

CURRICULUM VITAE

Jonathan J. Fortney

OFFICE ADDRESS:

Department of Astronomy & Astrophysics
University of California, Santa Cruz
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Santa Cruz, CA 95064

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CURRENT POSITION:

July 2015-present:
Professor, Department of Astronomy & Astrophysics, University of California, Santa Cruz
Director, Other Worlds Laboratory (OWL)

PREVIOUS RESEARCH POSITIONS:

July 2011-June 2015, Associate Professor, Department of Astronomy and Astrophysics,
University of California, Santa Cruz
January 2008-June 2011, Assistant Professor, Department of Astronomy and Astrophysics,
University of California, Santa Cruz

POSTDOCTORAL POSITIONS:

August 2006-December 2007, *Spitzer* Fellow, NASA Ames Research Center and Principal
Investigator, Carl Sagan Center, the SETI Institute, Advisor: Mark S. Marley
March 2004-July 2006, National Research Council (NRC) Postdoctoral Fellow, NASA Ames
Research Center, Advisor: Mark S. Marley

EDUCATION:

2004 – Ph.D., Planetary Sciences, University of Arizona
Dissertation Title: “The Evolution of Giant Planets,” Advisor: William B. Hubbard
1999 – B.S., Physics, Iowa State University, with Distinction and Honors Program

MAJOR FIELDS OF INTEREST:

Atmospheres and spectra of rocky and gas giant exoplanets, super Earth and giant planet
thermal evolution, planetary interiors, exoplanet characterization through transit photometry
and direct imaging, formation of giant planets, atmospheres and evolution of low mass stars
and brown dwarfs, stellar abundances

HONORS and AWARDS:

2020, Paolo Farinella Prize
2018, National Finalist, Blavatnik Award for Young Scientists
2017, Ahrens Lecture, Geologic and Planetary Sciences, California Institute of Technology
2016, Yuval Ne’eman Distinguished Lectures in Geophysics, Atmospheric, and Space
Sciences, Tel Aviv University
2015, 2013, 2008, Kavli Fellow, National Academy of Sciences
2010, Urey Prize, American Astronomical Society, Division for Planetary Sciences
2010, Alfred P. Sloan Research Fellowship
2006, NASA Early Career Fellowship in Planetary Sciences

COLLOQUIA and SEMINARS:

- NASA Jet Propulsion Laboratory, 5/2020
- Harvard/Smithsonian Center for Astrophysics, 3/2020
- Leiden Observatory, 1/2020
- University of Amsterdam, Department of Astronomy, 1/2020
- University of Texas, Department of Astronomy, 10/2019
- NASA Ames Research Center, Space Science Division, 5/2019
- Stanford University, KIPAC, 2/2019
- NASA Goddard, Astrophysics Science Division, 11/2018
- University of Maryland, Department of Astronomy, 11/2018
- ETH-Zurich, 9/2018
- University of Zurich, Department of Physics, 9/2018
- Geneva Observatory, 8/2018
- University of Bern, Center for Exoplanets and Habitable Worlds, 8/18
- Canadian Institute for Theoretical Astrophysics (CITA), 5/2018
- UCLA, Department of Earth, Planetary, and Space Sciences, 5/2018
- UCLA, Astronomy Division, 5/2018
- Georgia Tech, Department of Earth and Planetary Sciences, 1/2018
- California Institute of Technology, Geologic and Planetary Sciences Division, 11/17
- Boston University, Center for Space Physics, 2/2017
- Harvard-Smithsonian Center for Astrophysics, Division of Solar, Stellar, and Planetary Science, 2/2017
- Tel Aviv University, Dept. of Geophysics, Atmospheric, and Space Sciences, 12/2016
- NASA Nexus for Exoplanet Systems Science (NExSS), 10/2016
- University of Nevada, Las Vegas, Department of Physics and Astronomy, 9/2016
- NASA Jet Propulsion Laboratory, 5/2016
- California Institute of Technology, Department of Astronomy, 5/2016
- MIT, Department of Earth, Atmospheric, and Planetary Sciences, 4/2016
- Harvard-Smithsonian CfA, Division of Solar, Stellar, and Planetary Science, 4/2016
- SOFIA Science Center, NASA Ames Research Center, 11/2015
- Johns Hopkins University, Department of Physics and Astronomy, 4/2015
- University of Toronto, Centre for Planetary Sciences, 1/2015
- University of Chicago, Department of Geophysical Sciences, 8/2014
- University of Washington, Astrobiology Program, 5/2014
- McMaster University, Origins Institute, 1/2014
- Wartburg College, Department of Physics, 9/2013
- Grinnell College, Department of Physics, 9/2013
- Iowa State University, Department of Physics and Astronomy, 9/2013
- California Polytechnic State University, Department of Physics, 4/2013
- The SETI Institute, 4/2013
- California Institute of Technology, Division of Geological and Planetary Sciences, 3/2013
- Institute for Advanced Study, 11/2012
- University of Arizona, Theoretical Astrophysics Program, 4/2012
- McGill University, Department of Physics, 2/2012
- Yale University, Department of Astronomy, 11/2011
- Yale University, Department of Geology & Geophysics, 11/2011

- University of Washington, Department of Astronomy, 10/2011
- IAP, Paris, 9/2011
- Cambridge University, Institute of Astronomy, 9/2011
- Fermilab, 6/2011
- California Institute of Technology, Division of Geological and Planetary Sciences, 4/2011
- University of Central Florida, Department of Physics, 4/2011
- University of Florida, Department of Astronomy, 4/2011
- Space Telescope Science Institute, 3/2011
- University of Colorado, Department of Astrophysical and Planetary Sciences, 2/2011
- Cornell University, Department of Astronomy, 4/2010
- Arizona State University, School of Earth and Space Exploration, 3/2010
- University of Minnesota, Department of Astronomy, 3/2010
- University of Arizona, Department of Planetary Sciences, 2/2010
- Harvard-Smithsonian CfA, Institute for Theory and Computation, 2/2010
- Texas A&M University, Department of Physics & Astronomy, 12/2009
- Sonoma State University, Department of Physics, 11/2009
- UCLA, Institute for Geophysics and Planetary Physics, 5/2009
- University of Hawaii, Astrobiology Institute, 3/2009
- University of Arizona, Department of Planetary Sciences, 2/2009
- University of California, Santa Cruz, Department of Earth & Planetary Sciences, 11/2008
- Ohio State University, Department of Astronomy, 10/2008
- University of Virginia, Department of Astronomy, 2/2008
- Michigan State University, Department of Physics & Astronomy, 9/2007
- Carnegie Institution of Washington, Department of Terrestrial Magnetism, 3/2007
- University of California, Berkeley, Center for Integrative Planetary Science, 3/2007
- University of California, Santa Cruz, Department of Astronomy & Astrophysics, 1/2007
- University of California, Santa Cruz, Department of Astronomy & Astrophysics, 11/2006
- Lawrence Livermore National Laboratory, Inst. for Geophys. & Planetary Phys., 10/2006
- The SETI Institute, 8/2006
- Harvard University, Department of Earth and Planetary Sciences, 3/2006
- MIT, Department of Earth, Atmospheric, and Planetary Sciences, 2/2006
- University of British Columbia, Department of Physics and Astronomy, 2/2006
- University of Florida, Department of Astronomy, 1/2006
- San Francisco State University, Department of Physics and Astronomy, 11/2005
- Harvard-Smithsonian CfA, Division of Solar, Stellar, and Planetary Science, 9/2005
- NASA Ames Research Center, Space Science and Astrobiology Division 4/2005
- UCLA, Institute for Geophysics and Planetary Physics, 2/2005
- SOFIA Science Center, NASA Ames, 10/2004
- Observatoire de la Cote d'Azur, Nice, France, 4/2004
- American Museum of Natural History, Astronomy and Astrophysics Division, 9/2003
- NASA Ames Research Center, Space Science and Astrobiology Division, 11/2002
- Lawrence Livermore National Laboratory, 11/2002

INVITED CONFERENCE TALKS:

- Interior Structure and Energy Balance of Uranus and Neptune, 2020, Future Exploration of the Ice Giants
- 51 Pegasi b Science Summit, 2019, The Next Decade of Exoplanets

- Exoplanet Exploration Program Analysis Group (ExoPAG), 2019. Laboratory Needs for Exoplanetary Atmospheres
- National Academy of Sciences, Chemistry Roundtable, 2018, Laboratory Needs for Exoplanetary Atmospheres
- 51 Pegasi b Science Summit, 2018, The Future of Giant Planet Science
- Astrophysical Frontiers in the Next Decade and Beyond, 2018, Exoplanet Atmospheres
- Exoplanets and Planet Formation (Shanghai), 2017, Structure of Giant Exoplanets
- MESA Summer School, 2017, Thermal Evolution of Giant Planets
- Advanced School on Exoplanetary Science, 2017, Exoplanetary Atmospheres
- High Energy Density Laboratory Astrophysics, 2016, Interiors of Giant Planets
- Exoplanets in the Era of Extremely Large Telescopes, 2016. Planetary Thermal Evolution
- Opportunity M: Small Planets around Small Stars, 2016. How Theorists Model Clouds & Hazes in Exo-Atmospheres
- High Energy Density Laboratory Astrophysics, Nine, 2016. Interior Structure of Planets
- Planetary Systems: A Synergistic View, 2015. Understanding Giant Planets from Exoplanet Spectra
- In the Spirit of Lyot, 2015. Exoplanet Atmospheres
- Physics of Exoplanets: From Earth-sized to Mini-Neptunes, 2015. Atmospheres and Interiors of Sub-Neptune Planets
- Exoplanets with JWST-MIRI, 2014. Planetary Atmosphere Modeling
- Saturn in the 21st Century, 2014. Interior Structure of Saturn
- Sagan Exoplanet Summer Workshop, 2014. Thermal Evolution of Giant & Rocky Planets
- Goldschmidt Conference, 2014, Exoplanet Atmospheres
- Exoclimates III: The Diversity of Planetary Atmospheres, 2014. Model Exoplanet Spectra
- Transiting Planets and JWST Workshop, 2014. Atmosphere of Gas Giant Planets
- Protostars and Planets VI, 2013. Interior Structure of Planets
- International Astronomical Union Symposium #299, 2013. Highlights of Exoplanet Characterization
- Exoplanet Exploration Program Analysis Group (ExoPAG) 6, 2012. Characterizing Transiting Planet Atmospheres: A Modeling Perspective
- Physics of Non-Ideal Plasmas 14, 2012. The Structure of Giant Planets
- Sagan Exoplanet Summer Workshop, 2012. Giant Planet Interiors
- The Origins of Stars and Their Planetary Systems, 2012. The Structure of Transiting Planets
- Exploring Giant Planets at the National Ignition Facility (NIF), 2011. Interior Structure of Exoplanets
- International Workshop on Warm Dense Matter, 2011. Interior Structure and Evolution of Giant Planets
- Exploring Strange New Worlds, 2011. Atmospheres of Earths and Super Earths
- 7th International School of Planetary Sciences, 2011. Structure and Evolution of Giant Planets
- Exploring Giant Planets at the National Ignition Facility (NIF), 2010. Exoplanets and Hydrogen and Helium Under High Pressure
- Division for Planetary Sciences of the AAS, 2010. Urey Prize Lecture: Characterizing Exoplanet Atmospheres
- Exoclimates: Exploring the Diversity of Planetary Atmospheres, 2010. Exoplanet Model Atmospheres Confronted with Data

