

CURRICULUM VITAE
REBEKAH DAWSON

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CURRENT POSITION

Pennsylvania State University, State College, Pennsylvania, USA
Assistant Professor, Pennsylvania State University Department of Astronomy & Astrophysics, 01/2016-present

PREVIOUS POSITIONS

Miller Institute for Basic Research in Science, Berkeley, California, USA
Miller Research Fellow, University of California Berkeley Department of Astronomy, 09/2013-12/2015

EDUCATION

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

- 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)
- WE-Heraeus-Seminar on Extrasolar Planets, poster prize honorable mention (2011)
- American Astronomical Society Division on Dynamical Astronomy, student stipend award (2011)
- Certificate of Distinction in Teaching, Harvard University (2011)
- American Astronomical Society, Chambliss Astronomy Achievement Student Award (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)
- Summa cum laude honors/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)
- Raytheon Scholar (2006-2008)

GRANTS

NASA Exoplanet Research Program (XRP), *Warm Large Exoplanets*, **PI: Rebekah Dawson**, CO-Is: Billy Quarles, Jack Lissauer, \$360,000, 2016-2018

PUBLICATIONS**First author:**

- 1) *Correlations between compositions and orbits established by the giant impact era of planet formation*
Dawson, R., Lee, E., & Chiang, E. 2016, *ApJ*, 822, 54
- 2) *A metallicity recipe for rocky planets*,
Dawson, R., Chiang, E., & Lee, E. 2015, *MNRAS*, 453, 1571
- 3) *A paucity of proto-hot Jupiters on supereccentric orbits*,
Dawson, R., Murray-Clay, R.A., & Johnson, J.A. 2015, *Astrophysical Journal*, 798, 66
- 4) *A Class of Warm Jupiters with Mutually Inclined, Apsidally Misaligned, Close Friends*,
Dawson, R. & Chiang, E. 2014, *Science*, 346, 6206, pp. 212-216
- 5) *On the tidal origin of hot Jupiter stellar obliquity trends*,
Dawson, R., 2014, *Astrophysical Journal Letters*, 790, L31
- 6) *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., Buchhave, L., Cargile, P., Clubb, K., Fulton, B., Hebb, L., Howard, A., Huber, H., Shporer, A., Valenti, J., 2014, *Astrophysical Journal*, 791, 89
- 7) *Giant planets orbiting metal-rich stars show signatures of planet-planet interactions*
Dawson, R. & Murray-Clay, R.A., 2013, *ApJL*, 767, L14
- 8) *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
- 9) *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.
- 10) *Neptune's wild days: constraints from the eccentricity distribution of the classical Kuiper belt*,
Dawson, R. & Murray-Clay, R. 2012, *Astrophysical Journal*, 750, 43.
- 11) *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.
- 12) *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:

- 13) *Stability and Occurrence Rate Constraints on the Planetary Sculpting Hypothesis for "Transitional" Disks*,
Dong, R. & **Dawson, R.** 2016, *Astrophysical Journal*, 825, 77.
- 14) *Resonances, chaos, and short-term interactions among the inner Uranian satellites*,
French, R.G., **Dawson, R.**, & Showalter, M. 2015, *Astronomical Journal*, 149, 142
- 15) *Advances in Exoplanet Science from Kepler*,
Lissauer, J., **Dawson, R.**, & Tremaine, S. 2014, *Nature*, 513, 336
- 16) *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

- 17) *Discovery of a Substellar Companion to the Nearby Debris Disk Host HR 2562*,
Konopacky, Q., Rameau, J., Duchene, G., & 54 others incl. **Dawson, R.**, *Astrophysical Journal Letters*, in press
- 18) *β Pictoris's Inner Disk in Polarized Light and New Orbital Parameters for β Pictoris b*,

- Millar- Blankaer, M., Graham, J., Pueyo, L., Kalas, P., **Dawson, R.**, & 58 others, *Astrophysical Journal*, 811, 18
- 19) *Discovery and spectroscopy of the young Jupiter-like planet 51 Eri b with the Gemini Planet Imager*, Macintosh, B., Graham, J., Barman, T., & 85 others incl. **Dawson, R.**, *Science*, 350, 64
- 20) *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
- 21) *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
- 22) *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
- 23) *A Super-Earth transiting a naked eye star*, Winn, J., Matthews, J., **Dawson, R.**, & 11 others, 2011, *Astrophysical Journal Letters*, 737, L18.

