Tyler D. Robinson
Curriculum Vitae

Mailing Address
Northern Arizona University
Department of Physics and Astronomy
Box 6010
Flagstaff, AZ 86011-6010

Contact Information
Phone: (520)-907-8369
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Education

University of Washington (UW) 2006 - 2012
Ph.D. in Astronomy and Astrobiology (2012)
Thesis Advisor: Victoria S. Meadows

M.S. in Astronomy (2008)

University of Arizona 2002 - 2006
B.S. with Honors in Physics and Mathematics, Summa Cum Laude (2006)

Current Position

Assistant Professor
Northern Arizona University
Department of Physics and Astronomy

Previous Positions

NASA Carl Sagan Fellow
University of California, Santa Cruz
Advisor: Jonathan J. Fortney

NASA Postdoctoral Program Fellow
NASA Ames Research Center
Advisor: Mark S. Marley

Grants and Fellowships

Total: **$3.2M** —— PI: **$1.6M** —— Co-I: **$360K** —— Fellowship: **$1.2M**

NASA Habitable Worlds - Exoplanet Habitability Indicators (PI; 2019) ($570K)

NASA Exobiology - Biosignature Remote Sensing (PI; 2019) ($470K)

NASA Nexus for Exoplanet System Science (NExSS) - The Virtual Planetary Laboratory (Co-I; 2018) ($11M; $310K @ NAU)

NASA Exoplanets Research Program - Super-Earths and Mini-Neptunes (PI; 2018) ($540K)

NASA Exobiology - Miller-Urey Atmospheres (Co-I; 2018) ($540K; $50K @ NAU)

WFIRST Science Invest. Team - Starshade Considerations (Science PI; 2016) ($100K)

WFIRST Science Invest. Team - Optimizing WFIRST Coronagraph Science (Co-I; 2015) ($1.1M)

Sagan Fellowship (2015–2018) ($310K)

NSF Astronomy and Astrophysics Postdoctoral Fellowship (declined) (2015) ($270K)

Simons Collaboration on the Origins of Life Fellowship (declined) (2015) ($210K)

NASA Nexus for Exoplanet System Science (NExSS) - Habitability of Solar System Rocky Planets through Time (Co-I; 2014) ($6.5M)

NASA Postdoctoral Program Fellowship (2013–2015) ($145K)

NSF Astronomy and Astrophysics Postdoctoral Fellowship (declined) (2013) ($270K)

NASA Astrobiology Institute Cooperative Agreement Notice 6 - The Virtual Planetary Laboratory (Co-I; 2012) ($10M)

Honors and Awards

Association of College and University Educators Certificate in Effective Teaching Practices (2019)

Member of U.S. delegation to Lindau Nobel Laureate Meeting (2015)

Excellence in reviewing award from *Earth, Planets, and Space* (2014)

Science Communication Fellow, Pacific Science Center (2009–2013)

Ongoing Service

NASA Science and Technology Definition Team for HabEx mission concept (2016–2019)

Exoplanet science team member for LUVOIR and Origins mission concepts (2016–2019)

Previous Service

Reviewer for *Nature*, *Science*, *Icarus*, *Geophysical Research Letters*, *Astronomy and Astrophysics*, *Astrobiology*, *Earth, Planets, and Space*, *Advances in Space Research*, and *Planetary and Space Science*

NASA Exoplanet Exploration Program Analysis Group (ExoPAG) Exec. Committee (2016–2019)

Session Co-Planner for "Characterizing Exoplanet Habitability and Life with Future Observatories" at the Astrobiology Science Conference (2019)

Session Co-Planner and Chair for "Bridging Modeling and Observations in the Search for Habitable Worlds" at the Astrobiology Science Conference (2017)

Contributing author to Stapelfeldt, K. R., et al., "Exo-C: Imaging Nearby Worlds," final mission study report for NASA's Exoplanet Exploration Program (2015)

Contributor to Seager, S., et al., "Exo-S: Starshade Probe-Class," final mission study report for NASA's Exoplanet Exploration Program (2015)

Leading author and co-editor for NASA Astrobiology's Strategic Plan (2013–2015)

Session Co-Organizer and Co-Chair for "The Diversity of Worlds: Exoplanets and Habitability" at the Astrobiology Science Conference (2015)

