

Brian Jackson

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Education

Ph.D. Planetary Sciences U of AZ 2009 May
– Advisor: Prof. Richard Greenberg
– Dissertation Title: “Tidal Evolution of Extra-Solar Planets”
B.S. (Summa cum Laude) Physics Georgia Institute of Technology 2004 May

Positions

Assistant Prof., Boise State Physics 2014 - Present
Carnegie DTM Astronomy Postdoctoral Fellow 2011-2014
Instructor, U of MD Astronomy Dept. 2010
NASA internship mentor/geology field trip leader 2010, 2011
NASA Postdoctoral Program Fellow, NASA’s Goddard 2009-2011
NASA Earth and Space Sciences Graduate Fellow (NESSF), U of AZ 2008-2009
Graduate Research Associate, U of AZ 2004-2008
Georgia Space Grant Fellow, Jet Propulsion Lab 2004
Caltech Summer Undergraduate Research Fellow, Jet Propulsion Lab 2003

Funding (Total: \$738k)

“Boise State Planetarium”, Boise State Pony Up Crowd-Funding Campaign Fall 2018
<https://ponyup.boisestate.edu/planetarium>
– Proposal PI: Brian Jackson, Boise State University
– Program Point-of-Contact: Cara Walker, carawalker@boisestate.edu
– Total Budget: \$4,940

“Dust Devil Survey Using an Instrumented UAV”, NASA Idaho Space Grant Consortium Fall
2018-Spring 2019
– Proposal PI: Brian Jackson, Boise State University
– Program Point-of-Contact: Susie Johnson, susiej@uidaho.edu
– Total Budget: \$24,358

“Capturing Devils in the Desert”, NASA Solar System Workings 2018-2021
– Proposal PI: Brian Jackson, Boise State University
– Program Point-of-Contact: Jennifer Heldmann, hq-ssw@mail.nasa.gov
– Total Budget: \$217,286

Eclipse Outreach, Idaho STEM Action Center 2017
– Proposal PI: Brian Jackson, Boise State University
– Program Point-of-Contact: Angela Hemingway, Angela.Hemingway@stem.idaho.gov
– Total Budget: \$6,376

- “2017 Idaho Eclipse”, Boise State Pony Up Crowd-Funding Campaign Spring 2017
<https://ponyup.boisestate.edu/project/5060>
 – Proposal PI: Brian Jackson, Boise State University
 – Program Point-of-Contact: Cara Walker, carawalker@boisestate.edu
 – Total Budget: \$10,798
- “Dust Devil Survey Using an Instrumented UAV”, NASA Idaho Space Grant Consortium 2017
 – Proposal PI: Brian Jackson, Boise State University
 – Program Point-of-Contact: Susie Johnson, susiej@uidaho.edu
 – Total Budget: \$7,000
- Exoclipse Conference, Caltech IPAC 2017
 – Proposal PI: Brian Jackson, Boise State University
 – Program Point-of-Contact: Dawn Gelino, dawn@ipac.caltech.edu
 – Total Budget: \$20,000
- “Unstable Roche-Lobe Overflow of Gaseous Planets”, NASA’s XRP 2017-2019
 – Proposal PI: Brian Jackson, Boise State University
 – Program Point-of-Contact: Christina Richey, christina.r.richey@NASA.gov
 – Total Budget: \$165,864
- “Bring Back Our Observatory”, Boise State Pony Up Crowd-Funding Campaign Fall 2015
<http://ponyup.boisestate.edu/observatory>
 – Proposal PI: Brian Jackson, Boise State University
 – Program Point-of-Contact: Cara Walker, carawalker@boisestate.edu
 – Total Budget: \$10,000
- “Fossil Cores in the *Kepler* Data”, NASA’s Astrophys. Data Anal. Program 2014-2018
 – Proposal PI: Brian Jackson, Boise State University
 – Program Point-of-Contact: Doug Hudgins, Douglas.M.Hudgins@nasa.gov
 – Total Budget: \$271,200

Professional Training

- Certified Software Carpentry Instructor – <https://software-carpentry.org/> Summer 2018
 Boise State Teaching Scholars Program –
 Boise State’s Center for Teaching and Learning Fall 2017-Spring 2018
- Creating Rubrics: Multi-purpose tools for you and your students –
 Boise State’s Center for Teaching and Learning Spring 2016
- Undergraduate Research as a High Impact Learning Experience Inside the Classroom –
 Boise State’s Center for Teaching and Learning Spring 2016
- Faculty Writing Circle – Boise State’s Center for Teaching and Learning Fall 2015-Spring 2016
- Using Active Learning Techniques for Teaching and Assessment Workshop –
 Boise State’s Center for Teaching and Learning Fall 2015
- New Faculty Workshop – American Association of Physics Teachers Summer 2015
- Service-Learning Orientation – Boise State’s Center for Teaching and Learning Fall 2014