- Sagan Exoplanet Summer Workshop: Stars as Homes for Habitable Planetary Systems, 2010. Planetary Interiors
- Sagan Exoplanet Summer Workshop: Planetary Atmospheres, 2009. Orbital Phase Observations of Exoplanets
- Sagan Exoplanet Summer Workshop: Planetary Atmospheres, 2009. The Warm Spitzer Mission
- Sagan Exoplanet Summer Workshop: Planetary Atmospheres, 2009. The Kepler Mission
- Kavli Frontiers of Science, National Academy of Sciences, 2008. Characterizing Planets around Other Stars
- ISSI Workshop on Planetary Magnetism, 2008. The Structure of Jupiter, Saturn, and Extrasolar Giant Planets
- LANL and LLNL Astrophysics Initiative Workshop, 2008. The Structure, Formation, and Evolution of Giant Planets
- Michelson Summer Workshop—Planetary Transits: Detection to Characterization, 2007. Mass-Radius Relations for Giant Planets
- Extreme Solar Systems, 2007. The Impact of Transit Observations on Planetary Physics
- American Astronomical Society, May, 2007. Luminosity and Detectability of Young Giant Planets
- University of Tokyo Workshop on Development of Extra-solar Planetary Science, 2006. On the Luminosity of Young Jupiters
- High Energy Density Laboratory Astrophysics, Six, 2006. High Pressure Equations of State and the Structure of Jupiter, Saturn, and Exoplanets
- Ultra Low-Mass Star Formation and Evolution, 2005. Young Jupiters are Faint: New Models of the Early Evolution of Giant Planets

OTHER CONFERENCE TALKS:

- Chesapeake Bay Area Exoplanets Meeting, 2020
- ARIEL Consortium Meeting, 2020
- Exoclimes 5, 2019
- High Resolution Spectroscopy for Exoplanet Atmospheres, 2018
- American Astronomical Society – Division for Planetary Sciences Meeting #49, 2017
- Exoclimes 4, 2016
- American Astronomical Society – Division for Planetary Sciences Meeting #44, 2012
- Exoclimes 2, 2012
- Kepler Science Conference, 2011.
- American Astronomical Society – Division for Planetary Sciences Meeting #42, 2010
- American Astronomical Society – Division for Planetary Sciences Meeting #40, 2008
- IAU Symposium #253: Transiting Planets, 2008
- Spirit of Lyot, Berkeley, 2007
- Cool Stars 14, 2006
- Transiting Extrasolar Planets Workshop, 2006
- IAU Colloquium #200, Direct Imaging of Extrasolar Planets, 2005
- American Astronomical Society – Division for Planetary Sciences Meeting #37, 2005
- Tenth Anniversary of 51 Peg b: Status and Prospects for Hot Jupiter Studies, 2005
- Aspen Winter Conference on Astrophysics: Planet Formation and Detection, 2005
- European Geosciences Union, 2004

- American Astronomical Society – Division for Planetary Sciences Meeting #35, 2003
- American Astronomical Society - Division for Planetary Sciences Meeting #34, 2002

SERVICE:

Member, Steering Committee, Astro2020 Decadal Survey, 2019-
 Member, NASA *Juno* Mission Interiors Working Group, 2019-
 Director, OWL Exoplanet Summer Program, UC Santa Cruz, 2017, 2018, 2019-
 Member, NASA Neptune-Odyssey Mission Study Team, 2019-2020
 Founding Member, NASA Nexus for Exoplanet Systems Science (NExSS), 2015-
 Member, Gemini Planet Imager (GPI) Exoplanet Survey Science Team, 2009-
 Scientific Organizing Committee, Towards Other Earths 3, 2020
 Member, NASA Astrophysics Division Senior Review, 2019
 Organizer, AAS Splinter Session, Biosignatures in the 2030s and Beyond, 1/2019
 Member, NASA Science and Technology Definition Team (STDT) for the Origins Space
 Telescope, 2018-19
 Scientific Director, Kavli Summer Program in Astrophysics: Exoplanetary Atmospheres, 2016
 Member, Science and Technology Definition Team, NASA Origins Space Telescope Study,
 2017-2019
 Member, NASA *Cassini* Mission Science Team, 2016-2019
 Scientific Organizing Committee, Landscape of Precision Radial Velocity, 2018
 Member, NASA Science Definition Team (SDT) for future Ice Giant space missions, 2015-17
Kepler Mission Collaborator, 2011-2017
 Member, Hubble Space Telescope Exoplanet Advisory Committee, 2015-16
 Member, Keck Telescope Strategic Planning Committee, Exoplanets Panel, 2015-16
 Astronomy Department Undergraduate Curriculum Committee, 2008-
 Chair, 2012-
 Scientific Organizing Committee, Exoclipse, 2017
 Scientific Organizing Committee, Linking Exoplanet and Disk Compositions, 2016
 Scientific Organizing Committee, Exoclimates 4, 2016
 Scientific Organizing Committee, High Energy Density Laboratory Astrophysics (HEDLA),
 2016
 Scientific Organizing Committee, AAS Division for Planetary Sciences, Annual Meeting,
 2013, 2015
 Chair, Faculty Search Committee, Astronomy & Astrophysics, 2014-15
 NOAO Telescopes TAC, 2013-2015
 Member, Executive Committee of the NASA Exoplanet Exploration Program Analysis Group
 (ExoPAG), 2012-2015
 UCSC Physical and Biological Sciences, TA Committee, 2013-2014
 UCSC Physical and Biological Sciences, Undergrad Research Awards Committee, 2013-2015
 Scientific Organizing Committee, Exoplanets with JWST-MIRI, 2014
 Scientific Organizing Committee, Sagan Summer Workshop, 2014
 Scientific Organizing Committee, Second Kepler Science Conference, 2013
 NASA *Kepler* Participating Scientists Program, Review Panel Chair, 2013
 Referee for: Science, Nature, Astrophysical Journal, Astronomical Journal, Astronomy and
 Astrophysics, MNRAS, Icarus, Astronomical Notes, Nature Geosciences, Nature
 Astronomy, Nature Communications, Physical Review, Publications of the Astronomical
 Society of the Pacific, Computer Physics Communications

Member, *Kepler* Mission Science Team, 2008-2011
Keck Telescope, NASA Time Allocation Committee, 2007-2010
Head of Exoplanets TAC, 2008-2009
Spitzer Space Telescope Time Allocation Committee, Galactic Panel, 2007, 2010, 2013
Graduate Admissions Committee, 2008-2011
Graduate Advising Committee, 2011-12, 2013-14
Faculty Search Committee, Department of Earth & Planetary Sciences, 2008-09, 2013-14,
2015-16
NSF Astronomy & Astrophysics Panel, 2009, 2013
NASA Space Interferometry Mission (SIM) Science Studies, Planets & “Super” Panels, 2008
UC Santa Cruz, Dept. of Astronomy & Astrophysics, Colloquium Comm., 2008, 2011, 2012,
2013, 2015
Scientific Organizing Committee, High Energy Density Physics (HEDP) 1 / High Energy
Density Laboratory Astrophysics (HEDLA) 8, 2008
Local Organizing Committee, Navigator Program Forum, 2007

PROFESSIONAL AFFILIATIONS:

American Astronomical Society
AAS Division for Planetary Sciences,
American Geophysical Union

CLASSES TAUGHT:

W12, W14, F17, F19, *Ay118* Physics of Planetary Systems (advanced undergraduate level), 30
students
W19, S19, *Ay9*, Introduction to Research in Physics and Astrophysics (introductory
undergraduate level), 40 students
W11, W13, *Ay223* Planetary Physics (graduate level), 4-7 students
S09, F11, W15, W16, S17, S19, *Ay112* Physics of Stars (advanced undergraduate level), 50
students
F08, F10, F12, F14, F16, *Ay220A* Stellar Structure and Evolution (grad level), 10-20 students
W10, F13, F15, S18, *Ay003* The Solar System (intro undergraduate level), 175-270 students

STUDENTS SUPERVISED:

Sagnick Mukherjee, Graduate Student, 2020-
Yao Tang, Graduate Student, 2020-
Linfeng Wan, Graduate Student, 2019-
Maggie Thompson, Graduate Student, 2017-
Callie Hood, Graduate Student, 2017-
Katherina Feng, Graduate Student, 2014-2020
Chris Mankovich, Graduate Student, 2014-2019
Daniel Thorngren, Graduate Student, 2013-2019
Mikey Nayak, Graduate Student, 2015-16
Caroline Morley, Graduate Student, 2010-16
Eric Lopez, Graduate Student, 2009-2014
Neil Miller, Graduate Student, 2008-2013
Katie Morzinski, Graduate Student, 2008-2011

Lili Manzo, Undergraduate Student, 2020 (senior thesis)
Robert Schroder, Undergraduate Student, 2017-2020
Christopher Myers, Undergraduate Student, 2015-2020 (senior thesis)
Owen Book, Undergraduate Student, 2019 (senior thesis)
Kieren Henaghen, Undergraduate Student, 2019 (senior thesis)
Zafar Rustamkulov, Undergraduate Student, 2015-19 (honors senior thesis)
Nicholas Tasker Undergraduate Student, 2018-19 (honors senior thesis + extra year)
Tyler Neely, Undergraduate Student, 2018-19 (senior thesis)
Owen Book, Undergraduate Student, 2018-19 (senior thesis)
Takahito Yoshida, Undergraduate Student, 2018-19 (senior thesis)
Adam Smith, Undergraduate Student, 2016-18 (senior thesis + extra year)
Gabriela Hernandez, Undergraduate Student, 2017-18 (honors senior thesis)
Heather Eagle, Undergraduate Student, 2017-18 (senior thesis)
Ruoyan Wang, Undergraduate Student, 2016-18 (senior thesis)
Christopher Seay, Undergraduate Student, 2015-18 (senior thesis + extra year)
Dillon Teal, Undergraduate Student, 2014-16 (senior thesis + extra year)
Alfredo Calderon, Undergraduate Student, 2016
Puttiwat Kongkaew, Undergraduate Student, 2013-15 (honors senior thesis)
Alvaro Zamora, Undergraduate Student, 2015
Freddy Cisneros, Undergraduate Student, 2014-15
Cezar Montero, Undergraduate Student, 2014-15 (senior thesis)
John Chapman, Undergraduate Student, 2013-2015 (senior thesis)
Andrew Stine, Undergraduate Student, 2015 (senior thesis)
Jason Elhaderi, Undergraduate Student, 2014-2015 (senior thesis)
Amelia Callahan, Undergraduate Student, 2014-2015 (senior thesis)
Giovannina Mansir, Undergraduate Student, 2014-2015 (senior thesis)
Kyle Luther, Undergraduate Student, 2014
Bryce Harling, Undergraduate Student, 2013-2014 (senior thesis)
Jacob Lustig-Yaeger, Undergraduate Student, 2012-2014 (honors senior thesis + extra year)
Larissa Nofi, Undergraduate Student, 2011-2013 (senior thesis)
Erik Worth, Undergraduate Student, 2013 (senior thesis)
John Kolpin, Undergraduate Student, 2011-2013 (senior thesis)
Jennifer Mulder, Undergraduate Student, 2011-2012 (honors senior thesis)
Jacob Bruns, Undergraduate Student, 2010-2012 (senior thesis)
Megan Shabram, Undergraduate Student, 2008-2010 (honors senior thesis + extra year)
Jon Jonson, Undergraduate Student, 2008-2009 (senior thesis)

POSTDOCS SUPERVISED:

Elizabeth Bailey, 51 Pegasi b Fellow, 2020-
Peter Gao, NASA Sagan Fellow, 2020-
Xinting Yu, 51 Pegasi b Fellow, 2019-
Joshua Krissansen-Totton, NASA Sagan Fellow, 2019-
Naor Movshovitz, 2016-
Natasha Batalha, UC Presidents Fellow, 2018-2020
Henriette Schwarz, Morrison Fellow, 2017-2019
Thedodora Karalidi, 2017-2019
Ian Crossfield, NASA Sagan Fellow, 2016-17

Tyler Robinson, NASA Sagan Fellow, 2015-17
Michael Line, 2013-16
Vivien Parmentier, NASA Sagan Fellow, 2014-15
Kevin Moore, 2013-15
Nadine Nettelmann, 2009-2010, 2012-14
Philip Nutzman, 2010-2012
Eliza Miller-Ricci Kempton, NASA Sagan Fellow, 2009-2012

PUBLICATIONS

Jonathan J. Fortney

30,149 citations, *h*-index =94

RESEARCH PAPERS IN REFEREED JOURNALS:

- 302) Hood, C. E., Fortney, J. J., Line, M. R., Martin, E. C., Morley, C. V., Birkby, J. L., Rustamkulov, Z., Lupu, R. E., & Freedman, R. S. (2020), "Prospects for Characterizing the Hazyest Sub-Neptune Exoplanets with High-resolution Spectroscopy," *The Astronomical Journal*, 160, 198.
- 301) Fletcher, L. N., Helled, R., Roussos, E., et al. (2020), "Ice Giant Systems: The scientific potential of orbital missions to Uranus and Neptune," *Planetary and Space Science*, 191, 105030.
- 300) Feng, Y. K., Line, M. R., & Fortney, J. J. (2020), "2D Retrieval Frameworks for Hot Jupiter Phase Curves," *The Astronomical Journal*, 160, 137.
- 299) Jindal, A., de Mooij, E. J. W., Jayawardhana, R., Deibert, E. K., Brogi, M., Rustamkulov, Z., Fortney, J. J., Hood, C. E., & Morley, C. V. (2020), "Characterization of the Atmosphere of Super-Earth 55 Cancri e Using High-resolution Ground-based Spectroscopy," *The Astronomical Journal*, 160, 101.
- 298) Miles, B. E., Skemer, A. J. I., Morley, C. V., Marley, M. S., Fortney, J. J., Allers, K. N., Faherty, J. K., Geballe, T. R., Visscher, C., Schneider, A. C., Lupu, R., Freedman, R. S., & Bjoraker, G. L. (2020), "Observations of Disequilibrium CO Chemistry in the Coldest Brown Dwarfs," *The Astronomical Journal*, 160, 63.
- 297) Baxter, C., Désert, J.-M., Parmentier, V., Line, M., Fortney, J., Arcangeli, J., Bean, J. L., Todorov, K. O., & Mansfield, M. (2020), "A transition between the hot and the ultra-hot Jupiter atmospheres," *Astronomy and Astrophysics*, 639, A36.
- 296) Gao, P., Thorngren, D. P., Lee, G. K. H., Fortney, J. J., Morley, C. V., Wakeford, H. R., Powell, D. K., Stevenson, K. B., & Zhang, X. (2020), "Aerosol composition of hot giant exoplanets dominated by silicates and hydrocarbon hazes," *Nature Astronomy*, 10.1038/s41550-020-1114-3
- 295) Guo, X., Crossfield, I. J. M., Dragomir, D., et al. (2020), "Updated Parameters and a New Transmission Spectrum of HD 97658b," *The Astronomical Journal*, 159, 239.
- 294) Keating, D., Stevenson, K. B., Cowan, N. B., et al. (2020), "Smaller than Expected Bright-spot Offsets in Spitzer Phase Curves of the Hot Jupiter Qatar-1b," *The Astronomical Journal*, 159, 225.
- 293) Garhart, E., Deming, D., Mandell, A., Knutson, H. A., Wallack, N., Burrows, A., Fortney, J. J., Hood, C., Seay, C., Sing, D. K., Benneke, B., Fraine, J. D., Kataria, T., Lewis, N., Madhusudhan, N., McCullough, P., Stevenson, K. B., & Wakeford, H. (2020), "Statistical Characterization of Hot Jupiter Atmospheres Using Spitzer's Secondary Eclipses," *The Astronomical Journal*, 159, 137.
- 292) Movshovitz, N., Fortney, J. J., Mankovich, C., Thorngren, D., & Helled, R. (2020),

"Saturn's Probable Interior: An Exploration of Saturn's Potential Interior Density Structures," *The Astrophysical Journal*, 891, 109.

291) Tremblay, L., Line, M. R., Stevenson, K., Kataria, T., Zellem, R. T., Fortney, J. J., & Morley, C. (2020), "The Detectability and Constraints of Biosignature Gases in the Near- and Mid-infrared from Transit Transmission Spectroscopy," *The Astronomical Journal*, 159, 117.

290) Thorngren, D., Gao, P., & Fortney, J. J. (2020), "Erratum: "The Intrinsic Temperature and Radiative—Convective Boundary Depth in the Atmospheres of Hot Jupiters" (*ApJL*, 2018, 884, L6)," *The Astrophysical Journal*, 889, L39.

289) Libby-Roberts, J. E., Berta-Thompson, Z. K., Désert, J.-M., Masuda, K., Morley, C. V., Lopez, E. D., Deck, K. M., Fabrycky, D., Fortney, J. J., Line, M. R., Sanchis-Ojeda, R., & Winn, J. N. (2020), "The Featureless Transmission Spectra of Two Super-puff Planets," *The Astronomical Journal*, 159, 57.

288) Kilpatrick, B. M., Kataria, T., Lewis, N. K., Zellem, R. T., Henry, G. W., Cowan, N. B., de Wit, J., Fortney, J. J., Knutson, H., Seager, S., Showman, A. P., & Tucker, G. S. (2020), "Evaluating Climate Variability of the Canonical Hot-Jupiters HD 189733b and HD 209458b through Multi-epoch Eclipse Observations," *The Astronomical Journal*, 159, 51.

287) Smith, A. J. R. W., Feng, Y. K., Fortney, J. J., Robinson, T. D., Marley, M. S., Lupu, R. E., & Lewis, N. K. (2020), "Detecting and Characterizing Water Vapor in the Atmospheres of Earth Analogs through Observation of the 0.94 μm Feature in Reflected Light," *The Astronomical Journal*, 159, 36.

286) Miguel, Y., Cridland, A., Ormel, C. W., Fortney, J. J., & Ida, S. (2020), "Diverse outcomes of planet formation and composition around low-mass stars and brown dwarfs," *Monthly Notices of the Royal Astronomical Society*, 491, 1998.

285) Mankovich, C. R., & Fortney, J. J. (2020), "Evidence for a Dichotomy in the Interior Structures of Jupiter and Saturn from Helium Phase Separation," *The Astrophysical Journal*, 889, 51.

284) Mansfield, M., Bean, J. L., Stevenson, et al. (2020), "Evidence for H₂ Dissociation and Recombination Heat Transport in the Atmosphere of KELT-9b," *The Astrophysical Journal*, 888, L15.

283) Benneke, B., Wong, I., Piaulet, et al. (2019), "Water Vapor and Clouds on the Habitable-zone Sub-Neptune Exoplanet K2-18b," *The Astrophysical Journal*, 887, L14.

282) Teske, J. K., Thorngren, D., Fortney, J. J., Hinkel, N., & Brewer, J. M. (2019), "Do Metal-rich Stars Make Metal-rich Planets? New Insights on Giant Planet Formation from Host Star Abundances," *The Astronomical Journal*, 158, 239.

281) Wallack, N. L., Knutson, H. A., Morley, C. V., et al. (2019), "Investigating Trends in Atmospheric Compositions of Cool Gas Giant Planets Using Spitzer Secondary Eclipses," *The Astronomical Journal*, 158, 217.

280) Hofstadter, M., Simon, A., Atreya, S., Banfield, D., Fortney, J. J., et al. (2019), "Uranus and Neptune missions: A study in advance of the next Planetary Science Decadal Survey," *Planetary and Space Science*, 177, 104680.

279) Batalha, N. E., Lewis, T., Fortney, J. J., Batalha, N. M., Kempton, E., Lewis, N. K., &

- Line, M. R. (2019), "The Precision of Mass Measurements Required for Robust Atmospheric Characterization of Transiting Exoplanets," *The Astrophysical Journal*, 885, L25.
- 278) Todorov, K. O., Désert, J.-M., Huitson, et al. (2019), "Ground-based optical transmission spectrum of the hot Jupiter HAT-P-1b," *Astronomy and Astrophysics*, 631, A169.
- 277) Bell, T. J., Zhang, M., Cubillos, P., et al. (2019), "Mass loss from the exoplanet WASP-12b inferred from Spitzer phase curves," *Monthly Notices of the Royal Astronomical Society*, 489, 1995.
- 276) Thorngren, D., Gao, P., & Fortney, J. J. (2019), "The Intrinsic Temperature and Radiative-Convective Boundary Depth in the Atmospheres of Hot Jupiters," *The Astrophysical Journal*, 884, L6.
- 275) Beatty, T. G., et al. (2019), "Spitzer Phase Curves of KELT-1b and the Signatures of Nightside Clouds in Thermal Phase Observations," *The Astronomical Journal*, 158, 166.
- 274) Zellem, R. T., et al. (2019), "Constraining Exoplanet Metallicities and Aerosols with the Contribution to ARIEL Spectroscopy of Exoplanets (CASE)," *Publications of the Astronomical Society of the Pacific*, 131, 094401.
- 273) Benneke, B., et al (2019), "A sub-Neptune exoplanet with a low-metallicity methane-depleted atmosphere and Mie-scattering clouds," *Nature Astronomy*, 3, 813.
- 272) Fortney, J. J., Lupu, R. E., Morley, C. V., Freedman, R. S., & Hood, C., 2019. Exploring a Photospheric Radius Correction to Model Secondary Eclipse Spectra for Transiting Exoplanets, *The Astrophysical Journal*, 880, L16
- 271) Nielsen, E. L., et al., 2019. The Gemini Planet Imager Exoplanet Survey: Giant Planet and Brown Dwarf Demographics from 10 to 100 au, *The Astronomical Journal*, 158, 13
- 270) Batalha, N. E., Marley, M. S., Lewis, N. K., & Fortney, J. J., 2019. Exoplanet Reflected-light Spectroscopy with PICASO, *The Astrophysical Journal*, 878, 70
- 269) Arcangeli, J., et al., 2019. Climate of an ultra hot Jupiter. Spectroscopic phase curve of WASP-18b with HST/WFC3, *Astronomy and Astrophysics*, 625, A136
- 268) Thorngren, D., & Fortney, J. J., 2019. Connecting Giant Planet Atmosphere and Interior Modeling: Constraints on Atmospheric Metal Enrichment, *The Astrophysical Journal*, 874, L31
- 267) Deibert, E. K., de Mooij, E. J. W., Jayawardhana, R., Fortney, J. J., Brogi, M., Rustamkulov, Z., & Tamura, M., 2019. High-resolution Transit Spectroscopy of Warm Saturns, *The Astronomical Journal*, 157, 58
- 266) Espinoza, N., et al., 2019. ACCESS: a featureless optical transmission spectrum for WASP-19b from Magellan/IMACS, *Monthly Notices of the Royal Astronomical Society*, 482, 2065
- 265) Mankovich, C., Marley, M. S., Fortney, J. J., & Movshovitz, N., 2019. Cassini Ring Seismology as a Probe of Saturn's Interior. I. Rigid Rotation, *The Astrophysical Journal*, 871, 1
- 264) Casewell, S. L., Littlefair, S. P., Parsons, S. G., Marsh, T. R., Fortney, J. J., & Marley, M. S., 2018. The direct detection of the irradiated brown dwarf in the white dwarf-brown dwarf