Session Co-Chair for "Exoplanet Atmosphere Theory" at the Division of Planetary Sciences meeting (2013)

Chapter reviewer for the Space Science Series from the University of Arizona Press (2013)

Session Co-Chair for "Exoplanet Habitability" at the Astrobiology Science Conference (2012)

Mentoring & Advising

Amber Britt, Ph.D. student, NAU (primary advisor)

James Windsor, Ph.D. student, NAU (primary advisor)

Colin O. Chandler, Ph.D. student & NSF GRFP Fellow, NAU (co-primary advisor)

Chris Wolfe, Ph.D. student, NAU (co-primary advisor)

Megan Gialluca, undergraduate & Goldwater Scholar, NAU (current research advisor)

Anna Ross, undergraduate, NAU (current research advisor)

Juan Tolento, undergraduate, Cal Poly (REU mentor; 1 paper published)

Y. Katherina 'Kat' Feng, Ph.D. candidate, UC Santa Cruz (Kavli student, 1 paper published)

Alfredo Calderon, undergraduate, Humboldt State (Lamat Program, 1 poster presented)

Zafar Rustamkulov, undergraduate, UC Santa Cruz (Lamat Program, 1 poster presented)

Michael Nayak, Ph.D., UC Santa Cruz (1 paper submitted, currently with US Air Force)

Edward J. Schwieterman, Ph.D., UW (2 papers published, currently NPP Fellow)

Tiffany Jansen, B.S., UW (1 paper published, currently SDSS engineering asst.)

Brianna Lacy, B.S., UW (1 paper published, currently Princeton graduate student)

Teaching

Primary Instructor, AST183 "Life in the Universe" (NAU, 2019)

Primary Instructor, AST510 "Exoplanets" (NAU, 2018)

Primary Instructor, AST599 "Graduate Fellowship Writing" (NAU, 2018)

Primary Instructor, AST595 "Planet Formation, Evolution, and Habitability" (NAU, 2017)

Instructor and Coordinator, ASTR 599 "Astrobiology Seminar" (UW, 2012)

Instructor, ASTR 599 "Communicating Science to the Public Effectively" (UW, 2011)

Editor and Contributing Author to *The Astrobiology Activities Manual*, a suite of hands-on exercises for an introductory course on astrobiology (2009)

Instructor, ASTR 190 "Astronomy and Astrobiology" (UW, 2009)

Co-Instructor, ASTBIO 115 "Introduction to Astrobiology" (UW, 2009)

Public Outreach

Presenter and department co-representative to Flagstaff Lunar Legacy kick-off event (2018)

Co-Director and advisor for "Engage," a program to educate and involve graduate students in public outreach (2011-present)

Presenter to "NASA Social" event at Astrobiology Science Conference (2017)

Co-Organizer of "UW Science Now," a public lecture series at Seattle Town Hall (2011-2013)

Science Cafe presentation in local pub and on local PBS station, "Exoplanets: Out of our Solar System and Out of this World" (2012)

Invited Talks

"Characterizing Exoplanet Atmospheres and Biosignatures," Sagan Summer Symposium, Pasadena, CA, July 2019

"HabEx: The Habitable Exoplanet Observatory," American Astronomical Society, Seattle, WA, January 2019

"Characterizing Exo-Earths with Coronagraphy," High Dispersion Coronagraphy Conference, Caltech, CA, June 2018

"Are We Alone? Habitable Planets and Biosignatures," American Astronomical Society, National Harbor, MD, January 2018

"Characterizing Exoplanet Habitability with Emission Spectroscopy," American Astronomical Society, National Harbor, MD, January 2018

"Astronomy and Life's Origins: From Specks to Special," Gordon Research Seminar (Origin of Life), Galveston, TX, January 2016

"Completely Colorblind: Advances in Gray Techniques and Applications to Planets Near and Far," Comparative Climatology of Terrestrial Planets II, NASA Ames Research Center, CA, September 2015

"Strengths and Limitations of Reflected-light Observations of the Pale Blue Dot," Earth-Life Science Institute Symposium, Tokyo, Japan, January 2015

"So you want to find an exoplanet and say something about its habitability," Astrobiology Science Conference, Atlanta, GA, April 2012

