

Curriculum Vitae

JONATHAN M. JACKSON

Wesleyan University
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EDUCATION

- Ph.D. The Pennsylvania State University**, State College, PA 2022
Astronomy and Astrophysics
Graduate Minor. Computational Sciences
Advisor: Dr. Rebekah Dawson
- M.S. The Pennsylvania State University**, State College, PA 2018
Astronomy and Astrophysics
- B.A. Harvard University**, Cambridge, MA 2015
Concentration. Astronomy and Astrophysics
Secondary Field. Earth and Planetary Science

TEACHING POSITIONS

Instructor

- [*Wesleyan University*] ASTR/E&ES 555 “Planetary Science Seminar” Fall ’22,’23, Spring ’23,’24
[*Wesleyan University*] ASTR 105 “Exploring the Cosmos” Spring ’23,’24
[*Wesleyan University*] ASTR 430 “Astronomical Pedagogy” Fall 2023
[*Wesleyan University*] ASTR 102F “Planets Near and Far” Fall 2022
[*Penn State University*] Astronomy 11 “Elementary Astronomy Laboratory” Fall ’15,’16
[*Santa Cruz County Summit for Youth Leadership*] “Our Solar System and Beyond” June ’13,’14

Guest Lecturer

- [*Penn State University*] Astronomy 140 “Life in the Universe” Fall 2015

Teaching Assistant

- [*Penn State University*] Astronomy 140 “Life in the Universe” Fall 2021
[*Penn State University*] Astronomy 475W “Stars and Galaxies” Fall 2021
[*Penn State University*] Astronomy 130 “Black Holes in the Universe” Spring 2020
[*Penn State University*] Astronomy 402W “Astronomical Telescopes and Techniques” Spring 2020
[*Penn State University*] Telescope and Planetarium Assistant Spring 2016
[*Penn State University*] Astronomy 001 “Astronomical Universe” Fall 2015
[*Penn State University*] Astronomy 005 “The Sky and Planets” Fall 2015

Intern

- [*Smithsonian Observatory*] WorldWide Telescope Ambassadors Program 2012-2013

HONORS, AWARDS, AND FELLOWSHIPS

- Planetary Science Teaching Fellowship**, *Wesleyan University* 2022-Present
Pennsylvania Space Grant Consortium Graduate Fellowship 2021-2022
Zaccheus Daniel Fellowship, *Penn State University* 2018, 2019
NSF Graduate Research Fellowship, *Honorable Mention* 2017
Proposal Competition Winner, *AbGradCon Proposal Writing Workshop* 2016
Teaching Assistant of the Year, *Penn State Astronomy Department* 2015-2016
Homer F. Braddock/Nellie H. and Oscar L. Roberts Fellowship, *Penn State University* 2015-2016
Undergraduate Chambliss Prize, *Honorable Mention* 2015
Massachusetts Space Grant Consortium Undergraduate Fellowship 2014

RESEARCH POSITIONS

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| Postdoctoral Teaching Fellow , Wesleyan University | 2022-present |
| Graduate Research Assistant , Penn State University <i>Dr. Rebekah Dawson</i> | 2016-2022 |
| Undergraduate Researcher , Harvard University Harvard College Research Program (HCRP) 2014 <i>Dr. Ruth Murray-Clay, Dr. David Charbonneau, Dr. Joseph Hora</i> | 2013-2015 |
| NSF REU Researcher , Maria Mitchell Observatory <i>Dr. Gretchen Harris, Dr. Michael West</i> | Summer 2014 |
| Intern , WorldWide Telescope Ambassadors, Smithsonian Observatory <i>Dr. Patricia Udomprasert, Dr. Alyssa Goodman</i> | 2012-2013 |

PROFESSIONAL ACTIVITIES

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| Lead Organizer , WesAstro Equity and Ethics Journal Club | 2023-present |
| Co-founder and Lead Organizer , Towards a More Inclusive Astronomy (TaMIA) www.tamiastronomy.org | 2016-2022 |
| Graduate Program Committee Member , Penn State Astronomy | 2019-2021 |
| Graduate Student Recruitment Chair , Penn State Astronomy | 2017-2021 |
| Graduate Representative , Penn State Astronomy Acted as graduate student liaison to the larger department | 2019-2020 |
| Scientific Organizing Committee , Emerging Researchers in Exoplanet Science (ERES) V Cornell University, June 17-19 | 2019 |
| Scientific and Local Organizing Committee , ERES IV Penn State University, June 21-22 | 2018 |

OUTREACH

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| Space Night Talk Co-coordinator , Van Vleck Observatory Weekly student-led public event | 2023-present |
| Astronomy on Tap State College Speaker | April '17, June '19 |
| AstroFest Volunteer , Penn State University Annual 4-night outreach event | July '16, '19 |
| AstroNight Volunteer , Penn State University Annual 1-night outreach event | October '15, '17 |
| Star Tours and Observatory Tours , Maria Mitchell Observatory Thrice weekly | Summer 2014 |

