

## PHILIP STEVEN MUIRHEAD, PHD

Boston University  
725 Commonwealth Ave. Rm. 403  
Boston, MA 02215  
[philipm@bu.edu](mailto:philipm@bu.edu)

### Education

Doctor of Philosophy, Cornell University, Ithaca, NY, USA, Aug. 2011  
Major Field: Astronomy, Minor Field: Applied Engineering in Physics  
Dissertation: *Externally Dispersed Interferometry for Terrestrial Exoplanet Detection*  
<https://ecommons.cornell.edu/handle/1813/29454>

Master of Science, Cornell University, Ithaca, NY, USA, Aug. 2008  
Major Field: Astronomy, Minor Field: Applied Engineering in Physics

Bachelor of Science, University of Michigan, Ann Arbor, MI, USA, Apr. 2005  
Concentrations: Astronomy & Astrophysics, General Physics  
Programs: The LSA Honors Program, The Residential College

### Primary Appointments

Assistant Professor, Department of Astronomy, Boston University, Jul. 2014-present  
NASA Hubble Postdoctoral Fellow, Department of Astronomy, Boston University, funds awarded by the Space Telescope Science Institute, Sep. 2013-Jun. 2014  
Postdoctoral Scholar, Division of Physics, Math, and Astronomy, California Institute of Technology, Jul. 2011-Aug. 2013

### Secondary Appointments

Special Member of the Graduate Faculty, University of Toledo, Toledo, OH, Dec. 2018 to May 2021  
CfA Collaborator, Solar, Stellar and Planetary Sciences Division, Smithsonian Astrophysical Observatory, Cambridge, MA, Jun. 2018 to Jun. 2021  
Natural Sciences Faculty, The Core Curriculum, Boston University, Sep. 2016-present  
Visiting Scientist, Kavli Institute for Theoretical Physics, Santa Barbara, CA, Apr.-Jun. 2019  
Affiliated Astronomer, The Maria Mitchell Association, Nantucket, MA, Summer 2018, Summer 2019  
Anacapa Scholar, The Thacher School, Ojai, CA, Oct. 2015, Apr. 2019

### Awards and Distinctions

Scialog Fellow, Research Corporation for the Advancement of Science, Tucson, AZ, May 2019  
Templeton Award for Excellence in Undergraduate Advising and Mentoring, College of Arts and Sciences, Boston University, May 2018  
Hubble Postdoctoral Fellowship, Space Telescope Science Institute, Baltimore, MD, Sep. 2013  
Z. Carter Patten '25 Graduate Fellowship, Cornell University, Sep. 2010

New York Space Grant Fellowship, Cornell University, September 2010

Carnson W. and Edna B. Shelley Award for Graduate Research in Astronomy, Cornell University, May 2009

NASA Earth and Space Science Fellowship, NASA Headquarters, Washington, DC, Sep. 2007

James B. Angell Scholar, University of Michigan, May 2005

University Honors, University of Michigan, All Semesters (2001-2005)

**Awarded External Grants as Principal Investigator (reverse chronological order by start date)**

*Sum of awarded external grants as PI since July, 2014: \$1,432,434*

“A Search for Transiting Exoplanets and Exomoons Orbiting L and T Dwarfs”, NASA Exoplanet Research Program (XRP), Jan 2020 to Dec 2022, \$473,342

“M dwarf Radius Inflation Across the Fully Convective Boundary”, NASA Award connected to time awarded on the W. M. Keck Observatory, Mar 2019 to Dec 2020, \$11,750

“M dwarf Ages: The Missing Link in the Age-Rotation-Activity Relation”, NASA Award connected to time awarded on the W. M. Keck Observatory, Mar 2019 to Dec 2020, \$15,150

“The Mass-Radius-Luminosity-Rotation Relation for M Dwarfs Determined from Tess Eclipsing Binaries”, NASA TESS Guest Observer Program (Cycle 1), Mar 2018 to Dec 2019, \$25,000

“M dwarf Ages: The Missing Link in the Age-Rotation-Activity Relation”, NASA Award connected to time awarded on the W. M. Keck Observatory, Feb 2018 to Jan 2020, \$11,750

“Accurate Alpha Abundances and Ages of M dwarfs”, NASA Award connected to time awarded on the W. M. Keck Observatory, Feb 2018 to Jan 2020, \$10,850

“Activity and Planets at the Bottom of the Main Sequence”, NASA K2 Guest Observer Program Cycle 5, Dec 2017 to Dec 2019, \$50,000

“Statistical Ages of M dwarfs from Abundances”, National Science Foundation Astronomy & Astrophysics Research Grants (AAG), Aug 2017 to Jul 2020, \$373,678

“Recovering the Transit of KIC 9413313b: A Potential Exomoon Host Lost to Transit Timing Variations”, NASA/NSF Award connected to time awarded on the WIYN Telescope, Mar 2017 to Jan 2019, \$7,202

“Activity and Planets at the Bottom of the Main Sequence”, NASA K2 Guest Observer Program Cycle 6, Mar 2017 to Sep 2018, \$38,681

“Graduate student support to work on MIT's Transiting Exoplanet Survey Satellite (TESS)”, Massachusetts Institute of Technology, Jan 2017 to Apr 2017, \$19,599

“A New Approach for Characterizing Exoplanets with Atmospheric Refraction”, Massachusetts Space Grant Consortium, Jun 2016 to Aug 2016, \$5,500

“Accurate Alpha Abundance of Low-mass Stars”, NASA Award connected to time awarded on the W. M. Keck Observatory, Apr 2016 to Dec 2017, \$12,500

“Mass-Radius-Luminosity-Rotation Relationships for M Dwarf Planet-Hosting Stars in Preparation for the TESS, Gaia and JWST Era”, NASA Exoplanet Research Program (XRP), Feb 2015 to Dec 2018, \$371,932

“Using Cassini Data on Saturn to Correctly Interpret Exoplanet Atmosphere Measurements”, Massachusetts Space Grant Consortium, Jun 2014 to Aug 2014, \$5,500

### **Awarded External Grants as Co-Principal Investigator**

“Actively Disintegrating Asteroids around a White Dwarf”, NASA Award connected to time awarded on the Hubble Space Telescope, May 2018 to Jul 2019, \$7,555 awarded to BU.

“A White Dwarf with an Actively Disintegrating Asteroid”, NASA Award connected to time awarded on the Hubble Space Telescope, Feb 2017 to Apr 2018, \$24,166 awarded to BU.

“Lock-In Amplified Externally Dispersed Interferometry (LAEDI) for Terrestrial Exoplanet Detection”, JPL Director’s Research and Development Fund, Mar 2012 to Feb 2013, \$194,700 jointly to JPL and Caltech.

### **Administered External Grants as Principal Investigator (not part of the original proposal team)**

“Low-mass Field Stars with Infrared Excesses: Potential Signatures of Planetary Collisions”, NASA Astrophysics Data Analysis Program (ADAP), June 2016 to May 2018, \$124,990.