Academic Seminars

"Characterizing Exoplanets with Next Generation Space Telescopes", The Ohio State University Astronomy Seminar, Columbus, OH, March 2017

"Studying Earth-like Exoplanets with Next-Gen Space Telescopes", UC Riverside Joint Earth Sciences and Astro Seminar, Riverside, CA, December 2016

"Characterizing Exoplanets Atmospheres", UW Madison Atmospheric Sciences Seminar, Madison, WI, October 2016

"Characterizing Exoplanets in Reflected Light with Next Generation Space Telescopes", Yale Astronomy Seminar, New Haven, CT, September 2016

"A 0.1 bar Tropopause Rule", UC Santa Cruz IGPP Seminar, Santa Cruz, CA, February 2015

"Titan in Transit", University of Washington Astronomy Lunch Seminar, Seattle, WA, June 2014

"Transit Spectra of a Definitively Hazy World", Bay Area Exoplanet Meeting, SETI, June 2014

"Brown Dwarf Atmospheres: Observations, Variability, and Outstanding Questions", Division Seminar, Ames Research Center, April 2014

"Exploring Earth as an Exoplanet", Goddard Space Flight Center, Greenbelt, MD, March 2014

"A '0.1 bar Tropopause Rule' in Thick Atmospheres of Planets and Large Moons", Extrasolar Planet Seminar, Goddard Space Flight Center, March 2014

"Understanding the Pale Blue Dot", Defense talk, UW, August 2012

"Understanding Temperature Profiles in Planetary Atmospheres of the Solar System and Beyond", UW Atmospheric Sciences colloquium, UW, May 2012 (co-delivered with D. C. Catling)

"Understanding the Pale Blue Dot: From Galileo to EPOXI", UCSC Planetary Lunch & NASA Ames Special Seminar, CA, May 2012

"Temperature Profiles in Planetary Atmospheres: What the Solar System Can Teach Us About Exoplanets", UW Astrobiology Program research rotation talk, UW, November 2011

"Understanding the Pale Blue Dot: From Galileo to EPOXI", Yuk Lunch talk, Caltech, October 2011

"Once in a Pale Blue Dot: Simulated Observations of an Extrasolar Earth-Moon System", UW Astrobiology Program student orientation talk, UW, October 2011

"The Search for Other Earths Begins at Home", LSST lunch talk, UW, June 2011

"Once in a Pale Blue Dot: Modeling the Spectrum of an Unresolved Earth-Moon System", Planetaryum talk, UW, December 2010

"Detecting Oceans on Extrasolar Planets", UW Astrobiology Program student orientation talk, UW, October 2010

"Earth as an Extrasolar Planet", presentation to NASA Astrobiology Institute's Executive Council, UW, February 2010

"Earth as an Extrasolar Planet: Modeling EPOXI Earth Observations", Goddard Space Flight Center, Greenbelt, MD, January 2010

"Earth as an Extrasolar Planet: The Virtual Planetary Laboratory's 3-D Spectral Earth Model", Planetaryum talk, UW, December 2009

"Modeling Earth as an Extrasolar Planet", UW Astrobiology In-House Seminar, UW, June 2009

Tyler D. Robinson
Publications

Refereed Publications Total: **45** —— 1st author: **14** —— 2nd author: **6** —— h-index: **28**[1]

2019

Tolento, J. P., and **Robinson, T. D.** 2019, "A simple model for radiative and convective fluxes in planetary atmospheres," *Icarus*, 329, 34 (arXiv:1808.00579)

Chandler, C. O., and 5 co-authors (including **T. D. Robinson**) 2019, "Six Years of Sustained Activity in (6478) Gault," *ApJL*, 877, L12

Glenar, D. A., Stubbs, T. J., Schwieterman, E. W., **Robinson, T. D.**, and Livengood, T. A. 2019, "Earthshine as an illumination source at the Moon," *Icarus*, 321, 841

2018

Robinson, T. D., and Crisp, D. 2018, "Linearized Flux Evolution (LiFE): A technique for rapidly adapting fluxes from full-physics radiative transfer models," *JQSRT*, 211, 78 (arXiv:1803.02378)

Robinson, T. D. 2018, "Characterizing Exoplanets for Habitability," *Handbook of Exoplanets*, Springer International (arXiv:1701.05205)