Professional and University Service Projects

- Division of Planetary Sciences-European Planetary Science Conference 2019, Scientific Organizing Committee Member 2018-2019
- Division of Planetary Sciences Prize Sub-Committee Member 2017-2019
- Division of Planetary Sciences 2018 Meeting, Scientific Organizing Committee Member
- Thesis Committee Member for Johnathan Ahlers (PhD), U of ID, Physics Fall 2018
 – Thesis title: “Spin-Orbit Misalignment of Planets Orbiting High-Mass Stars: Observations and Techniques Using NASA’s Kepler Telescope”
- Division of Planetary Sciences 2017 Meeting, Local Organizing Committee Member
- Developed new University Foundations course, UF100 Summer 2018 - Fall 2018
- Boise State Teaching Scholars Fellow Fall 2017 - Spring 2018
- Thesis Committee Member for Shannon Mackenzie (PhD), U of ID, Physics Fall 2017
 – Thesis title: “Complex hydrocarbons in the Saturn system”
- Local Organizing Committee Chair, Exoclipse Conference 2017
- Co-Chair, Physics Dept. Seminar Series Fall 2014 - Present
- Panel and External reviewer for NASA ROSES, NSF Astronomy/Astrophysics, Fonds de recherche du Qubec - Nature et technologies, NASA’s Postdoctoral Program
- Manuscript Referee for Astrophysical Journal, Planetary Science, Astrobiology, Nature, Science, Celestial Mechanics and Dynamical Astronomy, Monthly Notices of the Royal Astronomical Society, Astronomy & Computing, Journal of Geophysical Research
- Reviewer for *Comparative Climatology of Terrestrial Planets*, UA Press
- Journal Club organizer at Carnegie DTM
- Library Committee member at Carnegie DTM
- Exoplanet and Astrobiology Journal Club founder at NASA Goddard
- External Committee Member/Advisor for Nicole Thom (MS), U of ND, Space Sciences 2012
 – Thesis title: “Atmospheric Escape and Orbital Evolution of Exoplanets”

Public Outreach and Education

- American Astronomical Society, Division of Planetary Sciences Education Committee Deputy Chair May 2019 - Present
- Boise Astronomical Society (boiseastro.org) Education Liaison Summer 2019 - Present
- STEM Teacher Space Science Summer 2019 Workshop Summer 2018 - Summer 2019
- Idaho Science Olympiad Site Organizer Fall 2018 - Spring 2019
- Organizer of Boise State Physics First Friday Astronomy Public Events Summer 2016 - Present
- Pony Up Crowd-Funding campaign (\$5k) for planetarium Fall 2018
<http://ponyup.boisestate.edu/planetarium>
- Pony Up Crowd-Funding campaign (\$11k) for regional solar eclipse outreach Spring 2017
<https://ponyup.boisestate.edu/project/5060>
- Pony Up Crowd-Funding campaign (\$10k) to refurbish on-Campus observatory Fall 2015
<https://ponyup.boisestate.edu/observatory>
- Organized \$16k+ of telescope donations
- Panelist for discussion of science and theater in “Cosmic Conversations” 2016 Feb
- American Assoc. of Physics Teachers New Faculty Workshop, College Park MD 2015 Jun

Invited Author for “Physics World” – https://tinyurl.com/y8un6tml	2015
Board Member for Montgomery County MD Science Fair	2013
Judge for Montgomery County MD Science Fair	2012, 2013
Participant in several science documentaries	2011 Aug
Astronomy partner with Towson U.’s Project ASTRO	2011-2012
Astronomy partner with U of AZ Project ASTRO	2005-2006
Regular contributor to “Astronomy” Magazine’s “Ask Astro”	
Professional NASA media training	

Student Research Assistants

Ciera Partka-Worley (BSU Physics) – Unstable Roche-Lobe Overflow	2018 - Present
Michelle Szurgot (BSU Physics) – Terrestrial & Martian Dust Devils	2018 - Present
Samantha Johnson (BSU Physics) – Short-Period Exoplanets	2017 - Present
Wesley Sandidge (BSU Physics) – Eclipse Variability	2016 - Present
Simon Roy (BSU Physics) – Unstable Roche-Lobe Overflow	2016 - 2017
Steven Kreyche (BSU Physics) – Eclipse Variability	2016 - 2017
Went on to U of ID as physics grad	
Karan Davis (BSU Physics) – Terrestrial & Martian Dust Devils	2016 - 2018
Went on to Puget Sound Power	
Jennifer Briggs (BSU Physics) – Eclipse Variability as Observed by the Kepler Mission	2015
Jacob Sabin (BSU Physics) – Adapting the Titius-Bode Law to Exoplanet Systems	2015
Elizabeth Kandziolka (BSU Physics) – Eclipse Variability	2015
Nathan Grigsby (BSU Physics) – Terrestrial & Martian Dust Devils	2015
Emily Jensen (BSU Physics) – Stable Roche-Lobe Overflow	2014 - 2016
Went on to U of WY as astronomy grad	
Ben Knipping (BSU Physics) – Short-Period Exoplanets from the Kepler Mission	2014 - 2015
David Weiss (College of Charleston) – Terrestrial & Martian Basalt Column Morphology	2011
Went on to Brown as geology grad	
Nicole Thom (U of ND) – Evaporative Mass Loss from Short-Period Exoplanets	2010
Went on to Harvard CfA as software developer	
Kynan Rilee (Princeton)	2010

Publications – h-index: 24, total citations: 1900+ (Student authors in [blue](#) below).

Refereed Articles

- B. JACKSON**, E. Adams, [Sandidge, W.](#), [Kreyche, S.](#), & [Briggs, J.](#) Variability in the Atmosphere of the Hot Jupiter Kepler-76b. *AJ*, 157:239, 2019.
- J. W. Barnes, S. M. MacKenzie, E. F. Young, L. E. Trouille, S. Rodriguez, T. Cornet, **B. JACKSON**, M. Ádámkóvics, C. Sotin, & J. M. Soderblom. Spherical radiative transfer in c++ (srctc++): A parallel monte carlo radiative transfer model for titan. *The Astronomical Journal*, 155(6):264, 2018.
- B. JACKSON**, R. Lorenz, & [Davis, K.](#) A framework for relating the structures and recovery statistics in pressure time-series surveys for dust devils. *Icarus*, 299:166–174, 2018a.
- B. JACKSON**, R. Lorenz, [Davis, K.](#), & B. Lipple. Using an instrumented drone to probe dust devils on oregons alvord desert. *Remote Sensing*, 10(1):65, 2018b.

