

Jessie Christiansen — Curriculum Vitae

NASA Exoplanet Science Institute, California Institute of Technology
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Employment

2018 – present: Research Scientist

NASA Exoplanet Science Institute/California Institute of Technology, Pasadena, CA, USA

2013 – 2018: Staff Scientist

NASA Exoplanet Science Institute/California Institute of Technology, Pasadena, CA, USA

2013 – 2017: Kepler Participating Scientist

NASA Exoplanet Science Institute/California Institute of Technology, Pasadena, CA, USA

2010 – 2013: Staff Scientist, Kepler Science Office

NASA Ames Research Center/SETI Institute, Moffett Field, CA, USA

2008 – 2010: Postdoctoral Research Fellow

Harvard-Smithsonian Center for Astrophysics, Boston, MA, USA

2004 – 2007: Postgraduate Teaching Assistant

University of New South Wales, Sydney, NSW, Australia

Education

2007: PhD (Astronomy), University of New South Wales, Sydney, Australia

2003: BSc Hons (Astronomy, First Class), Australian National University, Australia

2002: BSc (Advanced Studies), Griffith University, Brisbane, Australia

Selected Awards and Achievements

2018: NASA Exceptional Engineering Achievement Medal

2018: Outstanding Young Alumnus in the Sciences, Griffith University

2013–2017: Kepler Participating Scientist

2010: NASA Group Achievement Award to the Kepler Science Team

2009: NASA Group Achievement Award to the EPOXI Flight and Science Teams

2008: Honourable mention, Outstanding PhD Thesis Prize, Astronomical Society of Australia

2007: Best Student Talk, Astronomical Society of Australia

2006: Best Student Poster, Astronomical Society of Australia

2004–2007: Australian Postgraduate Award Scholarship, Australian National Government

2003: Honours Scholarship, Australian National University

2003: Honours Top-Up Scholarship, RSAA, Australian National University

2002: Science Medal (highest achieving science graduate), Griffith University

2002: Joe Segal Prize (highest achieving graduate from the Bachelor of Science with Advanced Studies), Griffith University

2000, 2001, 2002: Awards for Academic Excellence, Griffith University

2000–2002: Academic Excellence Scholarship, Griffith University

Selected Refereed Publications

Christiansen, J. L., Crossfield, I. J. M., Barentsen, G., et al. 2018, *AJ*, 155, 57, *The K2-138 System: A Near-resonant Chain of Five Sub-Neptune Planets Discovered by Citizen Scientists*

Christiansen, J. L., Vanderburg, A., Burt, J., et al. 2017, *AJ*, 154, 122, *Three's Company: An Additional Non-transiting Super-Earth in the Bright HD 3167 System, and Masses for All Three Planets*

Christiansen, J. L., Clarke, B. D., Burke, C. J., et al. 2016, *ApJ*, 828, 99, *Measuring Transit*

Signal Recovery in the Kepler Pipeline. III. Completeness of the Q1-Q17 DR24 Planet Candidate Catalogue with Important Caveats for Occurrence Rate Calculations

Christiansen, J. L., Clarke, B. D., Burke, C. J., et al. 2015, ApJ, 810, 95, *Measuring Transit Signal Recovery in the Kepler Pipeline II: Detection Efficiency as Calculated in One Year of Data*

Burke, C. J., **Christiansen, J. L.**, Mullally, F., et al. 2015, ApJ, 809, 8, *Terrestrial Planet Occurrence Rates for the Kepler GK Dwarf Sample*

Christiansen, J. L., Clarke, B. D., Burke, C. J. et al. 2013, ApJS, 207, 35, *Measuring Transit Signal Recovery in the Kepler Pipeline I: Individual Events*

Hopkins, P. F. & **Christiansen, J. L.** 2013, ApJ, 776, 48, *Turbulent Disks are Never Stable: Fragmentation and Turbulence-promoted Planet Formation*

Christiansen, J. L., Jenkins, J. M., Barclay, T. S. et al. 2012, PASP, 124, 1279, *The Derivation, Parameters and Value of Kepler's Combined Differential Photometric Precision*

Christiansen, J. L., Ballard, S., Charbonneau, D., et al. 2011, ApJ, 710, 97, *Studying the atmosphere of the exoplanet HAT-P-7b via secondary eclipse measurements with EPOXI, Spitzer and Kepler*

Ballard, S., **Christiansen, J. L.**, Charbonneau, D. et al. 2011, ApJ, 732, 41, *A Search for Additional Planets in Five of the Exoplanetary Systems Studied by the NASA EPOXI Mission*

Christiansen, J. L., Ballard, S., Charbonneau, D. et al. 2011, ApJ, 726, 94, *System Parameters, Transit Times, and Secondary Eclipse Constraints of the Exoplanet Systems HAT-P-4, TrES-2, TrES-3, and WASP-3 from the NASA EPOXI Mission of Opportunity*