### **Awarded External Grants as Collaborator (no funding received)**

“A Value-added, Science-enabling Catalog of Precise Stellar Properties for the TESS Mission”, NASA Exoplanet Research Program (XRP), Jan 2018-Dec 2020, PI: K. Stassun (Vanderbilt Univ.), \$168,362.30

“The Exoplanet Migration Timescale from K2 Young Clusters”, NASA Astrophysics Data Analysis Program (ADAP), Jan 2018 to Dec 2019, PI: A. Rizzuto (Univ. of Texas Austin), \$282,246.00

“Planet Evolution and Fundamental Stellar Parameters at 10-20 Myr After Formation”, NASA K2 Guest Observer Program Cycle 5, Sep 2017 to Aug 2018, PI: A. Rizzuto (Univ. of Texas Austin)

“Planet Formation and Fundamental Stellar Parameters at the Early Stages of Stellar Evolution”, NASA K2 Guest Observer Program Cycle 5, Mar 2017 to Mar 2018, PI: A. Rizzuto (Univ. of Texas Austin)

“Zodiacal Exoplanets in Time (ZEIT): The Hyades Cluster”, NASA K2 Guest Observer Program Cycle 4, Mar 2017 to Mar 2018, PI: A. Mann (Univ. of Texas Austin, now at Univ. of North Carolina)

“Characterizing the Cooler KOIs: Studying the Planet Population around Mid to M Dwarfs”, NASA K2 Guest Observer Program Cycle 1, Jul 2015 to Jun 2016, PI: J. Johnson (Harvard. Univ.)

### **Awarded Internal Grants**

“The Art of Astrophysics: A Competition for the BU Community”, The BU Arts Initiative awarded \$750 to support a campus and community gallery show and competition featuring work by artists and scientists inspired by space. I co-organized the event with a postdoc at the time, Dr. Bryce Croll.

“Core Field Trip to Arizona”, The BU Sapero Academic Enhancement Fund provided \$600 in the Fall of 2017 and \$600 in the Fall of 2018 to support CC 111 student travel to Arizona. Remaining funds were provided by the Broader Impacts component of an NSF AAG (above). I led the field trips.

## **Professional Service**

Referee for Nature Astronomy, The Astrophysical Journal, The Astrophysical Journal Letters, Publications of Astronomical Society of the Pacific, Monthly Notices of the Royal Astronomical Society, Astronomy & Astrophysics, Astrophysics and Space Sciences. Verified reviews are available on Publons.com (article titles and authors redacted): <https://publons.com/researcher/2517951/philip-steven-muirhead/peer-review/>

Proposal reviewer for NASA Grant Programs APRA, XRP, K2GO, NESSF, NPP and NASA/NSF EXPLORE. Served as Review Panel Chair once.

Proposal reviewer for the Spitzer Space Telescope (multiple cycles, large and small programs).

Proposal reviewer for Research Corporation for Science Advancement Cottrell Scholars Program.

External international proposal reviewer for the National Science Foundation (Switzerland), Natural Sciences and Engineering Research Council (Canada), National Fund for Scientific and Technological Development (Chile), National Science Centre (Poland).

Core Scientific Organizing Committee and Proposal Team Member for the “20<sup>th</sup> Cambridge Workshop on Cool Stars, Stellar Systems and the Sun” (“Cool Stars 20”), held at Boston University in July 2018 (525 participants): <http://coolstars20.cfa.harvard.edu>

Co-organizer for “Dwarf Stars and Clusters with K2”, a 3-day meeting held at Boston University, co-organized with NASA (Jan 16-18, 2018, 50 participants): <https://keplerscience.arc.nasa.gov/cluster-workshop/>

Leader of the *TESS Cool Dwarf Team*, a working group tasked with identifying M dwarfs for short-cadence observations with NASA’s Transiting Exoplanet Survey Satellite (TESS, 2015-2019).

## **Professional Memberships**

Full Member, The American Astronomical Society

Full Member, SPIE – The International Society for Optics and Photonics

Full Member, Sigma Xi – The Scientific Research Honor Society

## **Outreach Activity**

Co-organizer for “The Art of Astrophysics: A Competition for the BU Community”, funded by the BU Arts Initiative. The 2016 event involved a gallery show and competition featuring space-inspired art and music by local artists and scientists: <http://astroart.bu.edu>

Public Talk at the Thacher School in Ojai, CA, April 2019.

Public Talk at the Maria Mitchell Association in Nantucket, MA, July 2018.

Participant in BU Open Night at the Observatory (clear Wednesdays) and BU Alumni Weekend Events: <https://www.bu.edu/astronomy/events/public-open-night-at-the-observatory/>

## **Department, Center, College and University Service**

Director, Graduate Admissions, Department of Astronomy, Boston University, 2019-present

Member, Faculty Advisory Board, Scientific Instrument Facility, Boston University, 2018-present

Member, Discovery Channel Telescope Instrument Advisory Committee, 2017-present (Chair from 2017-2019)

Alternate Member Representative for Boston University, Association of Universities for Research in Astronomy (AURA), 2017-present

Member, Anderson Mesa Observatory Board, Boston University Member, 2016-present

Member, Institute for Astrophysical Research, Boston University, 2013-present

Member, Faculty Advisory Committee, Undergraduate Research Opportunities Program (UROP), Boston University, 2016-2019

Member, Ad Hoc Committee to Canvass for a new Director of the Core Curriculum, College of Arts and Sciences, Boston University, 2018-2019

Member, Ad Hoc Committee to Revise the MA/PhD Program in Astronomy, Boston University, 2017-2018

Member, Lecturer Search Committees, The Core Curriculum, Boston University, 2015 & 2018

Member, Faculty Search Committee, Department of Astronomy, Boston University, 2015-2016

Organizer, Prospective Graduate Student On-Campus Visits, Department of Astronomy, Boston University, 2015, 2019 & 2020

Contributor, Department of Astronomy Academic Program Review Report, Boston University, 2015

### **Undergraduate Teaching as Primary Instructor**

AS 101: *The Solar System* (Spring 2016: 94 students)

AS 105: *Alien Worlds* (Spring 2016: 108 students; Spring 2017: 140 students; Fall 2018: 131 students)

CC 111: *Core Natural Sciences I: Origins* (Fall 2016: 110 students; Fall 2017: 75 students; Fall 2018: 94 students)

AS 202: *Principles of Astronomy I* (Fall 2014: 36 students)

AS 401/402: *Honors Work in Astronomy* (Fall 2016, Spring 2017, 1 student)

AS 441: *Observational Astronomy* (Spring 2020: 15 students)

AS 491: *Directed Study in Astronomy* (Spring 2015: 1 student)

### **Graduate Teaching as Primary Instructor**

AS 712: *Radiative Processes in Astrophysics* (Spring 2015: 15 students)

AS 791: *Special Topics in Astrophysics* (Bayesian Statistics Course, Spring 2018: 6 enrolled students, 5 auditing students)

### **Other Teaching**

AS 699: *Teaching College Astronomy* (Fall 2014: 2 students; Spring 2016: 4 students; Spring 2017: 2 students; Fall 2018: 2 students)

AS 901/902: *Research in Astronomy* (every semester)

### **Supervised PhD Students at Boston University (as Primary Research Advisor, Major Professor and First Reader)**

Dr. Paul Dalba (PhD 2018), Dissertation: *On the Atmospheres of Saturn and Cold Gas Giant Extrasolar Planets*, currently an NSF Astronomy and Astrophysics Fellow at the University of California, Riverside.