Lustig-Yaeger, J., and 6 co-authors (including **T. D. Robinson**) 2018, "Detecting Ocean Glint on Exoplanets Using Multiphase Mapping," *AJ*, 156, 301 (arXiv:1901.05011)

Lincowski, A. P., and 6 co-authors (including **T. D. Robinson**) 2018, "Evolved Climates and Observational Discriminants for the TRAPPIST-1 Planetary System," *ApJ*, 867, 76 (arXiv:1809.07498)

Farr, B., Farr, W. B., Cowan, N. B., Haggard, H. M., and **Robinson, T. D.**, "exocartographer: A Bayesian Framework for Mapping Exoplanets in Reflected Light," *AJ*, 156, 146 (arXiv:1802.06805)

Gaudi, B. S., and 7 co-authors (including **T. D. Robinson**) 2018, "The Habitable Exoplanet Observatory (HabEx)," *Proc SPIE*, 10698, 106980P

Catling, D. C., and 7 co-authors (including **T. D. Robinson**) 2018, "Exoplanet Biosignatures: A Framework for Their Assessment," *Astrobiology*, 18, 709 (arXiv:1705.06381)

2017

Robinson, T. D., Fortney, J. S., and Hubbard, W. B. 2017, "Analytic Scattering and Refraction Models for Exoplanet Transit Spectra," *ApJ*, 850, 128 (arXiv:1711.01278)

Robinson, T. D. 2017, "A Theory of Exoplanet Transits with Light Scattering," *ApJ*, 836, 236 (arXiv:1701.05564)

Trilling, D. E., **Robinson, T. D.**, et al. 2017, "Implications for planetary system formation from Interstellar object 1I/2017 U1 ('Oumuamua)," *ApJL*, 850, L38 (arXiv:1711.01344)

Morley, C. V., and 4 co-authors (including **T. D. Robinson**) 2017, "Observing the Atmospheres of Known Temperate Earth-sized Planets with JWST," *ApJ*, 850, 121 (arXiv:1708.04239)

Roberge, A., and 12 co-authors (including **T. D. Robinson**) 2017, "Finding the Needles in the Haystacks: High-Fidelity Models of the Modern and Archean Solar System for Simulating Exoplanet Observations," *PASP*, 129, 124401 (arXiv:1710.06328)

Nayak, M.. and 5 co-authors (including **T. D. Robinson**) 2017, "Atmospheric Retrieval for Direct Imaging Spectroscopy of Gas Giants in Reflected Light II: Orbital Phase and Planetary Radius," *PASP*, 973, 034401 (arXiv:1612.00342)

[1] See: http://scholar.google.com/citations?user=X7rYp8EAAAAJ

Arney, G. N., and 7 co-authors (including **T. D. Robinson**) 2017, "Pale Orange Dots: The Impact of Organic Haze on the Habitability and Detectability of Earthlike Exoplanets," *ApJ*, 836, 49 (arXiv:1702.002994)

Gao, P., Marley, M. S., Zahnle, K., **Robinson, T. D.**, and Lewis, N. K. 2017, "Sulfur Hazes in Giant Exoplanet Atmospheres: Impacts on Reflected Light Spectra," *AJ*, 153, 139 (arXiv:1701.00318)

Meadows, V. S., and 13 co-authors (including **T. D. Robinson**) 2017, "The Habitability of Proxima Centauri b: II: Environmental States and Observational Discriminants," *Astrobiology*, in review (arXiv:1608.08620)

2016 **Robinson, T. D.**, Stapelfeldt, K. R., and Marley, M. S. 2016, "Characterizing Rocky and Gaseous Exoplanets with 2-meter Class Space-based Coronagraphs: General Considerations," *PASP*, 128, 025003 (arXiv:1507.00777)

Stark, C. C. and 11 co-authors (including **T. D. Robinson**) 2016, "A Direct Comparison of ExoEarth Yields for Starshades and Coronagraphs," *SPIE*, 9904, 99041U

2015 **Robinson, T. D.** 2015. "Completely Colorblind: Advances in Gray Techniques and Applications to Planets Near and Far," *Proceedings from Comparative Climates of Terrestrial Planets II.* (arXiv:1511.03288)

Marley, M. S., and **Robinson, T. D.** 2015, "On the Cool Side: Modeling the Atmospheres of Brown Dwarfs and Giant Planets," *ARAA*, 53, 279 (arXiv:1410.6512)

