20th, 2016.
28. *Connections among spacing, composition, and flatness in super-Earth systems*, American Astronomical Society Meeting #227, Kissimmee, Florida, January 6th, 2016.
29. *Origins and Signals of Super-Earths and Mini-Neptunes*, Bay Area Exoplanets, Mountain View, California, March 20, 2015.
30. *The whodunit of debris disk archaeology*, Thirty Years of Beta Pic and Debris Disk Studies, Paris, France, September 8, 2014.
31. *Toward mitigating the impact of correlated noise on the detection and characterization of Kepler planets*, ExoStats 2014. Pittsburgh, Pennsylvania, June 18, 2014.
32. *Challenges in Inferring and Interpreting Planetary Orbital Properties*, Bay Area Exoplanets Meeting, Mountain View, California, March 14, 2014.
33. *KOI-1474: A Case Study for Giant Planet Migration*, Bay Area Exoplanets Meeting, Mountain View, California, December 6, 2013.
34. *Origins and Evolution of Planetary Systems with GPI*, Gemini Planet Imager Meeting, Mountain View, California, November 1st-2nd, 2013.
35. *Constraining planetary migration mechanisms in systems of giant planets*, Modern Statistical and Computational Methods for Analysis of Kepler Data, Research Triangle Park, North Carolina, June 10th-28th, 2013.
36. *Constraining planetary migration mechanisms in systems of giant planets*, International Astronomical Union Symposium 299: Exploring the Formation and Evolution of Planetary Systems, Victoria, British Columbia, Canada, June 2nd-7th, 2013.

37. *Disk Migration vs. Multi-body Interactions: Kepler constraints from highly-eccentric hot Jupiter progenitors*, Exoplanets in Multi-body Systems in the Kepler Era, Aspen, Colorado, February 9-15, 2013.
38. *Constraining Planetary Migration Mechanisms with Highly Eccentric Hot Jupiter Progenitors*, American Astronomical Society, Long Beach, California, January 6th-10th, 2013
39. *Neptune's Wild Days: Constraints from the Classical Kuiper Belt*, American Astronomical Society Division on Dynamical Astronomy Meeting, Mt. Hood, Oregon, May 6th-May 10th, 2012.
40. *Planetesimal Disks as Tracers of Planet-Planet Scattering, at Home and Abroad.*, “Extreme Solar Systems II,” Moran, Wyoming, September 11th-17th 2011.
41. *Migration and Scattering: Constraints on the Dynamical History of the Solar System.*, “Exploring Strange New Worlds,” Flagstaff, AZ, May 1st-6th, 2011.
42. *Secular Constraints on the Dynamical History of the Solar System*, American Astronomical Society Division on Dynamical Astronomy Meeting, Austin, TX, April 10th-14th, 2011.
43. *Packed Perturbers: Short-term Interactions Among Uranus' Inner Moons*, American Astronomy Society Division on Dynamical Astronomy Meeting, Boston, MA, April 25th-29th, 2010.

Contributed Conference Posters

44. *Precise Characterization of a 2:1 Resonant Pair: The Warm Jupiter TOI-216c and Eccentric Warm Neptune TOI-216b*, TESS Science Conference II, Online, August 2—6, 2021
45. *Obliquities of exoplanet host stars*, Division of Dynamical Astronomy, Online, May 17, 2021
46. *Connections among spacing, composition, and flatness in super-Earth systems*, American Astronomical Society Division for Planetary Science Meeting, National Harbor, District of Columbia, November 8-13, 2015.
47. *A metallicity recipe for rocky planets*, Gordon Conference on Origins of Solar Systems, Mount Holyoke, Massachusetts, June 28-July 3, 2015.
48. *Planetary Systems Great and Small*, Miller Symposium, Point Reyes Station, California, June 2015.
49. *Planetary Systems in 4D*, Miller Symposium, Point Reyes Station, California, June 6th-8th, 2014.
50. *KOI-1474: A Case Study for Giant Planet Migration.*, Kepler Science Conference II, Mountain View, California, November 4th-8th, 2013.
51. *gadgetbelt: a tool for modeling planetary sculpting of massive debris disks.*, Protostars and Planets VI, Heidelberg, Germany, July 15th-20th, 2013.
52. *The Photoeccentric Effect and Proto-Hot-Jupiters*, Sagan Workshop, Pasadena, California, July 22nd-27th, 2012.
53. *The Photoeccentric Effect and Proto-Hot-Jupiters*, the American Astronomy Society Division on Dynamical Astronomy Meeting, Mt. Hood, Oregon, May 6th-May 10th, 2012.
54. *On the Misalignment of the Directly Imaged Planet β Pictoris b with the System's Warped Inner Disk*, American Astronomy Society Division on Dynamical Astronomy Meeting, Mt. Hood, Oregon, May 6th-May 10th, 2012.
55. *Secular Constraints on the Dynamical History of the Solar System*, WE-Heraeus Seminar “Extrasolar Planets: Toward Comparative Planetology beyond the Solar System,” June 5th-8th 2011.
56. *Secular Constraints on the Dynamical History of the Solar System*, American Astronomical Society, Boston, MA, May 22nd- 26th 2011.
57. *Radial Velocities De-aliased.*, Astronomy of Precise Radial Velocities, University Park, PA, August 16th-19th 2010.
58. *Radial Velocities De-aliased*, American Astronomical Society, Miami, FL, May 23nd- 27th 2010.

59. *Dynamical Interactions Among the Small, Inner Moons of Uranus*, American Astronomy Society Division on Dynamical Astronomy Meeting, Virginia Beach, VA, May 2nd-5th, 2009.