- binary SDSS J141126.20+200911.1, *Monthly Notices of the Royal Astronomical Society*, 481, 5216
- 263) Mansfield, M., et al., 2018. Detection of Helium in the Atmosphere of the Exo-Neptune HAT P-11b, *The Astrophysical Journal*, 868, L34
- 262) Stone, J. M., et al., 2018. The LEECH Exoplanet Imaging Survey: Limits on Planet Occurrence Rates under Conservative Assumptions, *The Astronomical Journal*, 156, 286
- 261) Wang, J., Mawet, D., Fortney, J. J., Hood, C., Morley, C. V., & Benneke, B., 2018. Detecting Water in the Atmosphere of HR 8799 c with L-band High-dispersion Spectroscopy Aided by Adaptive Optics, *The Astronomical Journal*, 156, 272
- 260) Bean, J. L., et al., 2018. The Transiting Exoplanet Community Early Release Science Program for JWST, *Publications of the Astronomical Society of the Pacific*, 130, 114402
- 259) Batalha, N. E., Smith, A. J. R. W., Lewis, N. K., Marley, M. S., Fortney, J. J., & Macintosh, B., 2018. Color Classification of Extrasolar Giant Planets: Prospects and Cautions, *The Astronomical Journal*, 156, 158
- 248) Parmentier, V., et al., 2018. From thermal dissociation to condensation in the atmospheres of ultra hot Jupiters: WASP-121b in context, *Astronomy and Astrophysics*, 617, A110
- 247) Schlawin, E., Greene, T. P., Line, M., Fortney, J. J., & Rieke, M., 2018. Clear and Cloudy Exoplanet Forecasts for JWST: Maps, Retrieved Composition, and Constraints on Formation with MIRI and NIRCcam, *The Astronomical Journal*, 156, 40
- 246) Kreidberg, L., et al., 2018. Global Climate and Atmospheric Composition of the Ultra-hot Jupiter WASP-103b from HST and Spitzer Phase Curve Observations, *The Astronomical Journal*, 156, 17
- 245) Mansfield, M., et al., 2018. An HST/WFC3 Thermal Emission Spectrum of the Hot Jupiter HAT-P-7b, *The Astronomical Journal*, 156, 10
- 244) Nikolov, N., et al., 2018. An absolute sodium abundance for a cloud-free 'hot Saturn' exoplanet, *Nature*, 557, 526
- 243) Morley, C. V., et al., 2018. An L Band Spectrum of the Coldest Brown Dwarf, *The Astrophysical Journal*, 858, 97
- 242) MacDonald, R. J., Marley, M. S., Fortney, J. J., & Lewis, N. K., 2018. Exploring H₂O Prominence in Reflection Spectra of Cool Giant Planets, *The Astrophysical Journal*, 858, 69
- 241) Thorngren, D. P., & Fortney, J. J., 2018. Bayesian Analysis of Hot-Jupiter Radius Anomalies: Evidence for Ohmic Dissipation?, *The Astronomical Journal*, 155, 214
- 240) Feng, Y. K., Robinson, T. D., Fortney, J. J., Lupu, R. E., Marley, M. S., Lewis, N. K., Macintosh, B., & Line, M. R., 2018. Characterizing Earth Analogs in Reflected Light: Atmospheric Retrieval Studies for Future Space Telescopes, *The Astronomical Journal*, 155, 200
- 239) Beichman, C. A., et al., 2018. Validation and Initial Characterization of the Long-period Planet Kepler-1654 b, *The Astronomical Journal*, 155, 158
- 238) Dang, L., et al., 2018. Detection of a westward hotspot offset in the atmosphere of hot

gas giant CoRoT-2b, *Nature Astronomy*, 2, 220

237) Arcangeli, J., et al., 2018. H- Opacity and Water Dissociation in the Dayside Atmosphere of the Very Hot Gas Giant WASP-18b, *The Astrophysical Journal*, 855, L30

236) Zhang, M., et al., 2018. Phase Curves of WASP-33b and HD 149026b and a New Correlation between Phase Curve Offset and Irradiation Temperature, *The Astronomical Journal*, 155, 83

235) Lothringer, J. D., et al., 2018. An HST/STIS Optical Transmission Spectrum of Warm Neptune GJ 436b, *The Astronomical Journal*, 155, 66

234) Garhart, E., Deming, D., Mandell, A., Knutson, H., & Fortney, J. J., 2018. Spitzer secondary eclipses of Qatar-1b, *Astronomy and Astrophysics*, 610, A55

233) Robinson, T. D., Fortney, J. J., & Hubbard, W. B., 2017. Analytic Scattering and Refraction Models for Exoplanet Transit Spectra, *The Astrophysical Journal*, 850, 128

232) Morley, C. V., Kreidberg, L., Rustamkulov, Z., Robinson, T., & Fortney, J. J., 2017. Observing the Atmospheres of Known Temperate Earth-sized Planets with JWST, *The Astrophysical Journal*, 850, 121

231) Daemgen, S., Todorov, K., Quanz, S. P., Meyer, M. R., Mordasini, C., Marleau, G.-D., & Fortney, J. J., 2017. High signal-to-noise spectral characterization of the planetary-mass object HD 106906 b, *Astronomy and Astrophysics*, 608, A71

230) Moll, R., Garaud, P., Mankovich, C., & Fortney, J. J., 2017. Double-diffusive Erosion of the Core of Jupiter, *The Astrophysical Journal*, 849, 24

229) Chapman, J. W., et al., 2017. Quantifying the Impact of Spectral Coverage on the Retrieval of Molecular Abundances from Exoplanet Transmission Spectra, *Publications of the Astronomical Society of the Pacific*, 129, 104402

228) Henderson, C. S., Skemer, A. J., Morley, C. V., & Fortney, J. J., 2017. A new statistical method for characterizing the atmospheres of extrasolar planets, *Monthly Notices of the Royal Astronomical Society*, 470, 4557

227) Line, M. R., et al., 2017. Uniform Atmospheric Retrieval Analysis of Ultracool Dwarfs. II. Properties of 11 T dwarfs, *The Astrophysical Journal*, 848, 83

226) Bethkenhagen, M., et al., 2017. Planetary Ices and the Linear Mixing Approximation, *The Astrophysical Journal*, 848, 67

225) Huitson, C. M., D'eresert, J.-M., Bean, J. L., Fortney, J. J., Stevenson, K. B., & Bergmann, M., 2017. Gemini/GMOS Transmission Spectral Survey: Complete Optical Transmission Spectrum of the Hot Jupiter WASP-4b, *The Astronomical Journal*, 154, 95

224) Rajan, A., et al., 2017. Characterizing 51 Eri b from 1 to 5 um: A Partly Cloudy Exoplanet, *The Astronomical Journal*, 154, 10

223) Wakeford, H. R., et al., 2017. HAT-P-26b: A Neptune-mass exoplanet with a well-constrained heavy element abundance, *Science*, 356, 628

222) Rowe, J. F., et al., 2017. Time-series Analysis of Broadband Photometry of Neptune from K2, *The Astronomical Journal*, 153, 149

- 221) Nayak, M., Lupu, R., Marley, M. S., Fortney, J. J., Robinson, T., & Lewis, N., 2017. Atmospheric Retrieval for Direct Imaging Spectroscopy of Gas Giants in Reflected Light. II. Orbital Phase and Planetary Radius, *Publications of the Astronomical Society of the Pacific*, 129, 034401
- 220) Espinoza, N., Fortney, J. J., Miguel, Y., Thorngren, D., & Murray-Clay, R., 2017. Metal Enrichment Leads to Low Atmospheric C/O Ratios in Transiting Giant Exoplanets, *The Astrophysical Journal*, 838, L9
- 219) Wakeford, H. R., Visscher, C., Lewis, N. K., Kataria, T., Marley, M. S., Fortney, J. J., & Mandell, A. M., 2017. High-temperature condensate clouds in super-hot Jupiter atmospheres, *Monthly Notices of the Royal Astronomical Society*, 464, 4247
- 218) de Wit, J., et al., 2017. Planet-induced Stellar Pulsations in HAT-P-2's Eccentric System, *The Astrophysical Journal*, 836, L17
- 217) Morley, C. V., Knutson, H., Line, M., Fortney, J. J., Thorngren, D., Marley, M. S., Teal, D., & Lupu, R., 2017. Forward and Inverse Modeling of the Emission and Transmission Spectrum of GJ 436b: Investigating Metal Enrichment, Tidal Heating, and Clouds, *The Astronomical Journal*, 153, 86
- 216) Stevenson, K. B., et al., 2017. Spitzer Phase Curve Constraints for WASP-43b at 3.6 and 4.5 μm , *The Astronomical Journal*, 153, 68
- 215) Rackham, B., et al., 2017. ACCESS I: An Optical Transmission Spectrum of GJ 1214b Reveals a Heterogeneous Stellar Photosphere, *The Astrophysical Journal*, 834, 151
- 214) Cartier, K. M. S., et al., 2017. Near-infrared Emission Spectrum of WASP-103b Using Hubble Space Telescope/Wide Field Camera 3, *The Astronomical Journal*, 153, 34
- 213) Nikolov, N., Sing, D. K., Gibson, N. P., Fortney, J. J., Evans, T. M., Barstow, J. K., Kataria, T., & Wilson, P. A., 2016. VLT FORS2 Comparative Transmission Spectroscopy: Detection of Na in the Atmosphere of WASP-39b from the Ground, *The Astrophysical Journal*, 832, 191
- 212) Mankovich, C., Fortney, J. J., & Moore, K. L., 2016. Bayesian Evolution Models for Jupiter with Helium Rain and Double-diffusive Convection, *The Astrophysical Journal*, 832, 113
- 211) Line, M. R., et al., 2016. No Thermal Inversion and a Solar Water Abundance for the Hot Jupiter HD 209458b from HST/WFC3 Spectroscopy, *The Astronomical Journal*, 152, 203
- 210) Grunblatt, S. K., et al., 2016. K2-97b: A (Re-?)Inflated Planet Orbiting a Red Giant Star, *The Astronomical Journal*, 152, 185
- 209) Thorngren, D. P., Fortney, J. J., Murray-Clay, R. A., & Lopez, E. D., 2016. The Mass-Metallicity Relation for Giant Planets, *The Astrophysical Journal*, 831, 64
- 208) Mousis, O., et al., 2016. The Hera Saturn entry probe mission, *Planetary and Space Science*, 130, 80
- 207) Leggett, S. K., et al., 2016. Observed Variability at 1 and 4 μm in the Y0 Brown Dwarf WISEP J173835.52+273258.9, *The Astrophysical Journal*, 830, 141
- 206) Moses, J. I., et al., 2016. On the Composition of Young, Directly Imaged Giant Planets,

The Astrophysical Journal, 829, 66

205) Cruz, P., Barrado, D., Lillo-Box, J., Diaz, M., Birkby, J., Lopez-Morales, M., & Fortney, J. J., 2016. Detection of the secondary eclipse of Qatar-1b in the Ks band, *Astronomy and Astrophysics*, 595, A61

204) Stevenson, K. B., et al., 2016. Transiting Exoplanet Studies and Community Targets for JWST's Early Release Science Program, *Publications of the Astronomical Society of the Pacific*, 128, 094401

203) Nettelmann, N., Wang, K., Fortney, J. J., Hamel, S., Yellamilli, S., Bethkenhagen, M., & Redmer, R., 2016. Uranus evolution models with simple thermal boundary layers, *Icarus*, 275, 107

202) Feng, Y. K., Line, M. R., Fortney, J. J., Stevenson, K. B., Bean, J., Kreidberg, L., & Parmentier, V., 2016. The Impact of Non-uniform Thermal Structure on the Interpretation of Exoplanet Emission Spectra, *The Astrophysical Journal*, 829, 52

201) Parmentier, V., Fortney, J. J., Showman, A. P., Morley, C., & Marley, M. S., 2016. Transitions in the Cloud Composition of Hot Jupiters, *The Astrophysical Journal*, 828, 22

200) Fischer, P. D., et al., 2016. HST Hot-Jupiter Transmission Spectral Survey: Clear Skies for Cool Saturn WASP-39b, *The Astrophysical Journal*, 827, 19

199) Skemer, A. J., et al., 2016. The First Spectrum of the Coldest Brown Dwarf, *The Astrophysical Journal*, 826, L17

198) Fortney, J. J., et al., 2016. The Hunt for Planet Nine: Atmosphere, Spectra, Evolution, and Detectability, *The Astrophysical Journal*, 824, L25

197) Cushing, M. C., et al., 2016. The First Detection of Photometric Variability in a Y Dwarf: WISE J140518.39+553421.3, *The Astrophysical Journal*, 823, 152

196) Wong, I., et al., 2016. 3.6 and 4.5 μm Spitzer Phase Curves of the Highly Irradiated Hot Jupiters WASP-19b and HAT-P-7b, *The Astrophysical Journal*, 823, 122

195) Todorov, K. O., Line, M. R., Pineda, J. E., Meyer, M. R., Quanz, S. P., Hinkley, S., & Fortney, J. J., 2016. The Water Abundance of the Directly Imaged Substellar Companion Kappa And b Retrieved from a Near Infrared Spectrum, *The Astrophysical Journal*, 823, 14

194) Montet, B. T., Johnson, J. A., Fortney, J. J., & Desert, J.-M., 2016. Benchmark Transiting Brown Dwarf LHS 6343 C: Spitzer Secondary Eclipse Observations Yield Brightness Temperature and Mid-T Spectral Class, *The Astrophysical Journal*, 822, L6

193) Buhler, P. B., Knutson, H. A., Batygin, K., Fulton, B. J., Fortney, J. J., Burrows, A., & Wong, I., 2016. Dynamical Constraints on the Core Mass of Hot Jupiter HAT-P-13b, *The Astrophysical Journal*, 821, 26