Schwieterman, E. W., **Robinson, T. D.**, Meadows, V. S., et al. 2015, "Detecting and Constraining N_2 Abundances in Planetary Atmospheres Using Collisional Pairs," *ApJ*, 810, 57 (arXiv:1507.07945)

Gao, P., Hu, R., **Robinson, T. D.**, Li, C., Yung, Y. L. 2015, "Stability of CO_2 Atmospheres on Desiccated M Dwarf Exoplanets," *ApJ*, 806, 249 (arXiv:1501.06876)

Agol, E., Jansen, T., Lacy, B., **Robinson, T. D.**, and Meadows, V. S. 2015, "The Center of Light: Spectroastrometric Detection of Exomoons," *ApJ*, 812, 5 (arXiv:1509.01615)

2014 **Robinson, T. D.**, Maltagliati, L., Marley, M. S., and Fortney, J. J. 2014, "Titan solar occultation observations reveal transit spectra of a hazy world," *PNAS*, 111, 9042 (arXiv:1406.3314)

Robinson, T. D., Ennico, K., Meadows, V. S., et al. 2014, "Detection of Ocean Glint and Ozone Absorption Using LCROSS Earth Observations," *ApJ*, 787, 2 (arXiv:1405.4557)

Robinson, T. D., and Marley, M. S. 2014, "Temperature Fluctuations as a Source of Brown Dwarf Variability," *ApJ*, 785, 158 (arXiv:1403.2438)

Robinson, T. D., and Catling, D. C. 2014, "Common 0.1 bar Tropopause in Thick Atmospheres Set by Pressure-Dependent Infrared Opacity," *Nature Geoscience*, 7, 12 (arXiv:1312.6859)

Stark, C. C., Roberge, A., Mandell, A., and **Robinson, T. D.** 2014, "Maximizing the ExoEarth Candidate Yield from a Future Direct Imaging Mission," *ApJ*, 795, 122 (arXiv:1409.5128)

Arney, G. and 5 co-authors (including **T. D. Robinson**) 2014, "Spatially-resolved measurements of H_2O, HCl, CO, OCS, SO_2, cloud opacity, and acid concentration in the Venus near-infrared windows," *JGR*, 119, 1860 (link)

Domagal-Goldman, S., and 4 co-authors (including **T. D. Robinson**) 2014, "Abiotic Ozone and Oxygen in Atmospheres Similar to Prebiotic Earth," *ApJ*, 792, 90 (arXiv:1407.2622)

Shields, A. L., and 4 co-authors (including **T. D. Robinson**) 2014, "Spectrum-driven Planetary Deglaciation due to Increases in Stellar Luminosity," *ApJ*, 785, L9 (arXiv:1403.3695)

Ramirez, R. M., and 6 co-authors (including **T. D. Robinson**) 2014, "Warming early Mars with CO_2 and H_2," *Nature Geosciences*, 7, 59 (arXiv:1405.6701)

2013

Goldblatt, C., **Robinson, T. D.**, Zahnle, K. J., and Crisp, D. 2013, "Low Simulated Radiation Limit for Runaway Greenhouse," *Nature Geoscience*, 6, 661 (link)

Kopparapu, R. K., and 9 co-authors (including **T. D. Robinson**) 2013, "Habitable Zones around Main Sequence Stars: New Estimates," *ApJ* 765, 131 (arXiv:1301.6674)

Shields, A. L., and 5 co-authors (including **T. D. Robinson**) 2013, "The Effect of Host Star Spectral Energy Distribution and Ice-Albedo Feedback on the Climate of Extrasolar Planets," *Astrobiology*, 13, 715 (arXiv:1305.6926)

2012

Robinson, T. D., and Catling, D. C. 2012, "An Analytic Radiative-Convective Model for Planetary Atmospheres," *ApJ*, 757, 104 (arXiv:1209.1833)

2011

Robinson, T. D. 2011, "Modeling the Infrared Spectrum of the Earth-Moon System: Implications for the Detection and Characterization of Earthlike Planets and their Moonlike Companions," *ApJ*, 741, 51 (arXiv:1110.3744)