Dr. Mark Veyette (PhD 2018), Dissertation: *Detailed Chemical Analysis of M Dwarf Stars*, currently a Senior Engineer in the Advanced Projects Division of the Lockheed Martin Corporation.

Dr. Aurora Kesseli (PhD 2019), Dissertation: *The Effects of Metallicity and Magnetism on the Radii of M Dwarf Stars*, currently a Postdoctoral Researcher at Leiden University.

Eunkyu Han (PhD 2020 *expected*), Dissertation: *The Mass-Radius Relationship of Low-mass Stars from Kepler Eclipsing Binaries*

Patrick Tamburo (PhD 2022 *expected*), Dissertation: *An Infrared Search for Exosatellites around L and T Dwarfs*

### **Boston University Graduate Student Committee Memberships**

Dr. Dylan Morgan (PhD 2016), PhD Defense Committee Member (Second Reader), Dissertation Steering Committee Member, Oral Qualifying Exam Committee Member.

Dr. Christopher Theissen (PhD 2017), PhD Defense Committee Member, Dissertation Steering Committee Member, Oral Qualifying Exam Committee Member.

Dr. Dustin Hickey (PhD 2018), PhD Defense Committee Member, Dissertation Steering Committee Member, Oral Qualifying Exam Committee Member.

Marc Kornbleuth (PhD 2020 *expected*), Dissertation Steering Committee Chair, Oral Qualifying Exam Committee Chair.

Connor Robinson (PhD 2020 *expected*), Dissertation Steering Committee Member, Oral Qualifying Exam Committee Member.

Sierra Grant (PhD 2021 *expected*), Dissertation Steering Committee Member, Oral Qualifying Exam Committee Member.

### **External Graduate Student Committee Memberships**

Dr. Kevin Hardegree-Ullman (PhD 2018, University of Toledo), External PhD Defense Committee Member, Oral Qualifying Exam Committee Member.

Neda Hejazi (PhD 2020 *expected*, Georgia State Univ.), External Committee Member, Oral Exam Committee Member.

### **Supervised Undergraduate Students at Boston University (as Primary Research Mentor)**

Howard Chen (BA 2016), UROP (Summer 2014, Fall 2014), currently a PhD student at Northwestern University.

Zachary Hall (BA 2017), UROP (Spring 2014, Summer 2014), Research Assistant (Fall 2015, Spring 2016), currently a PhD student at Stanford University in Philosophy.

Madeleine O'Keefe (BA 2018), Work Study Student (Spring 2016), currently a Communications Specialist at the Wisconsin IceCube Particle Astrophysics Center.

Brian Healy (BA with Honors 2017), UROP (Fall 2015), Directed Study, Honors Work in Astronomy, currently a PhD student at Johns Hopkins University.

Sheila Sagar (BA 2020 *expected*), Research Assistant (Fall 2019, Spring 2020), UROP Mentee (Summer 2017, Fall 2017, Spring 2018, Fall 2018).

Liam Daly (BA 2020 *expected*), UROP (Fall 2019, Spring 2020).

### **Supervised Undergraduate Students from Other Institutions (as Primary Research Mentor)**

Jia "Jimmy" Ye (BA/MEng Holy Cross/Columbia '19), summer NSF REU Student (BU 2014).

Hannah Gibson (BA Univ. of Kansas 2018), summer NSF REU Student (BU 2015), currently a PhD student at Purdue University.

Jack Lichtman (BA UConn 2018), summer NSF REU Student (BU 2016), currently a graduate student at the University of Connecticut.

Jay Chittidi (BA Vassar College 2019), summer NSF REU Student (Maria Mitchell Association 2018).

Georgia Stolle-McAllister (BA 2020 Kenyon College), summer NSF REU Student (Maria Mitchell Association 2019), also advising for her senior thesis research.

### **Supervised Postdoctoral Associates**

Dr. Bryce Croll (2015-2017), currently a Machine Learning Researcher at Paravision (Toronto, Ontario).

Dr. Julie Skinner (2016-2018), currently a Visiting Scientist at Boston University.

### **Hosted Visiting Scientists**

Dr. Andrew Mann (2014-2015)

Dr. Julie Skinner (2019-2020)

### **Invited Conference Presentations**

2019:

"Chemical Ages of M Dwarf Stars and Recent Work on Magnetic Inflation", Invited Research Talk, Planet-Star Connections in the Era of TESS and Gaia, Kavli Institute for Theoretical Physics, University of California, Santa Barbara, CA, 2019. Available online here:

[http://online.kitp.ucsb.edu/online/exostar\\_c19/muirhead/](http://online.kitp.ucsb.edu/online/exostar_c19/muirhead/)

2017:

“Determining Stellar Parameters from Spectroscopic Observations”, Invited Review Talk, Know Thy Star - Know Thy Planet: Assessing the Impact of Stellar Characterization on Our Understanding of Exoplanets, NASA Exoplanet Science Institute, Pasadena, CA, 2017

2016:

“M Dwarf Characterization with Spectroscopy”, Invited Review Talk, Opportunity M, Harvard-Smithsonian Center for Astrophysics, Aug. 2016

2015:

“So You Found an Exoplanet...A Flow Chart and Priorities for Determining Stellar Parameters”, Invited Review Talk, NASA Exoplanet Program and Analysis Group 11, Seattle, WA, Jan. 2015

2014:

“Short-period Sub Earths, ‘Discovering’ the Smallest Extrasolar Planets with Accurate Stellar Classification” Invited Research Talk, Hubble Fellows Symposium, Space Telescope Science Institute, Baltimore, MD, March 2014

2013:

“Planets Orbiting M Dwarf Stars: The Most Characterizable Terrestrial Exoplanets are also the Most Abundant”, Invited Plenary Talk, 45th Meeting of the AAS Division for Planetary Sciences, Denver, CO, Oct. 2013

2012:

“Determining Physical Parameters of M Dwarf Planet Hosts”, Invited Research Talk, 2012 Sagan Summer Workshop: Working with Exoplanet Light Curves, NASA Exoplanet Science Institute, Pasadena, CA, 2012

2009:

“Searching for Planets orbiting M Dwarfs with the TripleSpec Exoplanet Discovery Instrument (TEDI)”, Invited Research Talk, 2009 Palomar Science Meeting, California Institute of Technology, Pasadena, CA, Nov. 2009