- R. D. Lorenz, **B. JACKSON**, & P. D. Lanagan. A timelapse camera dataset and markov model of dust devil activity at eldorado playa, nevada, usa. *Aeolian Research*, 33:33–43, 2018.
- E. R. Adams, **B. JACKSON**, M. Endl, W. D. Cochran, P. J. MacQueen, D. A. Duev, R. Jensen-Clem, M. Salama, C. Ziegler, C. Baranec et al. Ultra-short-period planets in k2 with companions: A double transiting system for epic 220674823. *The Astronomical Journal*, 153(2):82, 2017.
- B. JACKSON**, P. Arras, K. Penev, S. Peacock, & P. Marchant. A new model of roche lobe overflow for short-period gaseous planets and binary stars. *The Astrophysical Journal*, 835(2):145, 2017a.
- B. JACKSON**, **Jensen, E.**, S. Peacock, P. Arras, & K. Penev. Erratum to: Tidal decay and stable roche-lobe overflow of short-period gaseous exoplanets. *Celestial Mechanics and Dynamical Astronomy*, 129(4):553–554, 2017b.
- E. R. Adams, **B. JACKSON**, & M. Endl. Ultra-short-period planets in k2 superpig results for campaigns 0–5. *The Astronomical Journal*, 152(2):47, 2016.
- R. Heller, M. Hippke, & **B. JACKSON**. Modeling the orbital sampling effect of extrasolar moons. *The Astrophysical Journal*, 820(2):88, 2016.
- B. JACKSON**, **Jensen, E.**, S. Peacock, P. Arras, & K. Penev. Tidal decay and stable roche-lobe overflow of short-period gaseous exoplanets. *Celestial Mechanics and Dynamical Astronomy*, 126(1-3):227–248, 2016.
- B. JACKSON** & R. Lorenz. A multiyear dust devil vortex survey using an automated search of pressure time series. *Journal of Geophysical Research: Planets*, 120(3):401–412, 2015. ISSN 2169-9100. 2014JE004712.
- R. D. Lorenz & **B. JACKSON**. Dust devils and dustless vortices on a desert playa observed with surface pressure and solar flux logging. *GeoResJ*, 5:1–11, 2015.
- G. Vixie, J. W. Barnes, **B. JACKSON**, S. Rodriguez, S. Le Mouélic, C. Sotin, S. MacKenzie, & P. Wilson. Possible temperate lakes on Titan. *Icarus*, 257:313–323, 2015.
- R. D. Lorenz & **B. JACKSON**. Declining rock movement at Racetrack Playa, Death Valley National Park: An indicator of climate change? *Geomorphology*, 211:116–120, 2014.
- R. D. Norris, J. M. Norris, R. D. Lorenz, J. Ray, & **B. JACKSON**. Sliding Rocks on Racetrack Playa, Death Valley National Park: First Observation of Rocks in Motion. *PLOS ONE*, 9:8, 2014.
- K. Penev, M. Zhang, & **B. JACKSON**. POET: A Model for Planetary Orbital Evolution Due to Tides on Evolving Stars. *PASP*, 126:553–564, 2014.
- J. W. Barnes, J. C. van Eyken, **B. JACKSON**, D. R. Ciardi, & J. J. Fortney. Measurement of Spin-orbit Misalignment and Nodal Precession for the Planet around Pre-main-sequence Star PTFO 8-8695 from Gravity Darkening. *ApJ*, 774:53, 2013.
- B. JACKSON**, C. C. Stark, E. R. Adams, J. Chambers, & D. Deming. A Survey for Very Short-period Planets in the Kepler Data. *ApJ*, 779:165, 2013.
- C. C. Stark, A. P. Boss, A. J. Weinberger, **B. JACKSON**, M. Endl, W. D. Cochran, M. Johnson, C. Caldwell, E. Agol, E. B. Ford, J. R. Hall, K. A. Ibrahim, & J. Li. A Search for Exozodiacal Clouds with Kepler. *ApJ*, 764:195, 2013.
- D. Deming, J. D. Fraine, P. V. Sada, N. Madhusudhan, H. A. Knutson, J. Harrington, J. Bleicic, S. Nymeyer, A. M. S. Smith, & **B. JACKSON**. Infrared Eclipses of the Strongly Irradiated Planet WASP-33b, and Oscillations of Its Host Star. *ApJ*, 754:106, 2012.
- B.-O. Demory, M. Gillon, S. Seager, B. Benneke, D. Deming, & **B. JACKSON**. Detection of Thermal Emission from a Super-Earth. *ApJ*, 751:L28, 2012.
- B. JACKSON**, N. K. Lewis, J. W. Barnes, L. Drake Deming, A. P. Showman, & J. J. Fortney.