192) Kataria, T., Sing, D. K., Lewis, N. K., Visscher, C., Showman, A. P., Fortney, J. J., & Marley, M. S., 2016. The Atmospheric Circulation of a Nine-hot-Jupiter Sample: Probing Circulation and Chemistry over a Wide Phase Space, *The Astrophysical Journal*, 821, 9

191) de Wit, J., Lewis, N. K., Langton, J., Laughlin, G., Deming, D., Batygin, K., & Fortney, J. J., 2016. Direct Measure of Radiative and Dynamical Properties of an Exoplanet Atmosphere, *The Astrophysical Journal*, 820, L33

- 190) Stone, J. M., et al., 2016. Adaptive Optics imaging of VHS 1256-1257: A Low Mass Companion to a Brown Dwarf Binary System, *The Astrophysical Journal*, 818, L12
- 189) Lopez, E. D., & Fortney, J. J., 2016. Re-inflated Warm Jupiters around Red Giants, *The Astrophysical Journal*, 818, 4
- 188) Skemer, A. J., et al., 2016. The LEECH Exoplanet Imaging Survey: Characterization of the Coldest Directly Imaged Exoplanet, GJ 504 b, and Evidence for Superstellar Metallicity, *The Astrophysical Journal*, 817, 166
- 187) Simon, A. A., et al., 2016. Neptune's Dynamic Atmosphere from Kepler K2 Observations: Implications for Brown Dwarf Light Curve Analyses, *The Astrophysical Journal*, 817, 162
- 186) Stevenson, K. B., Bean, J. L., Seifahrt, A., Gilbert, G. J., Line, M. R., Desert, J.-M., & Fortney, J. J., 2016. A Search for Water in the Atmosphere of HAT-P-26b Using LDSS-3C, *The Astrophysical Journal*, 817, 141
- 185) Sing, D. K., Fortney, J. J., et al., 2016. A continuum from clear to cloudy hot-Jupiter exoplanets without primordial water depletion, *Nature*, 529, 59
- 184) Greene, T. P., Line, M. R., Montero, C., Fortney, J. J., Lustig-Yaeger, J., & Luther, K., 2016. Characterizing Transiting Exoplanet Atmospheres with JWST, *The Astrophysical Journal*, 817, 17
- 183) Morley, C. V., Fortney, J. J., Marley, M. S., Zahnle, K., Line, M., Kempton, E., Lewis, N., & Cahoy, K., 2015. Thermal Emission and Reflected Light Spectra of Super Earths with Flat Transmission Spectra, *The Astrophysical Journal*, 815, 110
- 182) Dalba, P. A., Muirhead, P. S., Fortney, J. J., Hedman, M. M., Nicholson, P. D., & Veyette, M. J., 2015. The Transit Transmission Spectrum of a Cold Gas Giant Planet, *The Astrophysical Journal*, 814, 154
- 181) Kreidberg, L., et al., 2015. A Detection of Water in the Transmission Spectrum of the Hot Jupiter WASP-12b and Implications for Its Atmospheric Composition, *The Astrophysical Journal*, 814, 66
- 180) Macintosh, B., et al., 2015. Discovery and spectroscopy of the young jovian planet 51 Eri b with the Gemini Planet Imager, *Science*, 350, 64
- 179) Wong, I., et al., 2015. 3.6 and 4.5 um Phase Curves of the Highly Irradiated Eccentric Hot Jupiter WASP-14b, *The Astrophysical Journal*, 811, 122
- 178) Kammer, J. A., et al., 2015. Spitzer Secondary Eclipse Observations of Five Cool Gas Giant Planets and Empirical Trends in Cool Planet Emission Spectra, *The Astrophysical Journal*, 810, 118
- 177) Line, M. R., Teske, J., Burningham, B., Fortney, J. J., & Marley, M. S., 2015. Uniform Atmospheric Retrieval Analysis of Ultracool Dwarfs. I. Characterizing Benchmarks, Gl 570D and HD 3651B, *The Astrophysical Journal*, 807, 183
- 176) Wilson, P. A., et al., 2015. GTC OSIRIS transiting exoplanet atmospheric survey: detection of potassium in HAT-P-1b from narrow-band spectrophotometry, *Monthly Notices of the Royal Astronomical Society*, 450, 192

- 175) Deming, D., et al., 2015. Spitzer Secondary Eclipses of the Dense, Modestly-irradiated, Giant Exoplanet HAT-P-20b Using Pixel-level Decorrelation, *The Astrophysical Journal*, 805, 132
- 174) Webber, M. W., Lewis, N. K., Marley, M., Morley, C., Fortney, J. J., & Cahoy, K., 2015. Effect of Longitude-dependent Cloud Coverage on Exoplanet Visible Wavelength Reflected-light Phase Curves, *The Astrophysical Journal*, 804, 94
- 173) Desert, J.-M., et al., 2015. Low False Positive Rate of Kepler Candidates Estimated From A Combination Of Spitzer And Follow-Up Observations, *The Astrophysical Journal*, 804, 59
- 172) Maire, A.-L., et al., 2015. The LEECH Exoplanet Imaging Survey. Further constraints on the planet architecture of the HR 8799 system, *Astronomy and Astrophysics*, 576, A133
- 171) Cowan, N. B., et al., 2015. Characterizing Transiting Planet Atmospheres through 2025, *Publications of the Astronomical Society of the Pacific*, 127, 311
- 170) Nettelmann, N., Fortney, J. J., Moore, K., & Mankovich, C., 2015. An exploration of double diffusive convection in Jupiter as a result of hydrogen-helium phase separation, *Monthly Notices of the Royal Astronomical Society*, 447, 3422
- 169) Casewell, S. L., et al., 2015. Multiwaveband photometry of the irradiated brown dwarf WD0137-349B, *Monthly Notices of the Royal Astronomical Society*, 447, 3218
- 168) Croll, B., et al., 2015. Near-infrared Thermal Emission Detections of a Number of Hot Jupiters and the Systematics of Ground-based Near-infrared Photometry, *The Astrophysical Journal*, 802, 28
- 167) Showman, A. P., Lewis, N. K., & Fortney, J. J., 2015. 3D Atmospheric Circulation of Warm and Hot Jupiters, *The Astrophysical Journal*, 801, 95
- 166) Kataria, T., Showman, A. P., Fortney, J. J., Stevenson, K. B., Line, M. R., Kreidberg, L., Bean, J. L., & Desert, J.-M., 2015. The Atmospheric Circulation of the Hot Jupiter WASP-43b: Comparing Three-dimensional Models to Spectrophotometric Data, *The Astrophysical Journal*, 801, 86
- 165) Nikolov, N., et al., 2015. HST hot-Jupiter transmission spectral survey: haze in the atmosphere of WASP-6b, *Monthly Notices of the Royal Astronomical Society*, 447, 463
- 164) Cruz, P., Barrado, D., Lillo-Box, J., Diaz, M., Birkby, J., Lopez-Morales, M., Hodgkin, S., & Fortney, J. J., 2015. Detection of the secondary eclipse of WASP-10b in the Ks-band, *Astronomy and Astrophysics*, 574, A103
- 163) Parmentier, V., Guillot, T., Fortney, J. J., & Marley, M. S., 2015. A non-grey analytical model for irradiated atmospheres. II. Analytical vs. numerical solutions, *Astronomy and Astrophysics*, 574, A35
- 162) Sing, D. K., et al., 2015. HST hot-Jupiter transmission spectral survey: detection of potassium in WASP-31b along with a cloud deck and Rayleigh scattering, *Monthly Notices of the Royal Astronomical Society*, 446, 2428
- 161) Luger, R., Barnes, R., Lopez, E., Fortney, J., Jackson, B., & Meadows, V., 2015. Habitable Evaporated Cores: Transforming Mini-Neptunes into Super-Earths in the Habitable Zones of M Dwarfs, *Astrobiology*, 15, 57

- 160) Beichman, C., et al., 2014. Observations of Transiting Exoplanets with the James Webb Space Telescope (JWST), *Publications of the Astronomical Society of the Pacific*, 126, 1134
- 159) Arridge, C. S., et al., 2014. The science case for an orbital mission to Uranus: Exploring the origins and evolution of ice giant planets, *Planetary and Space Science*, 104, 122
- 158) Masters, A., et al., 2014. Neptune and Triton: Essential pieces of the Solar System puzzle, *Planetary and Space Science*, 104, 108
- 157) Becker, A., Lorenzen, W., Fortney, J. J., Nettelmann, N., Schöttler, M., & Redmer, R., 2014. Ab Initio Equations of State for Hydrogen (H-REOS.3) and Helium (He-REOS.3) and their Implications for the Interior of Brown Dwarfs, *The Astrophysical Journal Supplement Series*, 215, 21
- 156) Zhao, M., et al., 2014. Characterization of the Atmosphere of the Hot Jupiter HAT-P-32Ab and the M-dwarf Companion HAT-P-32B, *The Astrophysical Journal*, 796, 115
- 155) Lanotte, A. A., et al., 2014. A global analysis of Spitzer and new HARPS data confirms the loneliness and metal-richness of GJ 436 b, *Astronomy and Astrophysics*, 572, AA73
- 154) Stevenson, K. B., et al., 2014. Thermal structure of an exoplanet atmosphere from phase-resolved emission spectroscopy, *Science*, 346, 838
- 153) Diamond-Lowe, H., Stevenson, K. B., Bean, J. L., Line, M. R., & Fortney, J. J., 2014. New Analysis Indicates No Thermal Inversion in the Atmosphere of HD 209458b, *The Astrophysical Journal*, 796, 66
- 152) Lewis, N. K., Showman, A. P., Fortney, J. J., Knutson, H. A., & Marley, M. S., 2014. Atmospheric Circulation of Eccentric Hot Jupiter HAT-P-2b, *The Astrophysical Journal*, 795, 150
- 151) Freedman, R. S., Lustig-Yaeger, J., Fortney, J. J., Lupu, R. E., Marley, M. S., & Lodders, K., 2014. Gaseous Mean Opacities for Giant Planet and Ultracool Dwarf Atmospheres over a Range of Metallicities and Temperatures, *The Astrophysical Journal Supplement Series*, 214, 25
- 150) Knutson, H. A., et al., 2014. Hubble Space Telescope Near-IR Transmission Spectroscopy of the Super-Earth HD 97658b, *The Astrophysical Journal*, 794, 155
- 149) Wong, I., et al., 2014. Constraints on the Atmospheric Circulation and Variability of the Eccentric Hot Jupiter XO-3b, *The Astrophysical Journal*, 794, 134
- 148) Kreidberg, L., et al., 2014. A Precise Water Abundance Measurement for the Hot Jupiter WASP-43b, *The Astrophysical Journal*, 793, LL27
- 147) Line, M. R., Fortney, J. J., Marley, M. S., & Sorahana, S., 2014. A Data-driven Approach for Retrieving Temperatures and Abundances in Brown Dwarf Atmospheres, *The Astrophysical Journal*, 793, 33
- 146) Lopez, E. D., & Fortney, J. J., 2014. Understanding the Mass-Radius Relation for Sub neptunes: Radius as a Proxy for Composition, *The Astrophysical Journal*, 792, 1
- 145) Rostron, J. W., Wheatley, P. J., Anderson, D. R., Collier Cameron, A., Fortney, J. J., Harrington, J., Knutson, H. A., & Pollacco, D. L., 2014. The thermal emission of the exoplanet WASP-3b, *Monthly Notices of the Royal Astronomical Society*, 441, 3666