### **Invited Department Colloquia & Seminars**

2019:

“Small Stars with Small Planets and Big Consequences”, Rochester Institute of Technology, Astronomy Colloquium, Nov. 11, 2019

“New Results on the M Dwarf Radius Problem”, Universidad Andrés Bello (Santiago, Chile), Astrophysics Seminar, Jul. 23, 2019

2018:

“Magnetic Inflation and Stellar Mass”, University of Toledo, Astronomy Colloquium, June 26, 2018

“Small Stars with Small Planets and Big Consequences”, Florida Institute of Technology, Department of Aerospace, Physics and Space Sciences, Apr. 17, 2018



“Small Stars with Small Planets and Big Consequences”, University of Michigan, Department of Astronomy Colloquium, Feb. 8, 2018

“Small Stars with Small Planets and Big Consequences”, Texas A&M University, Department of Astronomy & Astrophysics Colloquium, Feb. 5, 2018

2017:

“M Dwarf Atmospheres: The Key to Studying Star and Planet Evolution”, The Pennsylvania State University, Department of Astronomy & Astrophysics Colloquium, Feb. 15, 2017

2016:

“The Evolution of Exoplanets Orbiting Low-mass Stars”, Massachusetts Institute of Technology, Astrophysics Colloquium, Dec. 13, 2016

“The Mysterious Atmospheres of Low-mass Stars, Brown Dwarfs and Cold Jovian (Exo)Planets”, Boston University, Institute for Astrophysical Research Seminar, Nov. 28, 2016

“Small Stars with Small Planets and Big Consequences”, Colby College, Physics Colloquium, Sep. 30, 2016

“Fundamental Properties of M Dwarf Stars and Their Many Exoplanets”, University of Exeter (UK), Astrophysics Seminar, Mar. 6, 2016

“Fundamental Properties of M Dwarf Stars and Their Many Exoplanets”, Universidade do Porto (Portugal), Centre for Astrophysics (CAUP) Seminar, Mar. 8, 2016

2015:

“From TripleSpec to NEWS: Exoplanet Discovery Science with Bread and Butter Infrared Spectroscopy”, University of Texas at Austin, Department of Astronomy Colloquium, Nov. 10, 2015

“From TripleSpec to NEWS: Exoplanet Discovery Science with Bread and Butter Infrared Spectroscopy”, Carnegie Observatories, Oct. 13, 2015

“Small Stars with Small Planets and Big Consequences”, Northwestern University, Astrophysics Seminar, May 7, 2015

2014:

“The Path to Extrasolar Biosignatures”, Cornell University, Department of Astronomy Colloquium, Aug. 28, 2014

“Small Stars with Small Planets and Big Consequences”, Wesleyan University, Department of Astronomy, Colloquium, Feb. 5, 2014

2013:

“Small Stars with Small Planets and Big Consequences”, McGill University/Université de Montréal (Canada), Joint Astrophysics Colloquium, Oct. 1, 2013

“Small Stars with Small Planets and Big Consequences”, Lowell Observatory, Colloquium, Sept. 23, 2013

“Small Stars with Small Planets and Big Consequences”, Harvard-Smithsonian Center for Astrophysics, Colloquium, Sept. 19, 2013. Available online here: <https://www.youtube.com/watch?v=Hj03S0SUfa4>

2012:

“A Mutually-Eclipsing Post-Common Envelope Binary with Precise *Kepler* Photometry”, Cornell University, Astrophysics Lunch Seminar, Dec. 19, 2012

“Small Stars with Small Planets and Big Consequences”, California State University, Northridge, Astronomy Colloquium, Nov. 28, 2012

“Small Stars with Small Planets and Big Consequences”, University of Hawaii at Manoa, Institute for Astronomy Colloquium, Oct. 10, 2012

“Small Stars with Small Planets and Big Consequences”, Harvey Mudd College, Physics Colloquium, Sept. 25, 2012

“Small Stars with Small Planets and Big Consequences”, University of Toronto, Department of Astronomy & Astrophysics Colloquium, Jan. 25, 2012

“Characterizing Exoplanet Hosts at 120 THz”, University of Virginia/National Radio Astronomical Observatory, Joint Colloquium, Apr 19, 2012

“The Cool KOI Program: Small Stars with Small Planets”, Harvard-Smithsonian Center for Astrophysics, OIR Seminar, Feb. 29, 2012

“The Cool KOI Program: Small Stars with Small Planets”, Cornell University, Planetary Lunch Seminar, Feb. 27, 2012

“The Cool KOI Program: Small Stars with Small Planets”, University of California, Los Angeles, iPLEX Seminar, Feb. 10, 2012

“The Cool KOI Program: Small Stars with Small Planets”, Las Cumbres Observatory Global Telescope, Seminar, Jan. 7, 2012

#### 2010:

“Precise Near-Infrared Radial Velocities with the TripleSpec Exoplanet Discovery Instrument (TEDI)”, California Institute of Technology, Tea Talk Seminar, Dec. 6 2010

“Precise Near-Infrared Radial Velocities with the TripleSpec Exoplanet Discovery Instrument (TEDI)”, Carnegie Observatories, Lunch Seminar, Nov. 22, 2010

“Precise Near-Infrared Radial Velocities with the TripleSpec Exoplanet Discovery Instrument (TEDI)”, The Pennsylvania State University, CEHW Seminar, Nov. 18, 2010

“Precise Near-Infrared Radial Velocities with the TripleSpec Exoplanet Discovery Instrument (TEDI)”, University of California, Berkeley, Space Sciences Laboratory Colloquium, Nov. 5, 2010

#### **Contributed Conference Talks (as Presenter and First Author)**

#### 2020:

“Intensification and Saturation of M Dwarf Absorption Lines with Rossby Number”, 235<sup>rd</sup> Meeting of the American Astronomical Society, Honolulu, HI, Jan. 2020

#### 2019:

“Are M Dwarf Exoplanets Extreme?”, Extreme Solar Systems IV, Reykjavik, Iceland, 2019

“Detailed Chemical Analysis of M Dwarf Stars”, 233<sup>rd</sup> Meeting of the American Astronomical Society, Seattle, WA, Jan. 2019

2018:

“Ages of M Dwarf Stars from their Alpha Enhancement”, 231<sup>st</sup> Meeting of the American Astronomical Society, National Harbor, MD, Jan. 2018

2017:

“The Puzzling Atmospheres of Low-mass Stars, Brown Dwarfs and Exoplanets Revealed by the Discovery Channel Telescope”, 229<sup>th</sup> Meeting of the American Astronomical Society, Grapevine, TX, Jan. 2017

2015:

“The Occurrence of Compact Multiples Orbiting Mid-M Dwarf Stars”, Extreme Solar Systems III, Waikaloa, HI, Dec. 2015

“Kepler-445, Kepler-446 and the Occurrence of Compact Multiples Orbiting Mid-M Dwarf Stars”, 225<sup>th</sup> Meeting of the American Astronomical Society, Seattle, WA, Jan. 2015