SCIENTIFIC TALKS

Invited Colloquia, Seminars, Lunch Talks

- 1) *All Planets Great and Small*, LUVUOIR Seminar, June 29th, 2016.
- 2) *All Planets Great and Small*, University of Pittsburgh Seminar, April 8th, 2016.
- 3) *All Planets Great and Small*, Yale Colloquium, March 31st, 2016.
- 4) *All Planets Great and Small*, University of Nevada at Las Vegas Seminar, February 5th, 2016.
- 5) *All Planets Great and Small*, Carnegie DTM Seminar, January 28th, 2016.
- 6) *All Planets Great and Small*, Carnegie Observatories Colloquium, December 8th, 2015.
- 7) *All Planets Great and Small*, Harvard ITC Colloquium, October 29th, 2015.
- 8) *Connections between super-Earth compositions and orbital architectures*, Harvard ITC Lunch, October 29th, 2015.
- 9) *Connections among spacing, composition, and flatness in super-Earth systems*, SETI-Ames Dynamics Lunch, October 21st, 2015.
- 10) *All Planets Great and Small*, ETH Zurich Institute for Astronomy Seminar, October 13th, 2015
- 11) *All Planets Great and Small*, University of Colorado Boulder Astrophysical and Planetary Sciences Colloquium, September 21st, 2015
- 12) *All Planets Great and Small*, UC Berkeley Astronomy Colloquium, September 14th, 2015
- 13) *The stellar activity problem for exoplanets*, UC Berkeley Department Lunch, September 14th, 2015
- 14) *Little, Big: On the Architectures of Planetary Systems*, CITA Seminar, April 22nd, 2015
- 15) *Little, Big: On the Architectures of Planetary Systems*, UC Davis Geology Seminar, April 8th, 2015
- 16) *Planetary Systems in 4D*, Thunch Talk, Princeton, November 20th, 2014
- 17) *Planetary Systems in 4D*, Astronomy Colloquium, Caltech, November 5th, 2014
- 18) *Planetary Systems in 4D*, Astronomy Seminar, Penn State, October 30th, 2014
- 19) *Planetary Systems in 4D*, Astrophysics Colloquium, MIT, October 28th, 2014
- 20) *Planetary Systems in 4D*, Astronomy Colloquium, University of Illinois, September 30th, 2014.
- 21) *Planetary Systems in 4D*, Astronomy Colloquium, University of Washington, June 5th, 2014.
- 22) *Hot Jupiter creation myths*, Center for the Origin, Dynamics, and Evolution of the Planets Seminar, University of California Santa Cruz, May 30th, 2014.
- 23) *Some assembly required: Nature's instruction booklet for planetary migration*, Astronomy Colloquium, University of California Santa Cruz, March 12th, 2014.
- 24) *On the Migration Behavior of Planetary Systems*, Astrophysics Seminar, New York University, March 7th, 2014.
- 25) *Some assembly required: Nature's instruction booklet for planetary migration*, SETI Institute Seminar, SETI Institute, January 21st, 2014.

- 26) *Some assembly required: Nature's instruction booklet for planetary migration*, Astronomy Colloquium, University of California Los Angeles, December 4th, 2013.
- 27) *Some assembly required: Nature's instruction booklet for planetary migration*, Seminar, University of Bern, July 22nd, 2013.
- 28) *Some assembly required: Nature's instruction booklet for planetary migration*, Center for Astrophysics and Habitable Worlds Seminar, Penn State, March 15th, 2013.
- 29) *Radial Velocity Planets De-aliased: A New, Short Period for Super-Earth 55 Cnc e*, Seminar, MPA Heidelberg, June 9th 2011