- 144) Zellem, R. T., et al., 2014. The 4.5 um Full-orbit Phase Curve of the Hot Jupiter HD 209458b, *The Astrophysical Journal*, 790, 53
- 143) Morley, C. V., Marley, M. S., Fortney, J. J., & Lupu, R., 2014. Spectral Variability from the Patchy Atmospheres of T and Y Dwarfs, *The Astrophysical Journal*, 789, L14
- 142) Vahidinia, S., Cuzzi, J. N., Marley, M., & Fortney, J., 2014. Cloud Base Signature in Transmission Spectra of Exoplanet Atmospheres, *The Astrophysical Journal*, 789, L11
- Shporer, A., et al., 2014. Atmospheric Characterization of the Hot Jupiter Kepler-13Ab, *The Astrophysical Journal*, 788, 92
- 141) Morley, C. V., Marley, M. S., Fortney, J. J., Lupu, R., Saumon, D., Greene, T., & Lodders, K., 2014. Water Clouds in Y Dwarfs and Exoplanets, *The Astrophysical Journal*, 787, 78
- 140) Croll, B., et al., 2014. Multiwavelength Observations of the Candidate Disintegrating Sub-Mercury KIC 12557548b, *The Astrophysical Journal*, 786, 100
- 139) Cáceres, C., et al., 2014. Ground-based transit observations of the super-Earth GJ 1214 b, *Astronomy and Astrophysics*, 565, A7
- 138) Kataria, T., Showman, A. P., Fortney, J. J., Marley, M. S., & Freedman, R. S., 2014. The Atmospheric Circulation of the Super Earth GJ 1214b: Dependence on Composition and Metallicity, *The Astrophysical Journal*, 785, 92
- 137) Wilson, P. A., et al., 2014. A search for methane in the atmosphere of GJ 1214b via GTC narrow-band transmission spectrophotometry, *Monthly Notices of the Royal Astronomical Society*, 438, 2395
- 136) Rowe, J. F., et al., 2014. Validation of Kepler's Multiple Planet Candidates. III. Light Curve Analysis and Announcement of Hundreds of New Multi-planet Systems, *The Astrophysical Journal*, 784, 45
- 135) Lupu, R. E., et al., 2014. The Atmospheres of Earthlike Planets after Giant Impact Events, *The Astrophysical Journal*, 784, 27
- 134) Beatty, T. G., et al., 2014. Spitzer and z' Secondary Eclipse Observations of the Highly Irradiated Transiting Brown Dwarf KELT-1b, *The Astrophysical Journal*, 783, 112
- 133) Chen, G., et al., 2014. Broad-band transmission spectrum and K-band thermal emission of WASP-43b as observed from the ground, *Astronomy and Astrophysics*, 563, A40
- 132) Marcy, G. W., et al., 2014. Masses, Radii, and Orbits of Small Kepler Planets: The Transition from Gaseous to Rocky Planets, *The Astrophysical Journal Supplement Series*, 210, 20
- 131) O'Rourke, J. G., et al., 2014. Warm Spitzer and Palomar Near-IR Secondary Eclipse Photometry of Two Hot Jupiters: WASP-48b and HAT-P-23b, *The Astrophysical Journal*, 781, 109
- 130) Kammer, J. A., et al., 2014. A Spitzer Search for Transits of Radial Velocity Detected Super-Earths, *The Astrophysical Journal*, 781, 103
- 129) Wilson, P. A., et al., 2014. A search for methane in the atmosphere of GJ1214b via GTC narrow-band transmission spectrophotometry, *Monthly Notices of the Royal Astronomical*

Society, 48

- 128) Bento, J., et al., 2014. Optical transmission photometry of the highly inflated exoplanet WASP-17b, *Monthly Notices of the Royal Astronomical Society*, 437, 1511
- 127) Nikolov, N., et al., 2014. Hubble Space Telescope hot Jupiter transmission spectral survey: a detection of Na and strong optical absorption in HAT-P-1b, *Monthly Notices of the Royal Astronomical Society*, 437, 46
- 126) Sing, D. K., et al., 2013. HST hot-Jupiter transmission spectral survey: evidence for aerosols and lack of TiO in the atmosphere of WASP-12b, *Monthly Notices of the Royal Astronomical Society*, 436, 2956
- 125) Jordan, A., et al., 2013. A Ground-based Optical Transmission Spectrum of WASP-6b, *The Astrophysical Journal*, 778, 184
- 124) Howard, A. W., et al., 2013. A rocky composition for an Earth-sized exoplanet, *Nature*, 503, 381
- 123) Mancini, L., et al., 2013. Physical properties, transmission and emission spectra of the WASP-19 planetary system from multi-colour photometry, *Monthly Notices of the Royal Astronomical Society*, 436, 2
- 122) Wakeford, H. R., et al., 2013. HST hot Jupiter transmission spectral survey: detection of water in HAT-P-1b from WFC3 near-IR spatial scan observations, *Monthly Notices of the Royal Astronomical Society*, 435, 3481
- 121) Moses, J. I., et al., 2013. Compositional Diversity in the Atmospheres of Hot Neptunes, with Application to GJ 436b, *The Astrophysical Journal*, 777, 34
- 120) Huitson, C. M., et al., 2013. An HST optical-to-near-IR transmission spectrum of the hot Jupiter WASP-19b: detection of atmospheric water and likely absence of TiO, *Monthly Notices of the Royal Astronomical Society*, 434, 3252
- 119) Demory, B.-O., et al., 2013. Inference of Inhomogeneous Clouds in an Exoplanet Atmosphere, *The Astrophysical Journal*, 776, L25
- 118) Lopez, E. D., & Fortney, J. J., 2013. The Role of Core Mass in Controlling Evaporation: The Kepler Radius Distribution and the Kepler-36 Density Dichotomy, *The Astrophysical Journal*, 776, 2
- 117) Copperwheat, C. M., et al., 2013. Transmission photometry of WASP-12b: simultaneous measurement of the planetary radius in three bands, *Monthly Notices of the Royal Astronomical Society*, 434, 661
- 116) Fortney, J. J., Mordasini, C., Nettelmann, N., Kempton, E. M.-R., Greene, T. P., & Zahnle, K., 2013. A Framework for Characterizing the Atmospheres of Low-mass Low-density Transiting Planets, *The Astrophysical Journal*, 775, 80
- 115) Morley, C. V., Fortney, J. J., Kempton, E. M.-R., Marley, M. S., Vissler, C., & Zahnle, K., 2013. Quantitatively Assessing the Role of Clouds in the Transmission Spectrum of GJ1214b, *The Astrophysical Journal*, 775, 33
- 114) Deming, D., et al., 2013. Infrared Transmission Spectroscopy of the Exoplanets HD 209458b and XO-1b Using the Wide Field Camera-3 on the Hubble Space Telescope, *The*

Astrophysical Journal, 774, 95

113) Barnes, J. W., van Eyken, J. C., Jackson, B. K., Ciardi, D. R., & Fortney, J. J., 2013. Measurement of Spin-orbit Misalignment and Nodal Precession for the Planet around Pre-main-sequence Star PTF0 8-8695 from Gravity Darkening, *The Astrophysical Journal*, 774, 53

112) Baskin, N. J., et al., 2013. Secondary Eclipse Photometry of the Exoplanet WASP-5b with Warm Spitzer, *The Astrophysical Journal*, 773, 124

111) Burningham, B., et al., 2013. 76 T dwarfs from the UKIDSS LAS: benchmarks, kinematics and an updated space density, *Monthly Notices of the Royal Astronomical Society*, 433, 457

110) Lissauer, J. J., et al., 2013. All Six Planets Known to Orbit Kepler-11 Have Low Densities, *The Astrophysical Journal*, 770, 131

109) Bodenheimer, P., D'Angelo, G., Lissauer, J. J., Fortney, J. J., & Saumon, D., 2013. Deuterium Burning in Massive Giant Planets and Low-mass Brown Dwarfs Formed by Core-nucleated Accretion, *The Astrophysical Journal*, 770, 120

108) Todorov, K. O., et al., 2013. Warm Spitzer Photometry of Three Hot Jupiters: HAT-P-3b, HAT-P-4b and HAT-P-12b, *The Astrophysical Journal*, 770, 102

107) Borucki, W. J., et al., 2013. Kepler-62: A Five-Planet System with Planets of 1.4 and 1.6 Earth Radii in the Habitable Zone, *Science*, 340, 587

106) Weiss, L. M., et al., 2013. The Mass of KOI-94d and a Relation for Planet Radius, Mass, and Incident Flux, *The Astrophysical Journal*, 768, 14

105) Abe, L., et al., 2013. The secondary eclipses of WASP-19b as seen by the ASTEP 400 telescope from Antarctica, *Astronomy and Astrophysics*, 553, A49

104) Nikolov, N., Chen, G., Fortney, J. J., Mancini, L., Southworth, J., van Boekel, R., & Henning, T., 2013. Refined physical properties and g', r', i', z', J, H, K transmission spectrum of WASP-23b from the ground, *Astronomy and Astrophysics*, 553, A26

103) Mancini, L., et al., 2013. Physical properties of the WASP-44 planetary system from simultaneous multi-colour photometry, *Monthly Notices of the Royal Astronomical Society*, 430, 2932

102) Kataria, T., Showman, A. P., Lewis, N. K., Fortney, J. J., Marley, M. S., & Freedman, R. S., 2013. Three-dimensional Atmospheric Circulation of Hot Jupiters on Highly Eccentric Orbits, *The Astrophysical Journal*, 767, 76

101) Lewis, N. K., et al., 2013. Orbital Phase Variations of the Eccentric Giant Planet HAT-P-2b, *The Astrophysical Journal*, 766, 95

100) Nettelmann, N., Helled, R., Fortney, J. J., & Redmer, R., 2013. New indication for a dichotomy in the interior structure of Uranus and Neptune from the application of modified shape and rotation data, *Planetary and Space Science*, 77, 143

99) Mace, G. N., et al., 2013. A Study of the Diverse T Dwarf Population Revealed by WISE, *The Astrophysical Journal Supplement Series*, 205, 6

98) Gilliland, R. L., et al., 2013. Kepler-68: Three Planets, One with a Density between that of Earth and Ice Giants, *The Astrophysical Journal*, 766, 40

- 97) Mancini, L., et al., 2013. A lower radius and mass for the transiting extrasolar planet HAT-P-8 b, *Astronomy and Astrophysics*, 551, A11
- 96) Barclay, T., et al., 2013. A sub-Mercury-sized exoplanet, *Nature*, 494, 452
- 95) Batalha, N. M., et al., 2013. Planetary Candidates Observed by Kepler. III. Analysis of the First 16 Months of Data, *The Astrophysical Journal Supplement Series*, 204, 24
- 94) Leggett, S. K., Morley, C. V., Marley, M. S., Saumon, D., Fortney, J. J., & Visscher, C., 2013. A Comparison of Near-infrared Photometry and Spectra for Y Dwarfs with a New Generation of Cool Cloudy Models, *The Astrophysical Journal*, 763, 130
- 93) Roberts, J. E., Barnes, J. W., Rowe, J. F., & Fortney, J. J., 2013. MOST Space Telescope Photometry of the 2010 January Transit of Extrasolar Planet HD80606b, *The Astrophysical Journal*, 762, 55
- 92) Showman, A. P., Fortney, J. J., Lewis, N. K., & Shabram, M., 2013. Doppler Signatures of the Atmospheric Circulation on Hot Jupiters, *The Astrophysical Journal*, 762, 24
- 91) Lopez, E. D., Fortney, J. J., & Miller, N., 2012. How Thermal Evolution and Mass-loss Sculpt Populations of Super-Earths and Sub-Neptunes: Application to the Kepler-11 System and Beyond, *The Astrophysical Journal*, 761, 59
- 90) Barclay, T., et al., 2012. Photometrically Derived Masses and Radii of the Planet and Star in the TrES-2 System, *The Astrophysical Journal*, 761, 53
- 89) Sing, D. K., et al., 2012. GTC OSIRIS transiting exoplanet atmospheric survey: detection of sodium in XO-2b from differential long-slit spectroscopy, *Monthly Notices of the Royal Astronomical Society*, 426, 1663
- 88) Orosz, J. A., et al., 2012. Kepler-47: A Transiting Circumbinary Multiplanet System, *Science*, 337, 1511
- 87) Morley, C. V., Fortney, J. J., Marley, M. S., Visscher, C., Saumon, D., & Leggett, S. K., 2012. Neglected Clouds in T and Y Dwarf Atmospheres, *Astrophysical Journal*, 756, 172
- 86) Carter, J. A., et al., 2012. Kepler-36: A Pair of Planets with Neighboring Orbits and Dissimilar Densities, *Science*, 337, 556
- 85) Jackiewicz, J., Nettelmann, N., Marley, M., & Fortney, J. J., 2012. Forward and inverse modeling for jovian seismology, *Icarus*, 220, 844
- 84) Howard, A. W., et al., 2012. Planet Occurrence within 0.25 AU of Solar-type Stars from Kepler, *Astrophysical Journal Supplement Series*, 201, 15
- 83) Stevenson, K. B., et al., 2012. Transit and Eclipse Analyses of the Exoplanet HD 149026b Using BLISS Mapping, *Astrophysical Journal*, 754, 136
- 82) Marley, M. S., Saumon, D., Cushing, M., Ackerman, A. S., Fortney, J. J., & Freedman, R., 2012. Masses, Radii, and Cloud Properties of the HR 8799 Planets, *Astrophysical Journal*, 754, 135
- 81) Sanchis-Ojeda, R., et al., 2012. Alignment of the stellar spin with the orbits of a three-planet system, *Nature*, 487, 449
- 80) Knutson, H. A., et al., 2012. 3.6 and 4.5 micron Phase Curves and Evidence for Non-