2013:

“Characterizing the Cool KOIs”, 221<sup>st</sup> Meeting of the American Astronomical Society, Long Beach, CA, Jan. 2013

2012:

“‘Discovering’ Sub-Earth-Sized Exoplanets with TripleSpec”, 2012 Palomar Science Meeting, Pasadena, CA, Nov. 2012

“Distilling Nearby M Dwarfs for Terrestrial Planet Hosts”, Keck Science Meeting, San Diego, CA Sept. 2012. Available online here: <https://youtu.be/RgXr8By0KEw?t=2755>

“The Cool KOI Program: Accurate Physical Parameters of *Kepler* M-Type Planet Hosts”, Transiting Planets in the House of the Sun, Maui, HI, June 2012

“KOI 961: Characterization and Validation of a *Kepler* M-Dwarf Multi-Planet Host”, 219<sup>th</sup> Meeting of the American Astronomical Society, Austin, TX, Jan. 2012

2011:

“Precise Near-Infrared Radial Velocities with the TripleSpec Exoplanet Discovery Instrument (TEDI)”, 217<sup>th</sup> Meeting of the American Astronomical Society, Seattle, Jan. 2011

“Characterizing the Cool KOIs I”, Kepler Science Conference, Moffett Field, CA, Dec. 2011

2009:

“A Brief TripleSpec Talk”, 2009 Keck Science Meeting, California Institute of Technology, Sept. 2009

“Searching for Planets orbiting M Dwarfs with the TripleSpec Exoplanet Discovery Instrument (TEDI)”, New Technologies for Probing the Diversity of Brown Dwarfs and Exoplanets, Shanghai, China, July 2009

### **Contributed Conference Posters (as Presenter and First Author)**

2019:

“Design Considerations for a Ground-based Search for Transiting Planets around L and T Dwarfs And PINES: The Perkins Infrared Exosatellite Survey”, The Brown Dwarf Exoplanet Connection III, Newark, DE, Oct. 2019

2016:

“A Catalog of Cool Dwarf Targets for the Transiting Exoplanet Survey Satellite (TESS)”, The 19<sup>th</sup> Workshop on Cool Stars, Stellar Systems and the Sun, Uppsala, Sweden, June 2016

2014:

“HiJaK: The High-resolution J, H and K Spectrometer”, SPIE Astronomical Telescopes + Instrumentation, Montreal, Canada, June 2014

2013:

“Characterizing the Cool KOIs: An Infrared Spectroscopic Survey of Kepler M Dwarf Planet-Candidate Hosts”, Second Kepler Science Conference, Moffett Field, CA, Oct. 2013

2010:

“Precise Infrared Radial Velocimetry with the TripleSpec Exoplanet Discovery Instrument (TEDI): Current Performance and Results”, Astronomy of Exoplanets with Precise Radial Velocities, University Park, PA, Aug. 2010

“Precise Infrared Radial Velocities with the TripleSpec Exoplanet Discovery Instrument (TEDI): Current Performance and Results”, 215th Meeting of the American Astronomical Society, National Harbor, MD, Jan. 2010

“Precise Infrared Radial Velocimetry with the TripleSpec Exoplanet Discovery Instrument (TEDI): Current Performance and Results”, SPIE Astronomical Instrumentation, San Diego, CA, June 2010

2009:

“Searching for Planets Orbiting M Dwarfs with the TripleSpec Exoplanet Discovery Instrument”, XXVIIth IAU General Assembly, Rio de Janeiro, Brazil, Aug. 2009

2008:

Precise Radial Velocimetry in the Near-Infrared with T-EDI”, 15th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun, St Andrews, Scotland, July 2008

2006:

“Precise Radial Velocimetry in the Near-Infrared with T-EDI”, Precision Spectroscopy in Astrophysics, Aviero, Portugal, September 2006

Precise Radial Velocimetry in the Near-Infrared with T-EDI”, 14th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun, Pasadena, CA, July 2006

**Conferences and Meetings Attended (no formal presentation)**

NASA Exoplanet Program and Analysis Group (Multiple Meetings)

Scialog: Time Domain Astrophysics, May 2019

221<sup>st</sup> Meeting of the American Astronomical Society, National Harbor, MD, Jan. 2014

2013 MESA Summer School, Santa Barbara, CA, August 2013

Kepler Science Working Group Meeting, Mountain View, CA, May 2013

## Media Appearances

“Can We Ever Understand the Size of Red Dwarf Stars?” P. Suttor, Space.com, August 9, 2019. (features research by PhD advisee Eunkyun Han). <https://www.space.com/red-dwarf-stars-size-mystery.html>

“His Holy Grail would be detecting life on another planet”, Cindy Atoji Keene, The Boston Globe, June 7, 2018, [https://www.bostonglobe.com/business/2018/06/07/his-holy-grail-would-detecting-life-another-planet/Z7IPSIYb4P8SRFaKxrlyUL/story.html?s\\_campaign=8315](https://www.bostonglobe.com/business/2018/06/07/his-holy-grail-would-detecting-life-another-planet/Z7IPSIYb4P8SRFaKxrlyUL/story.html?s_campaign=8315)

“BU team joins NASA in the search for earth-like planets”, Lillian Ilesley-Greene, The Daily Free Press, April 18, 2018, <https://dailyfreepress.com/2018/04/18/bu-team-joins-nasa-in-the-search-for-earth-like-planets/>

“TRAPPIST-1 discovery holds promise for BU astronomers” Lauren Frias, The Daily Free Press, March 2, 2017, <https://dailyfreepress.com/2017/03/02/trappist-1-discovery-holds-promise-bu-astronomers/>

“BU’s Shared Computing Cluster: Results Hundreds of Times Faster: Helping astronomers study cold atmosphere exoplanets”, BU Today Staff, BU Today, February 23, 2016, <http://www.bu.edu/today/2016/paul-dalba-nasa-cassini-spacecraft/>

“Pluto who? Caltech researchers discover possible ninth planet” Allegra Peelor, The Daily Free Press, January 26, 2016, <https://dailyfreepress.com/2016/01/26/pluto-who-caltech-researches-discover-planet-nine/>

“Observing Saturn as an Extrasolar Planet, One Ray of Light at a Time”, Paul A. Dalba, Massachusetts Green High Performance Computer Center Website, November 10, 2015, <http://www.mghpcc.org/looking-like-an-alien/>

“The Best Bet for Alien Life May Be in Planetary Systems Very Different From Ours”, Marcus Woo, WIRED, January 16, 2015, <http://www.wired.com/2015/01/alien-life-m-dwarf-planets/>

“Recent solar storm signals mass increase in sun’s activity”, Becca DeGregorio, The Daily Free Press, September 25, 2014, <http://dailyfreepress.com/2014/09/25/recent-solar-storm-signals-increase-in-suns-activity/>