Invited Conference Talks

- 1) *Forming small planets around small stars*. Presented at the Opportunity M workshop, Cambridge, Massachusetts, August 29th, 2016.
- 2) *Introduction to Exoplanet Data*. Presented at the Program on Statistical, Mathematical and Computational Methods for Astronomy Opening Workshop, Research Triangle Park, North Carolina, August 22nd, 2016.
- 3) *The critical role of residual gas in establishing planetary orbits and compositions*. Presented at Exoplanets 1, Davos, Switzerland, July 6th, 2016.
- 4) *Characterizing Kepler's transiting planets in the presence of correlated noise*. Presented at Statistical Challenges in Modern Astronomy VI, Pittsburgh, Pennsylvania, June 9th, 2016.
- 5) *Time Domain Challenges for Exoplanets*. Presented at AAS Special on Time Domain Methodologies, Kissimmee, Florida, January 2016.
- 6) *Planetary Systems and their Evolution*. Presented at U.S. Radio/Millimeter/Submillimeter Science Futures in the 2020s, Chicago, Illinois, December 15th-17th, 2015.
- 7) *New Views on Inner Solar Systems and Extreme Planets* (plenary talk). Presented at the American Astronomical Society Division for Planetary Science Meeting, National Harbor, District of Columbia, November 8-13, 2015.
- 8) *Giant planet formation and migration scenarios* (review talk), Presented at OHP 2015 : Twenty years of giant exoplanets, Saint-Michel-l'Observatoire, France, October 5-9, 2015.
- 9) *The interplay between aliasing and stellar activity*, Presented at the Extreme Precision Radial Velocities Workshop, New Haven, Connecticut, July 5-8, 2015.
- 10) *Planet Migration and Its Collateral Effects* (Discussion Leader). Presented at the Gordon Conference on the Origins of Solar Systems, Mount Holyoke, Massachusetts, June 28-July 3, 2015.
- 11) *TTV Planets: Farm to Table*. Presented at KITP: Physics of Exoplanets, Santa Barbara, California, February 23-27, 2015.
- 12) *Warm Jupiters as failed hot Jupiters*. Presented at AAS Special on Short Period Planets, Seattle, Washington, January 2015.
- 13) *The role of metallicity in establishing giant planet dynamics*. Presented at Towards Other Earths II: The Planet-Star Connection, Porto, Portugal, September 15th-19th, 2014.
- 14) *The Legacy of Giant Planet Dynamical Histories*. Presented at Exoplanets in the Post-Kepler Era, Cambridge, Massachusetts, May 20th-21st, 2013.
- 15) *Upheaval in Systems of Giant Planets*. Presented at the Women in AeroSpace Symposium, Cambridge, Massachusetts, April 17th-19th, 2013.

Contributed Seminars and Lunch Talks

- 1) *Origins of Planetary Systems*, Penn State Tuesday Lunch, April 12th, 2016.
- 2) *Lessons from Exceptional Exoplanets*, UC Berkeley Miller Lunch, October 20th, 2015.
- 3) *Insights from Exoplanet Exceptions*, KITP Physics of Earths Workshop, December 5th, 2015.
- 4) *The astronomy of exoplanets*, UC Berkeley Astronomy Department Lunch, October 9th, 2014.
- 5) *New Constraints on Planet Formation: A Tale of Two Conferences*, UC Berkeley Center for Integrative Planetary Science Seminar, September 24th, 2014.
- 6) *Tidal dissipation of hot Jupiter spin-orbit alignment*, UC Berkeley Astronomy Department Lunch, April 29th, 2014.

- 7) *Planetary tidal migration*, Center for Integrative Planetary Science Seminar, UC Berkeley, November 18th, 2013.
- 8) *The Legacy of Giant Planet Dynamical Histories in the Post-Kepler Era*, UC Berkeley Astronomy Department Lunch, October 17th, 2013.
- 9) *The origin of hot Jupiters*, Center for Integrative Planetary Science Seminar, UC Berkeley, October 9th, 2013.
- 10) *On the Migratory Behavior of Planetary Systems*, Raytheon Technical Seminar Series, July 10th, 2013.
- 11) *The search for super-eccentric proto-hot Jupiters*, Planet Lunch, Harvard CfA, January 22nd, 2013.
- 12) *Some assembly required: Nature's instruction booklet for planetary migration*, Wunch Talk, Princeton, December 5th, 2012
- 13) *Neptune's Wild Days: Evidence from the Classical Kuiper Belt*, Institute for Advanced Study Bahcall Lunch, December 4th, 2012.
- 14) *Radial velocities de-aliased*, Princeton Exoplanets Lunch, December 3rd, 2012.
- 15) *A paucity of proto-hot Jupiters on super-eccentric orbits*, ITC Lunch, November 28th, 2012.
- 16) *Some assembly required: Nature's instruction booklet for planetary migration*, Planet and Star Formation Seminar, University of California Berkeley, November 7th, 2012
- 17) *Some assembly required: Nature's instruction booklet for planetary migration*, Theoretical Astrophysics Program Colloquium, University of Arizona Tucson, October 22nd, 2012
- 18) *Some assembly required: Nature's instruction booklet for planetary migration*, CIERA Special Seminar, Northwestern, October 4th, 2012
- 19) *The Big Planet that Couldn't: The Mystery of the Warped Disk Beta Pictoris*, Graduate Predoc Forum, November 16th, 2011.
- 20) *Constraints on the Dynamical History of the Solar System*, ITC Lunch, Harvard CfA, April 1st, 2011.