Ballard, S., **Christiansen, J. L.**, Charbonneau, D. et al. 2010, ApJ, 716, 1047, *A Search for Additional Planets in the NASA EPOXI Observations of the Exoplanet System GJ 436*

Christiansen, J. L., Drekas, A., Kiss, L. L., et al. 2008, MNRAS, 385, 1749, *The University of New South Wales Extrasolar Planet Search: a catalogue of variable stars from fields observed between 2004 and 2007*

Christiansen, J. L., Drekas, A., Ashley, M. C. B., et al. 2007, MNRAS, 382, 239, *The first high-amplitude δ Scuti star in an eclipsing binary system*

Selected Colloquia and Invited Talks

2018

Keynote talk, 107th Annual Meeting of the AAVSO, Flagstaff AZ, USA

Colloquium, NRC Herzberg, UBC (Vancouver) and University of Victoria, Canada

Invited talk, ExSoCal 2018, Pasadena CA, USA

Invited talk, Sagan Exoplanet Summer Workshop, Pasadena CA, USA

Invited talk, Space on the Hill: Tools for Hunting Exoplanets, Washington DC, USA

Invited talk, NASA Social TESS Mission Overview, Cape Canaveral FL, USA

Olowin Physics and Astronomy Lecturer, St Mary's College of California, Moraga CA, USA

Invited talk, American Association for the Advancement of Science, Austin TX, USA

Press panelist, American Astronomical Society, National Harbor MD, USA

2017

Invited talk, Franco-Australian Astrobiology & Exoplanet Workshop, ACT, Australia

Seminar, University of Toledo, Ohio, USA

Colloquium, Carnegie Observatories, CA, USA

Invited talk, Exoclipse: Exploring New Worlds in the Shade, ID, USA

Invited talk, Innovation Speaker Series, CA, USA

Invited talk, Society of Astronomical Sciences Annual Symposium, CA, USA

Invited talk, Greater IPAC Science Symposium, CA, USA

Seminar, Earth, Planetary & Space Sciences, UCLA, CA, USA

Seminar, NASA Goddard Space Flight Center, MD, USA

Invited talk, K2/TESS Special Session, AAS 229, TX, USA

2016

Invited talk, Hotwiring the Transient Universe 5, Villanova University, PA, USA

Invited talk, Sagan Summer Workshop, CA, USA

Colloquium, Cal State Northridge, CA, USA

Seminar, Physics & Astronomy, Cal Poly Pomona, CA, USA

2015

Invited talk, 5th Australian Exoplanet Workshop, NSW, Australia

Invited talk, K2 Science Conference, CA, USA

Invited talk, Sagan Summer Workshop, CA, USA

Successful Recent Proposals as PI

2018–2020: Astrophysics Data Analysis Program (\$640k), *Towards a Comprehensive Understanding of Planet Occurrence Rates: Extending the Kepler Legacy Across a Wide Stellar Parameter Space with K2* (17-ADAP17-0263)

2018: NASA Spitzer Director's Discretionary Time (12 hours), *Extending and Characterizing an Exoplanet System in a Pristine Chain of Resonances*

2018A: Palomar 200-inch (5 nights), *The Elephant in the Room: Correcting Kepler Occurrence Rates for Stellar Multiplicity*

2013–2017: Kepler Participating Scientists Cycle 3 Program (\$193k), *Towards eta-Earth: Characterizing the detection rate of small planets in the Kepler pipeline* (12-KPS12-0026)

2014B: Palomar 200-inch (1 night), *The First Characterisation of a Binary System with Planets Detected Around Both Stars*

Community Service

Exoplanet Program Analysis Group (ExoPAG) Executive Committee member, 2018–present

Caltech Women in Physics, Maths and Astronomy (WiPMA) faculty advisor, 2017–present

Caltech Women Mentoring Women group leader, 2017–present

IPAC seminar series organiser, 2014–present

SOC member; Sagan Summer Workshop, July 2018, CA, USA

LOC member; Know Thy Star, Know Thy Planet, October 2017, CA, USA

SOC member; Kepler/K2 Science Conference IV, June 2017, CA, USA

SOC member; Sagan Summer Workshop, July 2016, CA, USA

SOC chair; ExSoCal 2016, September 2016, CA, USA

SOC chair; ExSoCal 2015, September 2015, CA, USA

IPAC Visiting Graduate Student Fellowship reviewer (2015, 2016)

NASA XRP review panelist (2014, 2017)

NASA Postdoctoral Program Review (2014)

NASA HST review panelist (2016)

NASA Spitzer review panelist (2016)

Kepler Guest Observer Office technical reviewer (2012)

Referee for Nature Astronomy, MNRAS, ApJ, AJ, A&A, and Astronomy & Computing