Robinson, T. D., Meadows, V. S., Crisp, D., et al. 2011, "Earth as an Extrasolar Planet: Earth Model Validation Using EPOXI Earth Observations," *Astrobiology*, 11, 393 (issue cover) (link)

Cowan, N. B., **Robinson, T. D.**, Livengood, T. A., et al. 2011, "Rotational Variability of Earth's Polar Regions: Implications for Detecting Snowball Planets," *ApJ*, 731, 76 (arXiv:1102.4345)

Livengood, T. A., and 10 co-authors (including **T. D. Robinson**) 2011, "Properties of an Earth-Like Planet Orbiting a Sun-Like Star: Earth Observed by the EPOXI Mission," *Astrobiology*, 11, 907 (link)

Crow, C. A., McFadden, L. A., **Robinson, T. D.**, et al. 2011, "Views from EPOXI: Colors in Our Solar System as an Analog for Extrasolar Planets," *ApJ*, 729, 130 (link)

2010

Robinson, T. D., Meadows, V. S., and Crisp, D. 2010, "Detecting Oceans on Extrasolar Planets Using the Glint Effect," *ApJL*, 721, L67 (arXiv:1008.3864)

2009

Cowan, N. B., Agol, E., Meadows, V. S., **Robinson, T. D.**, et al. 2009, "Alien Maps of an Ocean-bearing World," *ApJ*, 700, 915 (arXiv:0905.3742)

Conference Publications (Oral)

Robinson, T. D., and the HabEx Science and Technology Definition Team. "HabEx: The Habitable Exoplanet Observatory," American Astronomical Society, Seattle, WA, January 2019

Robinson, T. D. "Constraining Exoplanet Habitability with Future Space Telescopes," American Geophysical Union, Washington, D.C., December 2018

Feng, Y. K., **Robinson, T. D.**, and Fortney, J. J. "Characterizing Earth Analogs in Reflected Light: Information Content from the Ultraviolet Through the Near-Infrared," Comparative Climatology of Terrestrial Exoplanets III, Houston, TX, August 2018

Robinson, T. D. "Charactering Exo-Earths with Coronagraphy," High Dispersion Coronagraphy Conference, Caltech, CA, June 2018

Robinson, T. D. "Are We Alone? Habitable Planets and Biosignatures," American Astronomical Society, National Harbor, MD, January 2018

Robinson, T. D. "Characterizing Exoplanet Habitability with Emission Spectroscopy," American Astronomical Society, National Harbor, MD, January 2018

Robinson, T. D. , and Domagal-Goldman, S. "Characterizing Exoplanets with HabEx," American Astronomical Society, National Harbor, MD, January 2018

Robinson, T. D. "Characterizing Exoplanet Habitability with Space-Based Telescopes," Astrobiology Science Conference, Phoenix, AZ, April 2017

Robinson, T. D., Marley, M. S., and Stapelfeldt, K. "WFIRST Instrument Modeling and Filter Selection," STScI WFIRST / High Contrast Imaging in Space Workshop, Baltimore, MD, November 2016

Robinson, T. D., and Fortney, J. F. "Light Scattering in Exoplanet Transits," Division of Planetary Sciences, Pasadena, CA, October 2016

Robinson, T. D., Stapelfeldt, K., and Marley, M. S. "Characterizing Exoplanets with 2-meter Class Space-based Coronagraphs," American Geophysical Union, San Francisco, CA, 2015

Robinson, T. D., Marley, M. S., Ackerman, A. S., and Fortney, J. J. "Towards Modeling Dynamic Clouds in Brown Dwarf Atmospheres," Bay Area Exoplanet Meeting, Mountain View, CA, September 2015

Robinson, T. D., Meadows, V. S., et al. "LCROSS Observes Ocean Glint from Earth," Astrobiology Science Conference, Chicago, IL, June 2015

Robinson, T. D., Maltagliati, L., Marley, M. S., and Fortney, J. J. "Titan Reveals Transit Spectra of a Definitively Hazy World," American Astronomical Society, Seattle, WA, January 2015

Robinson, T. D., Maltagliati, L., Marley, M. S., and Fortney, J. J. "Titan Reveals Transit Spectra of a Definitively Hazy World," Division of Planetary Sciences, Tucson, AZ, November 2014