Contributed Conference Talks

- 1) *Connections among spacing, composition, and flatness in super-Earth systems*. Presented at American Astronomical Society Meeting #227, Kissimmee, Florida, January 6th, 2016.
- 2) *Origins and Signals of Super-Earths and Mini-Neptunes*. Presented at Bay Area Exoplanets, Mountain View, California, March 20, 2015.
- 3) *The whodunit of debris disk archaeology*. Presented at Thirty Years of Beta Pic and Debris Disk Studies, Paris, France, September 8, 2014.
- 4) *Toward mitigating the impact of correlated noise on the detection and characterization of Kepler planets*. Presented at ExoStats 2014. Pittsburgh, Pennsylvania, June 18, 2014.
- 5) *Challenges in Inferring and Interpreting Planetary Orbital Properties*. Presented at the Bay Area Exoplanets Meeting, Mountain View, California, March 14, 2014.
- 6) *KOI-1474: A Case Study for Giant Planet Migration*. Presented at the Bay Area Exoplanets Meeting, Mountain View, California, December 6, 2013.
- 7) *Origins and Evolution of Planetary Systems with GPI*, Gemini Planet Imager Meeting, Mountain View, California, November 1st-2nd, 2013.
- 8) *Constraining planetary migration mechanisms in systems of giant planets*. Presented at Modern Statistical and Computational Methods for Analysis of Kepler Data, Research Triangle Park, North Carolina, June 10th-28th, 2013.
- 9) *Constraining planetary migration mechanisms in systems of giant planets*. Presented at International Astronomical Union Symposium 299: Exploring the Formation and Evolution of Planetary Systems, Victoria, British Columbia, Canada, June 2nd-7th, 2013.
- 10) *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. (**Block Award**).

- 11) *Constraining Planetary Migration Mechanisms with Highly Eccentric Hot Jupiter Progenitors*. Presented at the American Astronomical Society, Long Beach, California, January 6th-10th, 2013 (**Rodger Doxsey Travel Prize**).
- 12) *Neptune's Wild Days: Constraints from the Classical Kuiper Belt*. Presented at the American Astronomical Society Division on Dynamical Astronomy Meeting, Mt. Hood, Oregon, May 6th-May 10th, 2012.
- 13) *Planetesimal Disks as Tracers of Planet-Planet Scattering, at Home and Abroad*. Presented at "Extreme Solar Systems II," Moran, Wyoming, September 11th-17th 2011.
- 14) *Migration and Scattering: Constraints on the Dynamical History of the Solar System*. Presented at "Exploring Strange New Worlds," Flagstaff, AZ, May 1st-6th, 2011.
- 15) *Secular Constraints on the Dynamical History of the Solar System*. Presented at the American Astronomical Society Division on Dynamical Astronomy Meeting, Austin, TX, April 10th-14th, 2011. (**Student stipend award.**)
- 16) *Packed Perturbers: Short-term Interactions Among Uranus' Inner Moons*. Presented at the American Astronomy Society Division on Dynamical Astronomy Meeting, Boston, MA, April 25th-29th, 2010.