- The EVIL-MC Model for Ellipsoidal Variations of Planet-hosting Stars and Applications to the HAT-P-7 System. *ApJ*, 751:112, 2012.
- K. Penev, **B. JACKSON**, F. Spada, & N. Thom. Constraining Tidal Dissipation in Stars from the Destruction Rates of Exoplanets. *ApJ*, 751:96, 2012.
- P. V. Sada, D. Deming, D. E. Jennings, **B. JACKSON**, C. M. Hamilton, J. Fraine, S. W. Peterson, F. Haase, K. Bays, A. Lunsford, & E. O’Gorman. Extrasolar Planet Transits Observed at Kitt Peak National Observatory. *PASP*, 124:212–229, 2012.
- D. Deming, P. V. Sada, **B. JACKSON**, S. W. Peterson, E. Agol, H. A. Knutson, D. E. Jennings, F. Haase, & K. Bays. Kepler and Ground-based Transits of the Exo-Neptune HAT-P-11b. *ApJ*, 740:33, 2011.
- R. D. Lorenz, **B. JACKSON**, J. W. Barnes, J. N. Spitale, & J. M. Keller. Ice rafts not sails: Floating the rocks at Racetrack Playa. *American Journal of Physics*, 79(1):2361, 2011a.
- R. D. Lorenz, **B. JACKSON**, J. W. Barnes, J. N. Spitale, J. Radebaugh, & K. H. Baines. Meteorological Conditions at Racetrack Playa, Death Valley National Park: Implications for Rock Production and Transport. *Journal of Applied Meteorology and Climatology*, 50:2361, 2011b.
- R. Barnes, S. N. Raymond, R. Greenberg, **B. JACKSON**, & N. A. Kaib. CoRoT-7b: Super-Earth or Super-Io? *ApJ*, 709:L95–L98, 2010.
- J. H. Debes & **B. JACKSON**. Too Little, Too Late: How the Tidal Evolution of Hot Jupiters Affects Transit Surveys of Clusters. *ApJ*, 723:1703–1710, 2010.
- B. JACKSON**, N. Miller, R. Barnes, S. N. Raymond, J. J. Fortney, & R. Greenberg. The roles of tidal evolution and evaporative mass loss in the origin of CoRoT-7 b. *MNRAS*, 407:910–922, 2010.
- R. D. Lorenz, **B. JACKSON**, & J. W. Barnes. Inexpensive time-lapse digital cameras for studying transient meteorological phenomena: dust devils and playa flooding. *Journal of Atmospheric and Oceanic Technology*, 27:246, 2010a.
- R. D. Lorenz, **B. JACKSON**, & A. Hayes. Racetrack and Bonnie Claire: southwestern US playa lakes as analogs for Ontario Lacus, Titan. *Planet. Space Sci.*, 58:724–731, 2010b.
- P. V. Sada, D. Deming, **B. JACKSON**, D. E. Jennings, S. W. Peterson, F. Haase, K. Bays, E. O’Gorman, & A. Lundsford. Recent Transits of the Super-Earth Exoplanet GJ 1214b. *ApJ*, 720:L215–L218, 2010.
- J. W. Barnes, R. H. Brown, J. M. Soderblom, L. A. Soderblom, R. Jaumann, **B. JACKSON**, S. Le Mouélic, C. Sotin, B. J. Buratti, K. M. Pitman, K. H. Baines, R. N. Clark, P. D. Nicholson, E. P. Turtle, & J. Perry. Shoreline features of Titan’s Ontario Lacus from Cassini/VIMS observations. *Icarus*, 201:217–225, 2009a.
- R. Barnes, **B. JACKSON**, R. Greenberg, & S. N. Raymond. Tidal Limits to Planetary Habitability. *ApJ*, 700:L30–L33, 2009b.
- R. Barnes, **B. JACKSON**, S. N. Raymond, A. A. West, & R. Greenberg. The HD 40307 Planetary System: Super-Earths or Mini-Neptunes? *ApJ*, 695:1006–1011, 2009c.
- B. JACKSON**, R. Barnes, & R. Greenberg. Observational Evidence for Tidal Destruction of Exoplanets. *ApJ*, 698:1357–1366, 2009.
- R. Barnes, S. N. Raymond, **B. JACKSON**, & R. Greenberg. Tides and the Evolution of Planetary Habitability. *Astrobiology*, 8:557–568, 2008.
- B. JACKSON**, R. Barnes, & R. Greenberg. Tidal heating of terrestrial extrasolar planets and implications for their habitability. *MNRAS*, 391:237–245, 2008a.
- B. JACKSON**, R. Greenberg, & R. Barnes. Tidal Evolution of Close-in Extrasolar Planets. *ApJ*,

678:1396–1406, 2008b.

B. JACKSON, R. Greenberg, & R. Barnes. Tidal Heating of Extrasolar Planets. *ApJ*, 681:1631–1638, 2008c.

J. P. Dunn, **B. JACKSON**, R. P. Deo, C. Farrington, V. Das, & D. M. Crenshaw. An Internet Database of Ultraviolet Continuum Light Curves for Seyfert Galaxies. *PASP*, 118:572–579, 2006.

Book Chapters

B. JACKSON & J. Carlberg. Accretion of planetary material onto host stars. *Handbook of Exoplanets*, pages 1–18, 2017.

R. D. Lorenz & **B. JACKSON**. Dust devil populations and statistics. *Space Science Reviews*, 203(1-4):277–297, 2016.

B. JACKSON, R. Barnes, & R. Greenberg. Tides and Exoplanets. In *Formation and Evolution of Exoplanets*, pages 243–266. 2010.

Conference Abstracts and White Papers

R. Heller, M. Hippke, & **B. JACKSON**. Pyose: Orbital sampling effect (ose) simulator. *Astrophysics Source Code Library*, 2018.

B. JACKSON, E. Adams, [Sandidge, W.](#), [Kreyche, S.](#), & [Briggs, J.](#) Searching for Eclipse Variability for Kepler-76 b in the Kepler Dataset. In *AAS/Division for Planetary Sciences Meeting Abstracts #50*, volume 50 of *AAS/Division for Planetary Sciences Meeting Abstracts*, page 402.06. 2018.