Robinson, T. D., and Catling, D. C. "A '0.1 bar Tropopause Rule' for Thick Atmospheres of Planets and Large Moons," Lunar and Planetary Science Conference, The Woodlands, TX, March 2013

Robinson, T. D., and Meadows, V. S. "Once in a Pale Blue Dot: Simulated Observations of an Extrasolar Earth-Moon System," American Geophysical Union, San Francisco, CA, December 2011

Robinson, T. D. "Once in a Pale Blue Dot: Simulated Observations of an Extrasolar Earth-Moon System," Astrobiology Graduate Conference, Bozeman, MT, June 2011

Robinson, T. D. "The Strange World We Call Home: Earth in the Context of an Exoplanet," Strange New Worlds, Flagstaff, AZ, May 2011

Robinson, T. D., Meadows, V. S., Crisp, D. "Detecting Oceans on Extrasolar Planets," Astrobiology Science Conference, League City, TX, April 2010

Robinson, T. D., Meadows, V. S., et al. "Modeling Earth as an Extrasolar Planet: The VPL Earth Model Validated Against EPOXI Observations," Division of Planetary Sciences, Fajardo, PR, October 2009

Robinson, T. D., Meadows, V. S., et al. "Simulating Earth as an Extrasolar Planet," Division of Planetary Sciences, Ithaca, NY, October 2008

Conference Publications (Poster)

Chandler, C. O., and **Robinson, T. D.**, "Efficient Atmospheric Model Equilibrium Searching and Assessment," Comparative Climatology of Terrestrial Exoplanets III, Houston, TX, August 2018

Robinson, T. D. "Characterizing Exoplanet Habitability with HabEx," American Astronomical Society, National Harbor, MD, January 2018

Robinson, T. D., and Catling, D. C. "A 0.1 bar Rule for Tropopause Temperature Minima in Thicks Atmospheres of Planets and Large Moons," Exoclimes III, Davos, Switzerland, February 2014

Robinson, T. D., Meadows, V. S., and Crisp, D. "Exploring Earth as an Exoplanet," American Geophysical Union, San Francisco, CA, December 2013 (**invited**)

Robinson, T. D., and Catling, D. C. "An Analytic Radiative-Convective Model for Planetary Atmospheres," American Geophysical Union, San Francisco, CA, December 2012

Robinson, T. D., Meadows, V. S., Catling, D. C., and Crisp, D. "Towards a Modeling Hierarchy: Two New General-Purpose, 1-D Planetary Climate Models," Astrobiology Science Conference, Atlanta, GA, April 2012

Robinson, T. D., Meadows, V. S., and Agol, E. "Simulated Observations of an Extrasolar Earth-Moon System," Exoclimes, Aspen, CO, January 2012

Robinson, T. D., and Meadows, V. S. "Astrobiology from
Earth-Sun L1," American Geophysical Union, San Francisco, CA, December 2011

Robinson, T. D., Meadows, V. S., and Agol, E. "Once in a Pale Blue Dot: Simulated Observations of an Extrasolar Earth-Moon System," Origins, Montpellier, FR, July 2011

Robinson, T. D., Meadows, V. S., Crisp, D. "Earth as an Extrasolar Planet," Division of Planetary Sciences, Pasadena, CA, October 2010

Robinson, T. D. "Simulating Earth as an Extrasolar Planet," Exoclimes, Exeter, UK, September 2010

Robinson, T. D., Meadows, V. S., and Crisp, D. "Earth as an Extrasolar Planet," Revisiting the Habitable Zone workshop, Seattle, WA, August 2010

Robinson, T. D., Anderson, R. E., and Meadows, V. S. "A Suite of Activities Developed for an Introductory Astrobiology Course for non-Science Majors," Astrobiology Graduate Conference, Seattle, WA, July 2009

Robinson, T. D., Meadows, V. S., Deming, D., and Crisp, D. "Simulating EPOXI Full-Disk Earth Data: Do the Models Stick to the Observations?" Astrobiology Graduate Conference, Santa Clara, CA, April 2008

References

Professor Jonathan J. Fortney
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Dr. Mark S. Marley
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Moffett Field, CA 94035
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Professor Victoria S. Meadows
Department of Astronomy
University of Washington
Box 351580
Seattle, WA 98195-1580
(206) 543-0206
vsm@astro.washington.edu