- equilibrium Chemistry in the Atmosphere of Extrasolar Planet HD 189733b, *Astrophysical Journal*, 754, 22
- 79) Crossfield, I. J. M., Knutson, H., Fortney, J. J., Showman, A. P., Cowan, N. B., & Deming, D., 2012. Spitzer/MIPS 24 μm Observations of HD 209458b: Three Eclipses, Two and a Half Transits, and a Phase Curve Corrupted by Instrumental Sensitivity Variations, *Astrophysical Journal*, 752, 81
- 78) Jackson, B. K., Lewis, N. K., Barnes, J. W., Drake Deming, L., Showman, A. P., & Fortney, J. J., 2012. The EVIL-MC Model for Ellipsoidal Variations of Planet-hosting Stars and Applications to the HAT-P-7 System, *Astrophysical Journal*, 751, 112
- 77) Gillon, M., et al., 2012. The TRAPPIST survey of southern transiting planets. I. Thirty eclipses of the ultra-short period planet WASP-43 b, *Astronomy and Astrophysics*, 542, A4
- 76) Arridge, C. S., et al., 2012. Uranus Pathfinder: exploring the origins and evolution of Ice Giant planets, *Experimental Astronomy*, 33, 753
- 75) Fortney, J. J., 2012. On the Carbon-to-oxygen Ratio Measurement in nearby Sun-like Stars: Implications for Planet Formation and the Determination of Stellar Abundances, *Astrophysical Journal*, 747, L27
- 74) Berta, Z. K., et al., 2012. The Flat Transmission Spectrum of the Super-Earth GJ1214b from Wide Field Camera 3 on the Hubble Space Telescope, *Astrophysical Journal*, 747, 35
- 73) Todorov, K. O., et al., 2012. Warm Spitzer Observations of Three Hot Exoplanets: XO-4b, HAT-P-6b, and HAT-P-8b, *Astrophysical Journal*, 746, 111
- 72) Borucki, W. J., et al., 2012. Kepler-22b: A 2.4 Earth-radius Planet in the Habitable Zone of a Sun-like Star, *Astrophysical Journal*, 745, 120
- 71) Kramm, U., Nettelmann, N., Fortney, J. J., Neuhauser, R., & Redmer, R., 2012. Constraining the interior of extrasolar giant planets with the tidal Love number k_2 using the example of HAT-P-13b, *Astronomy and Astrophysics*, 538, A146
- 70) Welsh, W. F., et al., 2012. Transiting circumbinary planets Kepler-34 b and Kepler-35 b, *Nature*, 481, 475
- 69) Colon, K. D., Ford, E. B., Redfield, S., Fortney, J. J., Shabram, M., Deeg, H. J., & Mahadevan, S., 2011. Probing potassium in the atmosphere of HD 80606b with tunable filter transit spectrophotometry from the Gran Telescopio Canarias, *Monthly Notices of the Royal Astronomical Society*, 419, 2233
- 68) Miller-Ricci Kempton, E., Zahnle, K., & Fortney, J. J., 2012. The Atmospheric Chemistry of GJ 1214b: Photochemistry and Clouds, *Astrophysical Journal*, 745, 3
- 67) Desert, J.-M., et al., 2011. The Hot-Jupiter Kepler-17b: Discovery, Obliquity from Stroboscopic Starspots, and Atmospheric Characterization, *Astrophysical Journal Supplement*, 197, 14
- 66) Endl, M., et al., 2011. Kepler-15b: A Hot Jupiter Enriched in Heavy Elements and the First Kepler Mission Planet Confirmed with the Hobby-Eberly Telescope, *Astrophysical Journal Supplement*, 197, 13
- 65) Desert, J.-M., et al., 2011. The Atmospheres of the Hot-Jupiters Kepler-5b and Kepler-6b

- Observed during Occultations with Warm-Spitzer and Kepler, *Astrophysical Journal Supplement*, 197, 11
- 64) Fortney, J. J., et al., 2011. Discovery and Atmospheric Characterization of Giant Planet Kepler-12b: An Inflated Radius Outlier, *Astrophysical Journal Supplement*, 197, 9
- 63) Lissauer, J. J., et al., 2011. Architecture and Dynamics of Kepler's Candidate Multiple Transiting Planet Systems, *Astrophysical Journal Supplement*, 197, 8
- 62) Cochran, W. D., et al., 2011. Kepler-18b, c, and d: A System of Three Planets Confirmed by Transit Timing Variations, Light Curve Validation, Warm-Spitzer Photometry, and Radial Velocity Measurements, *Astrophysical Journal Supplement*, 197, 7
- 61) Fressin, F., et al., 2011. Kepler-10 c: a 2.2 Earth Radius Transiting Planet in a Multiple System, *Astrophysical Journal Supplement*, 197, 5
- 60) Buchhave, L. A., et al., 2011. Kepler-14b: A Massive Hot Jupiter Transiting an F Star in a Close Visual Binary, *Astrophysical Journal Supplement*, 197, 3
- 59) Nutzman, P. A., Fabrycky, D. C., & Fortney, J. J., 2011. Using Star Spots to Measure the Spin-orbit Alignment of Transiting Planets, *Astrophysical Journal*, 740, L10
- 58) Doyle, L. R., et al., 2011. Kepler-16: A Transiting Circumbinary Planet, *Science*, 333, 1602
- 57) Arridge, C. S., et al., 2011. Uranus Pathfinder: exploring the origins and evolution of Ice Giant planets, *Experimental Astronomy*, 113
- 56) Moses, J. I., Visscher, C., Fortney, J. J., et al., 2011. Disequilibrium Carbon, Oxygen, and Nitrogen Chemistry in the Atmospheres of HD 189733b and HD 209458b, *Astrophysical Journal*, 737, 15
- 55) Miller, N. & Fortney, J. J., 2011. The Heavy-element Masses of Extrasolar Giant Planets, Revealed, *Astrophysical Journal*, 736, L29
- 54) Croll, B., Albert, L., Jayawardhana, R., Miller-Ricci Kempton, E., Fortney, J. J., Murray, N., & Neilson, H., 2011. Broadband Transmission Spectroscopy of the Super-Earth GJ 1214b Suggests a Low Mean Molecular Weight Atmosphere, *Astrophysical Journal*, 736, 78
- 53) Borucki, W. J., et al., 2011. Characteristics of Planetary Candidates Observed by Kepler. II. Analysis of the First Four Months of Data, *Astrophysical Journal*, 736, 19
- 52) Nettelmann, N., Fortney, J. J., Kramm, U., & Redmer, R., 2011. Thermal Evolution and Structure Models of the Transiting Super-Earth GJ 1214b, *Astrophysical Journal*, 733, 2
- 51) Cubillos, P. E., Rojo, P., & Fortney, J. J., 2011. High-resolution spectroscopic search for the thermal emission of the extrasolar planet HD 217107b, *Astronomy and Astrophysics*, 529, A88
- 50) Désert, J.-M., et al., 2011. Observational Evidence for a Metal-rich Atmosphere on the Super-Earth GJ1214b, *Astrophysical Journal*, 731, L40
- 49) Fortney, J. J., Ikoma, M., Nettelmann, N., Guillot, T., & Marley, M. S., 2011. Self-consistent Model Atmospheres and the Cooling of the Solar System's Giant Planets, *Astrophysical Journal*, 729, 32

- 48) Batalha, N. M., et al., 2011. Kepler's First Rocky Planet: Kepler-10b, *Astrophysical Journal*, 729, 27
- 47) Sing, D. K., Désert, J.-M., Fortney, J. J., et al., 2011. Gran Telescopio Canarias OSIRIS transiting exoplanet atmospheric survey: detection of potassium in XO-2b from narrowband spectrophotometry, *Astronomy and Astrophysics*, 527, A73
- 46) Lissauer, J. J., et al., 2011. A closely packed system of low-mass, low-density planets transiting Kepler-11, *Nature*, 470, 53
- 45) Borucki, W. J., et al., 2011. Characteristics of Kepler Planetary Candidates Based on the First Data Set, *Astrophysical Journal*, 728, 117
- 44) Shabram, M., Fortney, J. J., Greene, T. P.; Freedman, R. S., 2011. Transmission Spectra of Transiting Planet Atmospheres: Model Validation and Simulations of the Hot Neptune GJ 436b for the James Webb Space Telescope, *Astrophysical Journal*, vol 727, 65.
- 43) Croll, B., Lafreniere, D., Albert, L., Jayawardhana, R., Fortney, J. J., Murray, N., 2011. Near-infrared Thermal Emission from WASP-12b: Detections of the Secondary Eclipse in Ks, H, and J, *Astronomical Journal*, vol 141, 30.
- 42) Beerer, I. M., Knutson, H. A., Burrows, A, Fortney, J. J., et al., 2011. Secondary Eclipse Photometry of WASP-4b with Warm Spitzer, *Astrophysical Journal*, vol 727, 23.
- 41) D. Deming, H. Knutson, E. Agol, et al., 2011. Warm Spitzer Photometry of the Transiting Exoplanets CoRoT-1 and CoRoT-2 at Secondary Eclipse, *Astrophysical Journal*, vol 726, 95.
- 40) J. Steffen, N. M. Batalha, W. J. Borucki et al., 2010. Five Kepler target stars that show multiple transiting exoplanet candidates, *Astrophysical Journal*, vol 725, 1226-1241.
- 39) K. Cahoy, M. S. Marley, J. J. Fortney, 2010. Exoplanet albedo spectra and colors as a function of planet phase, separation, and metallicity, *Astrophysical Journal*, vol 724, 189-214.
- 38) B. Jackson, N. Miller, R. Barnes, S. N. Raymond, J. J. Fortney, R. Greenberg, 2010. The Roles of Tidal Evolution and Evaporative Mass Loss in the Origin of CoRoT-7b, *Monthly Notices of the Royal Astronomical Society*, vol 407, 910-922.
- 37) N. K. Lewis, A. P. Showman, J. J. Fortney, R. S. Freedman, K. Lodders, 2010. Atmospheric Circulation of Eccentric Hot Neptune GJ436b, *Astrophysical Journal*, vol 720, 344-356.
- 36) B. Croll, R. Jayawardhana, J. J. Fortney, D. Lafreniere, L. Albert, 2010. Near-Infrared Thermal Emission from TrES-3b: Ks-band Detection and an H-band Upper Limit on the Depth of the Secondary Eclipse, *Astrophysical Journal*, vol 718, 920-927.
- 35) B. Croll, L. Albert, D. Lafreniere, R. Jayawardhana, J. J. Fortney, 2010. Near-Infrared Thermal Emission from the Hot Jupiter TrES-2b: Ground-Based Detection of the Secondary Eclipse, *Astrophysical Journal*, vol 717, 1084-1091.
- 34) E. Miller-Ricci & J. J. Fortney, 2010. The Nature of the Atmosphere of the Transiting Super-Earth GJ 1214b, *Astrophysical Journal*, vol 716, L74-L79.
- 33) J. F. Rowe, W. J. Borucki, D. Koch, et al., 2010. *Kepler* Observations of Transiting Hot Companions, *Astrophysical Journal*, vol 713, L150-L154.
- 32) W. F. Welsh, J. A. Orosz, S. Seager, J. J. Fortney, J. Jenkins, J. F. Rowe, D. Koch, W. J.