PUBLICATIONS

FIRST- AND SECOND-AUTHOR PUBLICATIONS

- Gupta, A. F.; **Jackson, J. M.**; Hébrard, G.; et al., *A High-Eccentricity Warm Jupiter Orbiting TOI-4127*, 2023, The Astronomical Journal
- Jackson, J. M.**; Dawson, R. I.; Quarles, B.; Dong, J., *Statistical Limits on High-eccentricity Migration from Kepler*, 2023, The Astronomical Journal
- Jackson, J. M.**; Dawson, R. I.; Shannon, A.; Petrovich, C., *Predicted Observables from Perturber-coupled High-eccentricity Tidal Migration of Warm Jupiters*, 2021, The Astronomical Journal
- Jackson, J. M.**; Dawson, R. I.; Zalesky, J., *The Origin of Kepler-419b: A Path to Tidal Migration Via Four-body Secular Interactions*, 2019, The Astronomical Journal

CO-AUTHOR PUBLICATIONS

- Dong, J.; Huang, C. X.; Zhou, G.; et al. (**including Jackson, J. M.**), *TOI-3362b: A Proto-Hot Jupiter Undergoing High-Eccentricity Tidal Migration*, 2021, The Astrophysical Journal Letters
- Udomprasert, P.; Goodman, A.; Sunbury, S.; Zhang, Z. H.; Sadler, P.; Dussault, M.; Block, S.; Lotridge, E.; **Jackson, J. M.**; Constantin, A.-M., *Visualizing Moon Phases with WorldWide Telescope*, 2014, Astronomical Society of the Pacific Conference Series [Astronomy Education Study]

PRESENTATIONS

CONTRIBUTED TALKS

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| <i>Statistical Constraints on High-eccentricity Migration of Hot Jupiters from Kepler</i> CT Exoplanet Picnic, Wesleyan University | August 2022 |
| <i>Constraints on High-eccentricity Migration of Hot and Warm Jupiters</i> Three talks at virtual exoplanet seminar series, Princeton, Yale, UCSC | Fall 2021 |
| <i>Observable Predictions from Perturber-coupled High-eccentricity Migration of Warm Jupiters</i> 52 nd Meeting of the AAS Division on Dynamical Astronomy, Virtual | May 2021 |
| <i>Perturber-driven HEM for Warm Jupiters in the Context of Known Observables</i> ERES V, Cornell University | June 2019 |
| <i>The Origin of Kepler-419b: A Path to Tidal Migration Via Four-body Secular Interactions</i> CHEXO Meeting, University of Maryland | Feb. 2019 |
| <i>The Origin of Kepler-419b: A Path to Tidal Migration Through Secular Eccentricity Modulation</i> ERES IV, Penn State University | June 2018 |
| <i>The Origin of Kepler-419b: A Path to Tidal Migration Through Secular Eccentricity Modulation</i> ERES III, Yale University | June 2017 |

POSTER PRESENTATIONS

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| <i>Hot Planets, Hot Stars: Searching for Exoplanets Transiting Bright, Hot Stars</i> 243 rd Meeting of the American Astronomical Society, New Orleans, LA [Student Poster] | January 2024 |
| <i>Observable Predictions from High-eccentricity Migration of Warm Jupiters</i> Extreme Precision Radial Velocities V, Santa Barbara, CA | March 2023 |
| <i>Perturber-driven HEM for Warm Jupiters in the Context of Known Observables</i> 235 th Meeting of the American Astronomical Society, Honolulu, HI | January 2020 |
| <i>Perturber-driven HEM for Warm Jupiters in the Context of Known Observables</i> Extreme Solar Systems IV, Reykjavik, ISL | August 2019 |
| <i>How an Additional, Undetected Perturber Could Lead to High-eccentricity Tidal Migration</i> Sagan Summer Workshop, NASA Exoplanet Science Institute | July 2018 |
| <i>The Origin of Kepler-419b: A Path to Tidal Migration Through Secular Eccentricity Modulation</i> Habitable Worlds 2017: A System Science Workshop, University of Wyoming | Nov. 2017 |
| <i>Assessing 4-body Tidal Migration in the Kepler-419 System</i> Aspen Winter Conference, Aspen Center for Physics | March 2017 |
| <i>Early Dynamical Upheaval in Planetary Systems</i> AbGradCon, University of Colorado Boulder | July 2016 |
| <i>Early Dynamical Upheaval in Planetary Systems</i> ERES II, Cornell University | June 2016 |
| <i>The Search for Mass Correlations between Globular Cluster Systems and their Host Galaxies</i> 225 th Meeting of the American Astronomical Society, Seattle, WA | January 2016 |