B. JACKSON, E. R. Adams, R. Heller, & M. Endl. Investigating planet formation and evolutionary processes with short-period exoplanets. *arXiv preprint arXiv:1803.10293*, 2018a.

B. JACKSON, R. Lorenz, [Davis, K.](#), & B. Lipple. Using an instrumented drone to probe dust devils. In *Lunar and Planetary Science Conference*, volume 49. 2018b.

R. Lorenz, **B. JACKSON**, & P. Lanagan. A timelapse camera archive of dust devil activity at eldorado playa, usa. In *Lunar and Planetary Science Conference*, volume 49. 2018.

[Johnson, S. R.](#), **B. JACKSON**, E. Adams, & M. Endl. Discovering Ultra-Short-Period K2 Exoplanets. In *AAS/Division for Planetary Sciences Meeting Abstracts #50*, volume 50 of *AAS/Division for Planetary Sciences Meeting Abstracts*, page 413.10. 2018.

[Sandidge, W.](#) & **B. JACKSON**. Assembling a Low-Cost Portable Planetarium with Crowd-Funding. In *AAS/Division for Planetary Sciences Meeting Abstracts #50*, volume 50 of *AAS/Division for Planetary Sciences Meeting Abstracts*, page 211.09. 2018.

B. JACKSON & R. Lorenz. A framework for mitigating the biases in barometric dust devil surveys. In *Lunar and Planetary Science Conference*, volume 48. 2017.

B. JACKSON, R. Lorenz, [Davis, K.](#), & B. Lipple. Using an instrumented drone to sample dust devils. In *AAS/Division for Planetary Sciences Meeting Abstracts*, volume 49. 2017a.

B. K. Jackson, E. R. Adams, & M. Endl. Superpig’s ultra-short-period planets from k2 campaigns 6 through 8. In *American Astronomical Society Meeting Abstracts*, volume 229. 2017b.

[Davis, K.](#) & **B. JACKSON**. Boise state’s idaho eclipse outreach program. In *AAS/Division for Planetary Sciences Meeting Abstracts*, volume 49. 2017.

E. R. Adams, **B. JACKSON**, & M. Endl. Ultra-short-period planets in k2: New results from superpig. In *AAS/Division for Planetary Sciences Meeting Abstracts*, volume 48. 2016.

- B. JACKSON.** Crowdfunding to support university research and public outreach. In *AAS/Division for Planetary Sciences Meeting Abstracts*, volume 48. 2016.
- B. JACKSON, Jensen, E.,** S. Peacock, P. Arras, & K. Penev. Tidal decay and roche-lobe overflow of gaseous exoplanets. In *AAS/Division for Planetary Sciences Meeting Abstracts*, volume 48. 2016.
- B. K. Meinke, **B. JACKSON,** S. Buxner, S. Horst, D. Brain, & N. M. Schneider. Dps discovery slide sets for the introductory astronomy instructor. In *AAS/Division for Planetary Sciences Meeting Abstracts*, volume 48. 2016.
- E. R. Adams & **B. JACKSON.** The SuPerPiG search for short period planets in the K2 dataset. In *AAS/Division for Planetary Sciences Meeting Abstracts*, volume 47 of *AAS/Division for Planetary Sciences Meeting Abstracts*, page 501.02. 2015.
- B. JACKSON,** P. Arras, S. Peacock, & K. Penev. Tidal Decay and Disruption of Gaseous Exoplanets. *IAU General Assembly*, 22:2258333, 2015a.
- B. K. Jackson, P. Arras, **Jensen, E.,** S. Peacock, P. Marchant, & K. Penev. Tidal Decay and Disruption of Gaseous Exoplanets. In *AAS/Division for Planetary Sciences Meeting Abstracts*, volume 47 of *AAS/Division for Planetary Sciences Meeting Abstracts*, page 501.08. 2015b.
- R. Luger, R. Barnes, E. Lopez, J. Fortney, **B. JACKSON,** & V. Meadows. Habitable Evaporated Cores: Transforming Mini-Neptunes into Super-Earths in the Habitable Zones of M Dwarfs. *Astrobiology*, 15:57–88, 2015.
- E. R. Adams, **B. JACKSON,** M. Endl, C. C. Stark, J. Chambers, & D. Deming. A Survey for Very Short-Period Planets in the Kepler Data. In *AAS/Division for Planetary Sciences Meeting Abstracts*, volume 46 of *AAS/Division for Planetary Sciences Meeting Abstracts*, page 210.01. 2014.
- B. JACKSON** & R. Lorenz. A Multi-Year Dust Devil Vortex Survey Using an Automated Search of Pressure Time-Series. In *AAS/Division for Planetary Sciences Meeting Abstracts*, volume 46 of *AAS/Division for Planetary Sciences Meeting Abstracts*, page 300.05. 2014.
- B. JACKSON,** C. C. Stark, E. R. Adams, J. E. Chambers, & D. Deming. A Survey for Very Short-Period Planets in the Kepler Data. In *American Astronomical Society Meeting Abstracts #223*, volume 223 of *American Astronomical Society Meeting Abstracts*, page 132.02. 2014.
- D. R. Klassen, A. Roman, **B. JACKSON,** & N. Schneider. DPS Listing of Planetary Science Graduate Programs: A Resource for Students and Advisors. In *AAS/Division for Planetary Sciences Meeting Abstracts*, volume 46 of *AAS/Division for Planetary Sciences Meeting Abstracts*, page #212.01. 2014.
- R. Luger, R. Barnes, E. Lopez, J. J. Fortney, B. K. Jackson, & V. Meadows. Habitable Evaporated Cores: Converting Mini-Neptunes into Super-Earths in the Habitable Zone of M Dwarfs. In *American Astronomical Society Meeting Abstracts #223*, volume 223 of *American Astronomical Society Meeting Abstracts*, page #325.05. 2014.
- K. Penev & **B. JACKSON.** Tidal Alignment of Exoplanets Around Low Mass Stars. In *American Astronomical Society Meeting Abstracts #224*, volume 224 of *American Astronomical Society Meeting Abstracts*, page #416.01. 2014.
- B. JACKSON,** C. C. Stark, E. R. Adams, G. Anglada-Escudé, N. Law, & M. Endl. A Survey for Very Short-Period Planets in the Kepler Data. In *Kepler Conference II Abstracts*. 2013a.
- B. JACKSON,** C. C. Stark, E. R. Adams, M. Endl, P. Arras, A. Boss, & D. Deming. A Survey for Very Short-Period Planets in the Kepler Data. In *AAS/Division for Planetary Sciences Meeting Abstracts #45*, volume 45 of *AAS/Division for Planetary Sciences Meeting Abstracts*. 2013b.