Contributed Conference Posters

- 1) *Connections among spacing, composition, and flatness in super-Earth systems*. Presented at the American Astronomical Society Division for Planetary Science Meeting, National Harbor, District of Columbia, November 8-13, 2015.
- 2) *A metallicity recipe for rocky planets*. Presented at the Gordon Conference on Origins of Solar Systems, Mount Holyoke, Massachusetts, June 28-July 3, 2015.
- 3) *Planetary Systems Great and Small*. Presented at the Miller Symposium, Point Reyes Station, California, June 2015.
- 4) *Planetary Systems in 4D*. Presented at the Miller Symposium, Point Reyes Station, California, June 6th-8th, 2014.
- 5) *KOI-1474: A Case Study for Giant Planet Migration*. Presented at Kepler Science Conference II, Mountain View, California, November 4th-8th, 2013.
- 6) *gadgetbelt: a tool for modeling planetary sculpting of massive debris disks*. Presented at Protostars and Planets VI, Heidelberg, Germany, July 15th-20th, 2013.
- 7) *The Photoeccentric Effect and Proto-Hot-Jupiters*. Presented at the Sagan Workshop, Pasadena, California, July 22nd-27th, 2012.
- 8) *The Photoeccentric Effect and Proto-Hot-Jupiters* Presented at the American Astronomy Society Division on Dynamical Astronomy Meeting, Mt. Hood, Oregon, May 6th-May 10th, 2012.
- 9) *On the Misalignment of the Directly Imaged Planet β Pictoris b with the System's Warped Inner Disk*. Presented at the American Astronomy Society Division on Dynamical Astronomy Meeting, Mt. Hood, Oregon, May 6th-May 10th, 2012.
- 10) *Secular Constraints on the Dynamical History of the Solar System*. Presented at the WE-Heraeus Seminar "Extrasolar Planets: Toward Comparative Planetology beyond the Solar System," June 5th-8th 2011. (**Poster prize honorable mention.**)
- 11) *Secular Constraints on the Dynamical History of the Solar System*. Presented at the American Astronomical Society, Boston, MA, May 22nd- 26th 2011.
- 12) *Radial Velocities De-aliased*. Presented at Astronomy of Precise Radial Velocities, University Park, PA, August 16th-19th 2010.
- 13) *Radial Velocities De-aliased*. Presented at the American Astronomical Society, Miami, FL, May 23rd- 27th 2010. (**Chambliss student research prize.**)
- 14) *Dynamical Interactions Among the Small, Inner Moons of Uranus*. Presented at the American Astronomy Society Division on Dynamical Astronomy Meeting, Virginia Beach, VA, May 2nd-5th, 2009.

TEACHING

- **2016—present Assistant Professor**, The Pennsylvania State University, Courses: Astronomy 585 (graduate elective class on exoplanets, a new course developed by **Dawson**), Astronomy 589 (graduate reading seminar)
- **2016 Guest Lecturer**, The Pennsylvania State University, Meteorology 466: Planetary Atmospheres
- **2015 Guest Lecturer**, Harvard University Banneker Institute summer research program, Order of magnitude astronomy
- **2012 Guest Lecturer**, Wellesley College, Astronomy 107: Extrasolar Planet Research w/ Lab
- **2010 Teaching Fellow**, Harvard University, Astronomy 110: Exoplanets (*Certificate of Distinction in Teaching*)
- **2010 Teaching Fellow**, Harvard University, Astronomy 16: Stellar and Planetary Astronomy
- **2010 Guest Lecturer**, Harvard University, Astronomy 16: Stellar and Planetary Astronomy
- **2008–2009 Physics Tutor**, Wellesley College, Introductory Mechanics, Introductory Electromagnetism
- **2006–2009 Computing Consultant**, Wellesley College Information Services Computing Help Desk
- **2006–2007 Mathematics Tutor and Grader**, Wellesley College, Mathematics for the Sciences
- **2005–2007 Whitin Observatory Night Assistant**, Wellesley College, Astronomy 100
- **2006 Astronomy Grader**, Wellesley College, Astronomy 101