“Kepler telescope shows Einstein was right, again”, Los Angeles Times, April 4, 2013, <https://www.latimes.com/science/la-xpm-2013-apr-04-la-sci-sn-kepler-einstein-20130404-story.html>

“Gravity-Bending Find Leads to Kepler Meeting Einstein”, Whitney Clavin, NASA Press Release, April 4, 2013, <https://www.jpl.nasa.gov/news/news.php?release=2013-124>

“NASA’s Kepler Mission Finds Three Smallest Exoplanets”, Whitney Clavin, NASA Press Release, January 11, 2012, <https://www.jpl.nasa.gov/news/news.php?release=2012-009>

## Publications

### Publication Links

Link to all publications on the NASA Astrophysical Data System (ADS, the most accurate compilation of works): [https://ui.adsabs.harvard.edu/search/p\\_0&q=orcid%3A0000-0002-0638-8822](https://ui.adsabs.harvard.edu/search/p_0&q=orcid%3A0000-0002-0638-8822)

Link to profile on ORCID: <https://orcid.org/0000-0002-0638-8822>

Link to profile on Google Scholar: <https://scholar.google.com/citations?user=axhi02YAAAAJ&hl=en>

Link to profile on Publons (formerly ResearcherID): <https://publons.com/researcher/2517951/philip-steven-muirhead/>

Link to profile on ResearchGate: [https://www.researchgate.net/profile/Philip\\_Muirhead](https://www.researchgate.net/profile/Philip_Muirhead)

**Bold** indicates authorship, underline indicates a student under my supervision during the effort:

Co-authored Manuscripts currently in review (2)

1. Sagear, S. A., Skinner, J. N., & **Muirhead, P. S.** "Upper Limits on Planet Occurrence around Ultracool Dwarfs with K2", submitted to The Astrophysical Journal, arXiv:1912.04286. <https://ui.adsabs.harvard.edu/abs/2019arXiv191204286S>
2. Rodriguez, J. E., Vanderburg, A., Zieba, S., Kreidberg, L., Morley, C. V., Kane, S. R., Spencer, A., Quinn, S. N., Eastman, J. D., Cloutier, R., Huang, C. X., Collins, K. A., Mann, A. W., Gilbert, E., Schlieder, J. E., Quintana, E. V., Barclay, T., Suissa, G., Kopparapu, R. kumar., Dressing, C. D., Ricker, G. R., Vanderspek, R. K., Latham, D. W., Seager, S., Winn, J. N., Jenkins, J. M., Berta-Thompson, Z., Boyd, P. T., Charbonneau, D., Caldwell, D. A., Chiang, E., Christiansen, J. L., Ciardi, D. R., Colón, K. D., Doty, J., Gan, T., Guerrero, N., Günther, M. N., Lee, E. J., Levine, A. M., Lopez, E., **Muirhead, P. S.**, Newton, E., Rose, M. E., Twicken, J. D., & Villaseñor, J. N. "The First Habitable Zone Earth-Sized Planet From TESS II: \$Spitzer\$ Confirms TOI-700 d", submitted to The Astrophysical Journal, arXiv:2001.00954. <https://ui.adsabs.harvard.edu/abs/2020arXiv200100954R>

Peer-reviewed Publications as First-Author or with a Directly Supervised Student as First-Author (21)

1. **Muirhead, P. S.**, Veyette, M. J., Newton, E. R., Theissen, C. A., & Mann, A. W. "Magnetic Inflation and Stellar Mass. V. Intensification and Saturation of M-dwarf Absorption Lines with Rossby Number", 2020, The Astronomical Journal, 159, 52. <https://ui.adsabs.harvard.edu/abs/2020AJ....159...52M>
2. Tamburo, P., & **Muirhead, P. S.** "Design Considerations for a Ground-based Search for Transiting Planets around L and T Dwarfs", 2019, Publications of the Astronomical Society of the Pacific, 131, 114401. <https://ui.adsabs.harvard.edu/abs/2019PASP..131k4401T>
3. Han, E., **Muirhead, P. S.**, & Swift, J. J. "Magnetic Inflation and Stellar Mass. IV. Four Low-mass Kepler Eclipsing Binaries Consistent with Non-magnetic Stellar Evolutionary Models", 2019, The Astronomical Journal, 158, 111. <https://ui.adsabs.harvard.edu/abs/2019AJ....158..111H>
4. Healy, B. F., Han, E., **Muirhead, P. S.**, Skiff, B., Polakis, T., Rilinger, A., & Swift, J. J. "Magnetic Inflation and Stellar Mass. III. Revised Parameters for the Component Stars of NSVS 07394765", 2019, The Astronomical Journal, 158, 89. <https://ui.adsabs.harvard.edu/abs/2019AJ....158...89H>
5. Veyette, M. J., & **Muirhead, P. S.** "Chemo-kinematic Ages of Eccentric-planet-hosting M Dwarf Stars", 2018, The Astrophysical Journal, 863, 166. <https://ui.adsabs.harvard.edu/abs/2018ApJ...863..166V>
6. Kesseli, A. Y., **Muirhead, P. S.**, Mann, A. W., & Mace, G. "Magnetic Inflation and Stellar Mass. II. On the Radii of Single, Rapidly Rotating, Fully Convective M-Dwarf Stars", 2018, The Astronomical Journal, 155, 225. <https://ui.adsabs.harvard.edu/abs/2018AJ....155..225K>