- B. JACKSON** & J. Carlberg. Ellipsoidal Variation Analysis of Kepler Observations Using the EVIL-MC Model. In *AAS/Division for Planetary Sciences Meeting Abstracts #44*, volume 44 of *AAS/Division for Planetary Sciences Meeting Abstracts*. 2012.
- B. JACKSON**, N. K. Lewis, J. W. Barnes, D. Deming, A. P. Showman, & J. J. Fortney. The EVIL-MC Model for Ellipsoidal Variations of Planet-Hosting Stars and Applications to the HAT-P-7 System. In *Cool Stars Proceedings*. 2012.
- M. P. Milazzo, [Weiss, D. K.](#), **B. JACKSON**, & J. Barnes. Columnar Jointing on Mars: Earth Analog Studies. In *Lunar and Planetary Institute Science Conference Abstracts*, volume 43 of *Lunar and Planetary Inst. Technical Report*, page 2726. 2012.
- [Thom, N.](#) & **B. JACKSON**. Atmospheric Mass Loss and Orbital Evolution of Exoplanets. In *Lunar and Planetary Institute Science Conference Abstracts*, volume 43 of *Lunar and Planetary Inst. Technical Report*, page 2717. 2012.
- [Weiss, D. K.](#), **B. JACKSON**, M. P. Milazzo, & J. W. Barnes. A New Look at Cooling Models for Martian Flood Basalt Columns. In *Lunar and Planetary Institute Science Conference Abstracts*, volume 43 of *Lunar and Planetary Inst. Technical Report*, page 1150. 2012.
- G. Vixie, J. W. Barnes, **B. JACKSON**, & P. Wilson. Temperate Lakes Discovered on Titan. In *Lunar and Planetary Institute Science Conference Abstracts*, volume 43 of *Lunar and Planetary Inst. Technical Report*, page 2766. 2012a.
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- B. JACKSON** & D. Deming. Analysis Of Kepler Observations Of HAT-P-7 b. In *AAS/Division for Extreme Solar Systems Abstracts*, volume 2 of *AAS/Division for Extreme Solar Systems Abstracts*, page 306. 2011a.
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- B. JACKSON**, R. Barnes, & R. Greenberg. Planetary Transits and Tidal Evolution. In *IAU Symposium*, volume 253 of *IAU Symposium*, pages 217–229. 2009a.
- B. JACKSON**, R. Barnes, S. Raymond, & R. Greenberg. Effects of Secular, Resonant and Tidal Perturbations on Planetary Habitability. In *AAS/Division for Planetary Sciences Meeting Abstracts #41*, volume 41 of *AAS/Division for Planetary Sciences Meeting Abstracts*, page #05.05.

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- B. JACKSON**, R. Barnes, & R. Greenberg. Tidal Heating of Extrasolar Terrestrial-scale Planets and Constraints on Habitability. In *AAS/Division for Planetary Sciences Meeting Abstracts 40*, volume 40 of *Bulletin of the American Astronomical Society*, page 391. 2008a.
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- B. JACKSON**, R. Greenberg, & R. Barnes. Tidal Evolution of Extrasolar Planets. In *AAS/Division of Dynamical Astronomy Meeting 38*, volume 38 of *AAS/Division of Dynamical Astronomy Meeting*, page #15.02. 2007b.
- B. JACKSON**, C. A. Griffith, & Cassini VIMS Team. VIMS Observations of Titan’s South Polar Haze. In *AAS/Division for Planetary Sciences Meeting Abstracts 37*, volume 37 of *Bulletin of the American Astronomical Society*, page 1569. 2005.
- G. Orton, B. Fischer, M. Ressler, & **B. JACKSON**. Exploring the 18-20 Micron Window in Titan’s Atmosphere: Rotational and Time Variability. In *Geophysical Research Abstracts*, volume 6, page 04044. 2004.