ADVISING

- **Fall 2016 — present**, Mariah MacDonald (Penn State graduate student), “Super-Earth formation and dynamics.”
- **Fall 2016 — present**, Andrew Shannon (Penn State research associate), “Formation and dynamics of planets and debris disks.”
- **Summer 2016 — present**, Jonathan Jackson (Penn State graduate student), “Origins of warm Jupiters.”
- **Spring 2016 — present**, Paige Campbell (Penn State undergraduate), “Host star metallicity dependence of high eccentricity migration.”
- **Summer 2015 — present**, Arjun Khandelwal (Haverford College undergraduate), “Recovery of long-period transiting planets.”
- **Fall 2015**, Diana Kossakowski (UC Berkeley undergraduate), “Tidal realignment of stars by hot Jupiters in the presence of oblateness coupling of the star’s core and envelope.”
- **Spring 2015 - Summer 2015**, Sofia Sheikh (UC Berkeley undergraduate), “Constraints on super-eccentric proto-hot Jupiters missed by the *Kepler* pipeline”
- **Spring 2014 - Fall 2014**, Joseph Zalesky (UC Berkeley undergraduate), “The role of a third planet in the dynamical evolution of the Kepler-419 system.”
- **Summer 2012**, Eric Mukherjee (Caltech undergraduate), “Constraining Planetesimal Formation Mechanisms from Planetary Debris Disks,” co-advised with Ruth Murray-Clay.

ACADEMIC SERVICE

- **Member**: Large UV/Optical/Infrared Surveyor (LUVOIR) Science Definition Team
- **Member**: WFIRST Science Investigation Team, “Characterizing Extrasolar Planetary Systems with the WFIRST Coronagraph” (2016-present)
- **Committee Member**: Penn State Center for Exoplanets and Habitable Worlds Seminar (2016-present), Penn State Astronomy Graduate Admissions Committee (2016-present), Penn State Astronomy Graduate Program Committee (2016-present), Penn State College Ethics Committee (2016-present), Jason Curtis PhD dissertation defense (August 2016)
- **Committee Member**: UC Berkeley Center for Integrative Planetary Science Seminar (2013-2015), UC Berkeley Theoretical Astrophysics Center Seminar (2014-2015), UC Berkeley Miller Symposium (2014-2015), Harvard-Smithsonian Center for Astrophysics Graduate Pre-doctoral Research Forum (2011-2013), Division on Dynamical Astronomy

41st Meeting Local Organizing Committee (2010), Wellesley College Study Abroad Office Advisory Council (2008-2009)

- **Referee/Reviewer**, Astrophysical Journal Letters (2012-present), Astrophysical Journal (2013-present), Icarus (2013-present), MNRAS (2015-present), Nature (2014-present), NASA (2013-present), NSF, PASP, PNAS, Science (2014-present)
- **Guest blogger, Committee for the Status of Women in Astronomy** (2012-2013)
- **Student coordinator of student office assignments, Harvard Astronomy Department** (2011-2013)
- **Organizer: Harvard Astronomy Department Student-Faculty Lunches** (2010-2011)
- **Volunteer: American Astronomical Society 218th Meeting** (2011)

OUTREACH

- **2015 (March 21)**, Science@Cal public lecturer, “Exoplanet Surprises”
- **2011-2014**, Scientist visitor to elementary and high school classes
- **2013 (April 22)**, NOVA Science Cafe scientist speaker, “Giant Planet Surprises”
- **2013 (February 21)**, Harvard CfA Monthly Observatory Night lecturer, “Giant Planet Mysteries”
- **2012 (April 28)**, Cambridge Explores the Universe Volunteer
- **2009-2012**, Women in Science, Math, Technology, and Engineering Mentor Program, mentor to four undergraduate women
- **2009-2010**, Volunteer teacher for Grade 7-12 weekend programs through MIT Educational Studies Program. Designed and taught two science courses for middle/high schoolers
- **2009**, Kids Capture the Universe, middle school after-school program, volunteer teacher
- **2008-2009**, Let’s Get Ready Math SAT Coach (program for underrepresented high school students), head math coach in Spring 2009
- **2008-2009**, Tutor/mentor, Wellesley College Mentoring in the Sciences Program for underrepresented students
- **2008-2009**, President, Wellesley College Astronomy Students Toward Recreational Observing
- **2006-2007**, Treasurer, Wellesley College Astronomy Students Toward Recreational Observing

REFERENCES

- 1) **Ruth Murray-Clay** (PhD Supervisor), UCSC Dept. Astronomy
- 2) **John Johnson**, Harvard University Dept. Astronomy
- 3) **Eugene Chiang**, UCB Dept. Astronomy