7. **Muirhead, P. S.**, Dressing, C. D., Mann, A. W., Rojas-Ayala, B., Lépine, S., Paegert, M., De Lee, N., & Oelkers, R. "A Catalog of Cool Dwarf Targets for the Transiting Exoplanet Survey Satellite", 2018, The Astronomical Journal,155, 180. <https://ui.adsabs.harvard.edu/abs/2018AJ....155..180M>
8. **Veyette, M. J., Muirhead, P. S.**, Mann, A. W., Brewer, J. M., Allard, F., & Homeier, D. "A Physically Motivated and Empirically Calibrated Method to Measure the Effective Temperature, Metallicity, and Ti Abundance of M Dwarfs", 2017, The Astrophysical Journal,851, 26. <https://ui.adsabs.harvard.edu/abs/2017ApJ...851...26V>
9. **Han, E., Muirhead, P. S.**, Swift, J. J., Baranec, C., Law, N. M., Riddle, R., Atkinson, D., Mace, G. N., & DeFelippis, D. "Magnetic Inflation and Stellar Mass. I. Revised Parameters for the Component Stars of the Kepler Low-mass Eclipsing Binary T-Cyg1-12664", 2017, The Astronomical Journal,154, 100. <https://ui.adsabs.harvard.edu/abs/2017AJ....154..100H>
10. **Dalba, P. A., Muirhead, P. S.**, Croll, B., & Kempton, E. M.-R. "Kepler Transit Depths Contaminated By a Phantom Star", 2017, The Astronomical Journal,153, 59. <https://ui.adsabs.harvard.edu/abs/2017AJ....153...59D>
11. **Veyette, M. J., Muirhead, P. S.**, Mann, A. W., & Allard, F. "The Physical Mechanism Behind M Dwarf Metallicity Indicators and the Role of C and O Abundances", 2016, The Astrophysical Journal,828, 95. <https://ui.adsabs.harvard.edu/abs/2016ApJ...828...95V>
12. **Dalba, P. A., & Muirhead, P. S.** "No Timing Variations Observed in Third Transit of Snow-line Exoplanet Kepler-421b", 2016, The Astrophysical Journal,826, L7. <https://ui.adsabs.harvard.edu/abs/2016ApJ...826L...7D>
13. **Dalba, P. A., Muirhead, P. S.**, Fortney, J. J., Hedman, M. M., Nicholson, P. D., & **Veyette, M. J.** "The Transit Transmission Spectrum of a Cold Gas Giant Planet", 2015, The Astrophysical Journal,814, 154. <https://ui.adsabs.harvard.edu/abs/2015ApJ...814..154D>
14. **Jensen-Clem, R., Muirhead, P. S., Bottom, M.**, Wallace, J. K., Vasisht, G., & Johnson, J. A. "Attaining Doppler Precision of 10 cm s<sup>-1</sup> with a Lock-in Amplified Spectrometer", 2015, Publications of the Astronomical Society of the Pacific,127, 1105. <https://ui.adsabs.harvard.edu/abs/2015PASP..127.1105J>
15. **Muirhead, P. S.**, Mann, A. W., Vanderburg, A., Morton, T. D., Kraus, A., Ireland, M., Swift, J. J., Feiden, G. A., Gaidos, E., & Gazak, J. Z. "Kepler-445, Kepler-446 and the Occurrence of Compact Multiples Orbiting Mid-M Dwarf Stars", 2015, The Astrophysical Journal,801, 18. <https://ui.adsabs.harvard.edu/abs/2015ApJ...801...18M>
16. **Muirhead, P. S., Becker, J.**, Feiden, G. A., Rojas-Ayala, B., Vanderburg, A., Price, E. M., Thorp, R., Law, N. M., Riddle, R., Baranec, C., **Hamren, K.**, Schlawin, E., Covey, K. R., Johnson, J. A., & Lloyd, J. P. "Characterizing the Cool KOIs. VI. H- and K-band Spectra of Kepler M Dwarf Planet-candidate Hosts", 2014, The Astrophysical Journal Supplement Series,213, 5. <https://ui.adsabs.harvard.edu/abs/2014ApJS..213....5M>
17. **Muirhead, P. S., Vanderburg, A.**, Shporer, A., **Becker, J.**, Swift, J. J., Lloyd, J. P., Fuller, J., Zhao, M., Hinkley, S., Pineda, J. S., **Bottom, M.**, Howard, A. W., von Braun, K., Boyajian, T. S., Law, N., Baranec, C., Riddle, R., Ramaprakash, A. N., Tendulkar, S. P., Bui, K., Burse, M., Chordia, P., Das, H., Dekany, R., Punnadi, S., & Johnson, J. A. "Characterizing the Cool KOIs. V. KOI-256: A

Mutually Eclipsing Post-common Envelope Binary", 2013, The Astrophysical Journal, 767, 111.  
<https://ui.adsabs.harvard.edu/abs/2013ApJ...767..111M>

18. **Bottom, M., Muirhead, P. S.,** Johnson, J. A., & Blake, C. H. "Optimizing Doppler Surveys for Planet Yield", 2013, Publications of the Astronomical Society of the Pacific, 125, 240.  
<https://ui.adsabs.harvard.edu/abs/2013PASP..125..240B>
19. **Muirhead, P. S., Hamren, K.,** Schlawin, E., Rojas-Ayala, B., Covey, K. R., & Lloyd, J. P. "Characterizing the Cool Kepler Objects of Interests. New Effective Temperatures, Metallicities, Masses, and Radii of Low-mass Kepler Planet-candidate Host Stars", 2012, The Astrophysical Journal, 750, L37. <https://ui.adsabs.harvard.edu/abs/2012ApJ...750L..37M>
20. **Muirhead, P. S.,** Johnson, J. A., Apps, K., Carter, J. A., Morton, T. D., Fabrycky, D. C., Pineda, J. S., **Bottom, M.,** Rojas-Ayala, B., Schlawin, E., **Hamren, K.,** Covey, K. R., Crepp, J. R., Stassun, K. G., Pepper, J., Hebb, L., Kirby, E. N., Howard, A. W., Isaacson, H. T., Marcy, G. W., Levitan, D., Diaz-Santos, T., Armus, L., & Lloyd, J. P. "Characterizing the Cool KOIs. III. KOI 961: A Small Star with Large Proper Motion and Three Small Planets", 2012, The Astrophysical Journal, 747, 144.  
<https://ui.adsabs.harvard.edu/abs/2012ApJ...747..144M>
21. **Muirhead, P. S.,** Edelstein, J., Erskine, D. J., Wright, J. T., Muterspaugh, M. W., Covey, K. R., Wishnow, E. H., **Hamren, K.,** Andelson, P., Kimber, D., Mercer, T., Halverson, S. P., Vanderburg, A., Mondo, D., Czeszumaska, A., & Lloyd, J. P. "Precise Stellar Radial Velocities of an M Dwarf with a Michelson Interferometer and a Medium-Resolution Near-Infrared Spectrograph", 2011, Publications of the Astronomical Society of the Pacific, 123, 709.  
<https://ui.adsabs.harvard.edu/abs/2011PASP..123..709M>

#### Peer-reviewed Publications as Co-Author (46)

1. Shporer, A., Collins, K. A., Astudillo-Defru, N., Irwin, J., Bonfils, X., Collins, K. I., Matthews, E., Winters, J. G., Anderson, D. R., Armstrong, J. D., Charbonneau, D., Cloutier, R., Daylan, T., Gan, T., Günther, M. N., Hellier, C., Horne, K., Huang, C. X., Jensen, E. L. N., Kielkopf, J., Palle, E., Sefako, R., Stassun, K. G., Tan, T.-G., Vanderburg, A., Ricker, G. R., Latham, D. W., Vanderspek, R., Seager, S., Winn, J. N., Jenkins, J. M., Colon, K., Dressing, C. D., Léepine, S., **Muirhead, P. S.,** Rose, M. E., Twicken, J. D., & Villaseñor, J. N. "GJ 1252 b: A 1.2  $R_{\oplus}$  Planet Transiting an M3 Dwarf at 20.4 pc", 2020, The Astrophysical Journal, 890, L7.  
<https://ui.adsabs.harvard.edu/abs/2020ApJ...890L...7S>
2. Addison, B., Wright, D. J., Wittenmyer, R. A., Horner, J., Mengel, M. W., Johns, D., Marti, C., Nicholson, B., Soutter, J., Bowler, B., Crossfield, I., Kane, S. R., Kielkopf, J., Plavchan, P., Tinney, C. G., Zhang, H., Clark, J. T., Clerte, M., Eastman, J. D., Swift, J., **Bottom, M., Muirhead, P.,** McCrady, N., Herzig, E., Hogstrom, K., Wilson, M., Sliski, D., Johnson, S. A., Wright, J. T., Johnson, J. A., Blake, C., Riddle, R., Lin, B., Cornachione, M., Bedding, T. R., Stello, D., Huber, D., Marsden, S., & Carter, B. D. "Minerva-Australis. I. Design, Commissioning, and First Photometric Results", 2019, Publications of the Astronomical Society of the Pacific, 131, 115003.  
<https://ui.adsabs.harvard.edu/abs/2019PASP..131k5003A>
3. Xuesong Wang, S., Wright, J. T., Bender, C., Howard, A. W., Isaacson, H., **Veyette, M., & Muirhead, P. S.** "The Effects of Telluric Contamination in Iodine-calibrated Precise Radial Velocities", 2019, The Astronomical Journal, 158, 216.  
<https://ui.adsabs.harvard.edu/abs/2019AJ....158..216X>