Seminars, Colloquia, and Public Lectures

- 2019 Apr 11: Astronomy Seminar @ U of WA, Seattle WA - Host: Prof. Rory Barnes
- 2019 Feb 2: Alien Worlds @ Boise State Engineering & Science Festival, Boise ID
- 2018 Nov 12: Alien Worlds, Alien Life @ Osher Institute, Boise ID
- 2018 Oct 29: Alien Worlds, Alien Life @ Osher Institute, Boise ID
- 2018 Aug 2: Nampa Public Library, Nampa IA
- 2018 Jun 8: Boise Astronomical Society, Boise ID
- 2018 Jun 1: Northwest American Physical Society Meeting @ University of Puget Sound, Tacoma WA
- 2018 Apr 4: Physics & Astronomy Colloquium @ University of Texas at Dallas, Dallas TX - Host: Prof. Kaloyan Penev
- 2018 Jan 9: Thinks and Drinks @ Long Drop Cider, Boise ID
- 2018 Feb 3: Engineering and Science Festival @ Boise State, Boise ID
- 2018 Jan 30: Technologies for Exoplanetary Science Seminar @ McGill University - Host: Prof. Nicholas Cowan
- 2017 Dec 7: Astronomy Colloquium @ Lowell Observatory, Flagstaff AZ - Host: Dr. Joe Llama
- 2017 Nov 30: Physics & Astronomy Colloquium @ College of Idaho, Caldwell ID
- 2017 Sep 19: MIT Planetary Lunch Colloquium Series @ MIT, Cambridge MA - Host: John Brooks Biersteker
- 2017 Sep 25: Geosciences Colloquium @ Boise State, Boise ID - Host: Prof. Jen Pierce
- 2017 Jul 26: Idaho Conference for Undergraduate Research @ Boise State, Boise ID
- 2017 Jun 9: Boise Astronomical Society Meeting, Boise ID

- 2017 Mar 31: Formation and Dynamical Evolution of Exoplanets @ Aspen Center for Physics, Aspen CO
- 2017 Feb 27: Presentation about the Solar Eclipse @ Flying M, Nampa ID
- 2017 Feb 16: Teen Science Café @ Boise Public Library, Boise ID
- 2017 Feb 16: Research Computing Days Lightning Talk @ Boise State, Boise ID
- 2017 Feb 4: Engineering & Science Festival @ Boise State, Boise ID
- 2017 Feb 3: Aerospace Day @ Boise State, Boise ID
- 2017 Jan 27: Geology Colloquium @ University of Wyoming Geology & Geophysics, Laramie WY - Host: Prof. Robert Howell
- 2017 Jan 27: Astronomy Colloquium @ University of Wyoming Physics & Astronomy, Laramie WY - Host: Prof. Hannah Jang-Condell
- 2016 Oct 6: Viewing the 2017 Eclipse with Your Class @ Learning Across All Dimensions Teacher Conference, Boise ID
- 2016 Aug 5: Tidal Decay and Disruption of Gaseous Exoplanets @ Exoclines 2016 Conference, Quest University, Squamish BC, CA
- 2016 Apr 7: The Exoplanet Revolution @ Osher Institute, Boise ID
- 2016 Apr 1: Earth Sciences Colloquium @ University of Western Ontario, London ON, CA - Host: Prof. Catherine Neish, UWO Earth Sciences
- 2016 Mar 31: Physics and Astronomy Colloquium @ University of Western Ontario, London ON, CA - Host: Prof. Peter Brown, UWO Physics and Astronomy
- 2016 Mar 31: Centre for Planetary Science and Exploration (CPSX) Brown-Bag Talk @ University of Western Ontario, London ON, CA - Host: Prof. Catherine Neish, UWO Earth Sciences
- 2016 Feb 5: Keynote Speaker for Aerospace Day @ Boise State University, Boise ID - Host: Christine Chang Gillespie, Boise State Instfor STEM and Diversity Initiatives
- 2016 Jan 25: Physics Dept. Colloquium @ Idaho State University, Pocatello ID - Host: Prof. Steven Shropshire
- 2015 Dec 4: Astronomy Dept. Colloquium @ New Mexico State University, Las Cruces NM - Host: Prof. Jim Murphy
- 2015 Sep 24: Geosciences Dept. Seminar @ Brigham Young University, Provo UT - Host: Prof. Jani Radebaugh
- 2015 Sep 23: Physics & Astronomy Dept. Seminar @ Brigham Young University, Provo UT - Host: Prof. Clark Christensen
- 2015 Sep 4: Physics Dept. Seminar @ Boise State University, Boise ID - Host: Prof. Charles Hanna
- 2015 Jun 26: Planetary Astronomy Lunch Seminar @ University of Maryland, College Park MD - Host: Dr. Michael Kelley
- 2014 Oct 27: Geosciences Department Seminar @ Boise State University, Boise ID Host: Prof. David Wilkins
- 2014 Apr 17: Monthly Meeting Lecture @ Howard Astronomical League, Howard Co., MD Host: Chris Todd
- 2014 Mar 4: Departmental Seminar @ Boise State Univ., Boise ID Host: Prof. Daryl Macomb
- 2014 Feb 27: Departmental Seminar @ U of NE, Kearney, Kearney NE Host: Prof. W. Lee Powell
- 2014 Feb 4: Planetary Astronomy Lunch Seminar (PALS) @ U of MD, College Park MD Host: Dr. Michael Kelley