- Borucki, 2010. The Discovery of Ellipsoidal Variations in the *Kepler* Light Curve of HAT-P-7, *Astrophysical Journal*, vol 713, L145-L149.
- 31) W. J. Borucki, D. Koch, et al., 2010. *Kepler* Planet Detection Mission: Introduction and First Results, *Science*, vol 327, 977-980.
- 30) S. Li, N. Miller, D. N. C. Lin, J. J. Fortney, 2010. WASP-12b as a prolate, inflated and disrupting planet from tidal dissipation. *Nature*, vol 463, 1054-1056.
- 29) M. Gillon, A. A. Lanotte, T. Barman, N. Miller, B.-O. Demory, M. Deleuil, J. Montalban, F. Bouchy, A. Collier Cameron, H. J. Deeg, J. J. Fortney, eight other authors, 2010. The thermal emission of the young and massive planet CoRoT-2b at 4.5 and 8 microns. *Astronomy & Astrophysics*, vol 511, A3.
- 28) J. J. Fortney, M. Shabram, A. P. Showman, Y. Lian, M. S. Marley, R. S. Freedman, N. Lewis, 2010. Transmission Spectra of Three-Dimensional Hot Jupiter Model Atmospheres. *Astrophysical Journal*, vol 709, 1396-1406.
- 27) K. Todorov, D. Deming, J. Harrington, K. B. Stevenson, W. C. Bowman, S. Nymeyer, J. J. Fortney, G. Bakos, 2010. Spitzer IRAC Secondary Eclipse Photometry of the Transiting Extrasolar Planet HAT-P-1b. *Astrophysical Journal*, vol 708, 498-504.
- 26) H. A. Knutson, D. Charbonneau, N. B. Cowan, J. J. Fortney, A. P. Showman, E. Agol, G. W. Henry, 2009. The 8 Micron Phase Variation of the Hot Saturn HD 149026b. *Astrophysical Journal*, vol 703, 769-784.
- 25) N. Miller, J. J. Fortney, B. Jackson, 2009. Inflating and Deflating Hot Jupiters: Coupled Tidal and Thermal Evolution of Known Transiting Planets. *Astrophysical Journal*, vol 702, 1413-1427.
- 24) K. Zahnle, M. S. Marley, R. S. Freedman, K. Lodders, J. J. Fortney, 2009. Atmospheric Sulfur Photochemistry on Hot Jupiters. *Astrophysical Journal*, vol 701, L20-L24.
- 23) A. P. Showman, J. J. Fortney, Y. Lian, M. S. Marley, R. S. Freedman, H. A. Knutson, D. Charbonneau, 2009. Atmospheric circulation of hot Jupiters: Coupled radiative-dynamical general circulation model simulations of HD 189733b and HD 209458b. *Astrophysical Journal*, vol 699, 564-584.
- 22) P. Nutzman, D. Charbonneau, J.N. Winn, H.A. Knutson, J.J. Fortney, M.J. Holman, E. Agol, 2009. A Precise Estimate of the Radius of the Exoplanet HD 149026b from Spitzer Photometry. *Astrophysical Journal*, vol 692, 229-235.
- 21) H. A. Knutson, D. Charbonneau, N. B. Cowan, J. J. Fortney, A. P. Showman, E. Agol, G. W. Henry, M. E. Everett, L. E. Allen, 2009. Multi-Wavelength Constraints on the Day-Night Circulation Patterns of HD 189733b. *Astrophysical Journal*, vol 690, 822-836.
- 20) J.J. Fortney, M.S. Marley, D. Saumon, K. Lodders, 2008. Synthetic Spectra and Colors of Young Giant Planet Atmospheres: Effects of Initial Conditions and Atmospheric Metallicity. *Astrophysical Journal*, vol 683, 1104-1116.
- 19) A. P. Showman, C. S. Cooper, J. J. Fortney, M. S. Marley, 2008. Atmospheric Circulation of Hot Jupiters: Three-dimensional circulation models of HD 209458b and HD 189733b with Simplified Forcing. *Astrophysical Journal*, vol 682, 559-576.

- 18) J. J. Fortney, K. Lodders, M. S. Marley, R. S. Freedman, 2008. A Unified Theory for the Atmospheres of the Hot and Very Hot Jupiters: Two Classes of Irradiated Atmospheres. *Astrophysical Journal*, vol 678, 1419-1435.
- 17) J. J. Fortney & M. S. Marley, 2007. Analysis of Spitzer Spectra of Irradiated Planets: Evidence for Water Vapor? *Astrophysical Journal*, vol 666, L45-L48.
- 16) H. A. Knutson, D. Charbonneau, L. E. Allen, J. J. Fortney, E. Agol, N. B. Cowan, A. P. Showman, C. S. Cooper, S. T. Megeath, 2007. A Map of the Day-Night Contrast of the Extrasolar Planet HD 189733b, *Nature*, vol 447, 183-186.
- 15) J. J. Fortney, M. S. Marley, J. W. Barnes, 2007. Planetary Radii across Five Orders of Magnitude in Mass and Stellar Insolation: Application to Transits, *Astrophysical Journal*, vol 659, 1661-1672.
- 14) M. S. Marley, J. J. Fortney, O. Hubickyj, P. Bodenheimer, J. J. Lissauer, 2007. On the Luminosity of Young Jupiters, *Astrophysical Journal*, vol 655, 541-548.
- 13) J. J. Fortney, C. S. Cooper, A. P. Showman, M. S. Marley, R. S. Freedman, 2006. The Influence of Atmospheric Dynamics on the Infrared Spectra and Light Curves of Hot Jupiters. *Astrophysical Journal*, vol 652, 746-757.
- 12) N. Bozorgnia, J. J. Fortney, C. McCarthy, D. A. Fischer, G. W. Marcy, 2006. The Search for an Atmospheric Signature of the Transiting Exoplanet HD 149026b, *Publications of the Astronomical Society of the Pacific*, vol 118, 1252-1257.
- 11) P. K. G. Williams, D. Charbonneau, C. S. Cooper, A. P. Showman, J. J. Fortney, 2006. Resolving the Surfaces of Extrasolar Planets with Secondary Eclipse Light Curves. *Astrophysical Journal*, vol 649, 1020-1027.
- 10) J. J. Fortney, D. Saumon, M. S. Marley, K. Lodders, R. Freedman, 2006. Atmosphere, Interior, and Evolution of the Metal-Rich Transiting Planet HD 149026b. *Astrophysical Journal*, vol 642, 495-504.
- 9) J. J. Fortney, 2005. The Effect of Condensates on the Characterization of Transiting Planet Atmospheres with Transmission Spectroscopy, *Monthly Notices of the Royal Astronomical Society*, vol 364, 649-653.
- 8) J.J. Fortney, M.S. Marley, K. Lodders, D. Saumon, R. Freedman, 2005. Comparative Planetary Atmospheres: Models of TrES-1 and HD209458b. *Astrophysical Journal*, vol 627, L69-L72.
- 7) J. Barnes and J. J. Fortney, 2004. Transit Detectability of Ring Systems around Extrasolar Giant Planets, *Astrophysical Journal*, vol 616, 1193-1203.
- 6) A. Burrows, I. Hubeny, W. B. Hubbard, D. Sudarsky, J. J. Fortney, 2004. Theoretical Radii of Transiting Giant Planets: The Case of OGLE-TR-56b, *Astrophysical Journal*, vol 610, L53-L56.
- 5) J. J. Fortney and W. B. Hubbard, 2004. Effects of Helium Phase Separation on the Evolution of Extrasolar Giant Planets, *Astrophysical Journal*, vol 608, 1039-1049.
- 4) J. J. Fortney and W. B. Hubbard, 2003. Phase Separation in Giant Planets: Inhomogeneous Evolution of Saturn. *Icarus*, vol. 164, 228-243.

- 3) J. J. Fortney, D. Sudarsky, I. Hubeny, C. S. Cooper, W. B. Hubbard, A. Burrows, J. I. Lunine, 2003. On the Indirect Detection of Sodium in the Atmosphere of the Planetary Companion to HD 209458. *Astrophysical Journal*, vol. 589, 615-622.
- 2) J. Barnes and J. J. Fortney, 2003. Measuring Oblateness and Rotation of Transiting Extrasolar Giant Planets. *Astrophysical Journal*, vol. 588, 545-556.
- 1) W. B. Hubbard, J. J. Fortney, J. I. Lunine, A. Burrows, D. Sudarsky, P. Pinto, 2001. Theory of Extrasolar Giant Planet Transits. *Astrophysical Journal*, vol. 560, 413-419.

REFEREED REVIEW ARTICLES:

- 11) Helled, R., & Fortney, J. J. (2020), The Interiors of Uranus and Neptune: Current Understanding and Open Questions, arXiv:2007.10783, Philosophical Transactions of the Royal Society A, in press
- 10) Fortney, J. J., Helled, R., Nettelmann, N., Stevenson, D. J., Marley, M. S., Hubbard, W. B., & Iess, L., 2016. The Interior of Saturn, ArXiv e-prints, arXiv:1609.06324, *Saturn in the 21st Century*, Cambridge University Press.
- 9) Spiegel, D. S., Fortney, J. J., & Sotin, C., 2014. Structure of exoplanets, *Proceedings of the National Academy of Science*, 111, 12622
- 8) Baraffe, I., Chabrier, G., Fortney, J. J., & Sotin, C., 2014. Planetary internal structures, *Protostars and Planets VI*, Henrik Beuther, Ralf S. Klessen, Cornelis P. Dullemond, and Thomas Henning (eds.), University of Arizona Press, p.763-786, arXiv:1401.4738
- 7) Madhusudhan, N., Knutson, H., Fortney, J. J., & Barman, T., 2014. Exoplanetary Atmospheres, *Protostars and Planets VI*, Henrik Beuther, Ralf S. Klessen, Cornelis P. Dullemond, and Thomas Henning (eds.), University of Arizona Press, p.739-762, arXiv:1402.1169
- 6) Helled, R., et al., 2014. Giant Planet Formation, Evolution, and Internal Structure, *Protostars and Planets VI*, Henrik Beuther, Ralf S. Klessen, Cornelis P. Dullemond, and Thomas Henning (eds.), University of Arizona Press, p.643-665, arXiv:1311.1142
- 5) J. J. Fortney, I. Baraffe, B. Militzer, 2010. Giant Planet Interior Structure and Thermal Evolution. *EXOPLANETS*. S. Seager (ed.), Univ. of Arizona Press, Tucson, AZ, arXiv:0911.3154.
- 4) J. J. Fortney and N. Nettelmann, 2010. Structure, Composition, and Evolution of Giant Planets, *Space Science Reviews*, vol 152, 423-447.
- 3) J. J. Fortney, S. H. Glenzer, M. Koenig, B. Militzer, D. Saumon, D. Valencia, 2009. Frontiers of the physics of dense plasmas and planetary interiors: experiments, theory, applications. *Physics of Plasmas*, vol 16, 041003-041003-7, doi:10.1063/1.3101818.
- 2) M. S. Marley, J. J. Fortney, S. Seager, T. Barman, 2007. Atmospheres of Extrasolar Giant Planets. *Protostars and Planets V*. B. Reipurth, D. Jewitt, and K. Keil (eds.), University of Arizona Press, Tucson, 733-747.
- 1) M. S. Marley and J. J. Fortney, 2007. The Interiors of Giant Planets. *Encyclopedia of the Solar System, Second Edition*. L. McFadden, P. Weissman, T. Johnson (eds.), Academic Press, San Diego, 403-418.

COMMENTARIES:

J. J. Fortney, 2018. A deeper look at Jupiter, *Nature*, 555, 168

J. J. Fortney, 2010. Peering into Jupiter, *Physics*, vol 3, 26.

J. J. Fortney, 2007. Extrasolar Planets: The one that Got Away, *Nature*, vol 449, 147-148.

J. J. Fortney, 2004. Looking into the Giant Planets, *Science*, vol 305, 1414-1415.