- 2013 Dec 19: Department Seminar @ Carnegie DTM, Washington DC – Host: Dr. Alycia Weinberger
- 2013 Dec 19: Department Seminar @ Carnegie DTM, Washington DC – Host: Dr. Alycia Weinberger
- 2013 Dec 11: Astronomy Colloquium @ US Naval Observatory, Washington DC – Host: Dr. Mark Stollberg
- 2013 Sep 24: Exoplanets Seminar @ NASA Goddard, Greenbelt MD – Host: Dr. Marc Kuchner
- 2013 Sep 12: Dept. of Astronomy TUNA Talk @ University of Virginia, Charlottesville VA – Host: Prof. Phil Arras
- 2013 Mar 21: Adler Planetarium Invited Seminar, Chicago IL – Host: Dr. Geza Gyuk
- 2013 Feb 13: Physics and Space Sciences Dept. Colloquium @ Florida Institute of Technology, Melbourne FL – Host: Prof. Terry Oswalt
- 2012 Nov 20: NASA’s Goddard Exoplanets Seminar @ NASA/GSFC, Greenbelt MD – Host: Dr. Marc Kuchner
- 2012 Nov 14: University of Maryland Astronomy Dept. Colloquium @ University of Maryland, College Park MD – Host: Prof. Richard Mushotzky
- 2012 Oct 31: Carnegie DTM Colloquium @ Carnegie DTM, Washington DC – Host: Dr. Matt Fouch
- 2012 Oct 8: Special Talk @ Space Telescope Science Institute (STScI), Baltimore MD – Host: Dr. Anand Sivaramakrishan
- 2012 Apr 27: Geology Dept. Colloquium @ University of South Florida, Tampa FL - Host: Prof. Matthew Pasek
- 2012 Mar 1: Astronomy Dept. Lunch Talk @ Vanderbilt University, Nashville TN - Host: Dr. Joshua Pepper
- 2012 Feb 8: Physics Dept. Colloquium @ Lehigh University, Bethlehem PA - Host: Prof. George McCluskey
- 2011 Nov 3: Astronomy Dept. Colloquium @ Univ. of Virginia, Charlottesville VA – Host: Prof. Phil Arras
- 2011 Jun 7: Heraeus Seminar, Physikzentrum Bad Honnef, Germany (invited)
- 2011 May 12: Physics and Astronomy Dept. Colloquium @ Georgia State Univ., Atlanta GA - Host: Prof. Michael Crenshaw
- 2011 Feb 1: National Capital Astronomers monthly meeting (invited)
- 2010 May 7: Physics Dept. Colloquium @ Univ. of Idaho, Moscow ID - Host: Prof. Jason Barnes
- 2010 Apr 24: Northern Virginia Astronomy Clubs Astronomy Day (invited)
- 2010 Mar 21: Science and Exploration Director’s Science Seminar @ NASA/GSFC, Greenbelt MD - Host: Joseph Nuth
- 2010 Mar 17: Wednesday Lunch Talk (Wunch) @ Princeton Astrophysics Dept., Princeton NJ - Hosts: Tim Brandt and Prof. Adam Burrows
- 2010 Feb 23: Institute for Theoretical Computation Lunch Talk @ Harvard CfA, Boston MA - Host: Dr. Darin Ragozzine
- 2010 Feb 19: Special Planetary Science Seminar @ MIT Earth, Atmospheric, and Planetary Sciences Dept., Boston MA - Host: Prof. Sara Seager
- 2010 Feb 2: Kleigel Planetary Science Seminar @ Caltech Geological and Planetary Sciences Dept., Pasadena CA - Host: Prof. Michael Brown
- 2010 Jan 13: Science Brown-Bag Seminar @ NASA Headquarters, Washington D.C. - Host: Joe

Bredenkamp

2009 Nov 19: Physics and Astronomy Dept. Colloquium @ Franklin and Marshall College, Lancaster PA – Host: Dr. Delphine Perrodin

2009 Oct 29: Physics and Astronomy Dept. Colloquium @ State Univ. of New York Stony Brook, Stony Brook NY – Host: Prof. Deane Peterson

2009 Oct 27: Astronomy and Astrophysics Dept. Pizza Lunch Seminar @ Columbia Univ., New York NY – Host: Prof. Kristen Menou

2009 Sep 17: Exoplanets Group Talk @ Goddard Space Flight Center, Greenbelt MD - Host: Dr. Marc Kuchner

2009 Jul 21: Astronomy Dept. Colloquium @ Univ. of Washington, Seattle WA - Host: Dr. Rory Barnes

2009 Jun 5: Astronomy Dept. Colloquium @ Univ. of California Santa Cruz, Santa Cruz CA - Host: Prof. Jonathan Fortney

Courses Taught

Fall 2018

- UF 100 - Alien Worlds, Alien Life - Syllabus

Spring 2018

- PHYS341 - Mechanics - <http://sites.google.com/site/bsu2018phys341/>
- PHYS205 - Stellar Astronomy

Spring 2017

- PHYS 341 - Mechanics
<https://sites.google.com/site/bsu2017phys341/>
- PHYS 205 - Stellar Astronomy
<https://sites.google.com/site/bsu2016phys205wiki/>

Fall 2016

- PHYS104 - Planets and Astrobiology - Syllabus
- PHYS 204 - Planetary Astronomy
<https://sites.google.com/site/bsu2016phys205wiki/>

Spring 2016

- PHYS 341 - Mechanics
<https://sites.google.com/site/bsu2016phys341/>
- PHYS 205 - Stellar Astronomy
<https://sites.google.com/site/bsu2016phys205wiki/>

Fall 2015

- PHYS 104/204 - Planets and Astrobiology
<https://sites.google.com/site/bsu2015phys104/>
<https://sites.google.com/site/bsu2015phys204wiki/>

Spring 2015

- PHYS 341 - Mechanics

<https://sites.google.com/site/bsu2015phys341/>

Fall 2014

- PHYS 405 - Astrophysics

<https://sites.google.com/site/bsu2014phys405/>

Spring 2010

- ASTR 330 Solar System Astronomy (University of Maryland)