4. Winters, J. G., Medina, A. A., Irwin, J. M., Charbonneau, D., Astudillo-Defru, N., Horch, E. P., Eastman, J. D., Halley Vrijmoet, E., Henry, T. J., Diamond-Lowe, H., Winston, E., Barclay, T., Bonfils, X., Ricker, G. R., Vanderspek, R., Latham, D. W., Seager, S., Winn, J. N., Jenkins, J. M., Udry, S., Twicken, J. D., Teske, J. K., Tenenbaum, P., Pepe, F., Murgas, F., **Muirhead, P. S.**, Mink, J., Lovis, C., Levine, A. M., Lépine, S., Jao, W.-C., Henze, C. E., Furész, G., Forveille, T., Figueira, P., Esquerdo, G. A., Dressing, C. D., Díaz, R. F., Delfosse, X., Burke, C. J., Bouchy, F., Berlind, P., & Almenara, J.-M. "Three Red Suns in the Sky: A Transiting, Terrestrial Planet in a Triple M-dwarf System at 6.9 pc", 2019, *The Astronomical Journal*, 158, 152.  
<https://ui.adsabs.harvard.edu/abs/2019AJ....158..152W>
  
5. Stassun, K. G., Oelkers, R. J., Paegert, M., Torres, G., Pepper, J., De Lee, N., Collins, K., Latham, D. W., **Muirhead, P. S.**, Chittidi, J., Rojas-Ayala, B., Fleming, S. W., Rose, M. E., Tenenbaum, P., Ting, E. B., Kane, S. R., Barclay, T., Bean, J. L., Brassuer, C. E., Charbonneau, D., Ge, J., Lissauer, J. J., Mann, A. W., McLean, B., Mullally, S., Narita, N., Plavchan, P., Ricker, G. R., Sasselov, D., Seager, S., Sharma, S., Shiao, B., Sozzetti, A., Stello, D., Vanderspek, R., Wallace, G., & Winn, J. N. "The Revised TESS Input Catalog and Candidate Target List", 2019, *The Astronomical Journal*, 158, 138. <https://ui.adsabs.harvard.edu/abs/2019AJ....158..138S>
  
6. Wilson, M. L., Eastman, J. D., Cornachione, M. A., Wang, S. X., Johnson, S. A., Sliski, D. H., Schap, W. J., Morton, T. D., Johnson, J. A., McCrady, N., Wright, J. T., Wittenmyer, R. A., Plavchan, P., Blake, C. H., Swift, J. J., Bottom, M., Baker, A. D., Barnes, S. I., Berlind, P., Blackhurst, E., Beatty, T. G., Bolton, A. S., Cale, B., Calkins, M. L., Colón, A., de Vera, J., Esquerdo, G., Falco, E. E., Fortin, P., Garcia-Mejia, J., Geneser, C., Gibson, S. R., Grell, G., Groner, T., Halverson, S., Hamlin, J., Henderson, M., Horner, J., Houghton, A., Janssens, S., Jonas, G., Jones, D., Kirby, A., Lawrence, G., Luebbbers, J. A., **Muirhead, P. S.**, Myles, J., Nava, C., Rivera-García, K. O., Reed, T., Relles, H. M., Riddle, R., Robinson, C., Chaput de Saintonge, F., & Sergi, A. "First Radial Velocity Results From the MINiature Exoplanet Radial Velocity Array (MINERVA)", 2019, *Publications of the Astronomical Society of the Pacific*, 131, 115001.  
<https://ui.adsabs.harvard.edu/abs/2019PASP..131k5001W>
  
7. Crossfield, I. J. M., Waalkes, W., Newton, E. R., Narita, N., **Muirhead, P.**, Ment, K., Matthews, E., Kraus, A., Kostov, V., Kosiarek, M. R., Kane, S. R., Isaacson, H., Halverson, S., Gonzales, E., Everett, M., Dragomir, D., Collins, K. A., Chontos, A., Berardo, D., Winters, J. G., Winn, J. N., Scott, N. J., Rojas-Ayala, B., Rizzuto, A. C., Petigura, E. A., Peterson, M., Mocz, T., Mikal-Evans, T., Mehrle, N., Matson, R., Kuzuhara, M., Irwin, J., Huber, D., Huang, C., Howell, S., Howard, A. W., Hirano, T., Fulton, B. J., Dupuy, T., Dressing, C. D., Dalba, P. A., Charbonneau, D., Burt, J., Berta-Thompson, Z., Benneke, B., Watanabe, N., Twicken, J. D., Tamura, M., Schlieder, J., Seager, S., Rose, M. E., Ricker, G., Quintana, E., Lépine, S., Latham, D. W., Kotani, T., Jenkins, J. M., Hori, Y., Colon, K., & Caldwell, D. A. "A Super-Earth and Sub-Neptune Transiting the Late-type M Dwarf LP 791-18", 2019, *The Astrophysical Journal*, 883, L16.  
<https://ui.adsabs.harvard.edu/abs/2019ApJ...883L..16C>
  
8. Cloutier, R., Astudillo-Defru, N., Bonfils, X., Jenkins, J. S., Berdiñas, Z., Ricker, G., Vanderspek, R., Latham, D. W., Seager, S., Winn, J., Jenkins, J. M., Almenara, J. M., Bouchy, F., Delfosse, X., Díaz, M. R., Díaz, R. F., Doyon, R., Figueira, P., Forveille, T., Kurtovic, N. T., Lovis, C., Mayor, M., Menou, K., Morgan, E., Morris, R., **Muirhead, P.**, Murgas, F., Pepe, F., Santos, N. C., Ségransan, D., Smith, J. C., Tenenbaum, P., Torres, G., Udry, S., Vezie, M., & Villaseñor, J. "Characterization of the L 98-59 multi-planetary system with HARPS. Mass characterization of a hot super-Earth, a sub-Neptune, and a mass upper limit on the third planet", 2019, *Astronomy and Astrophysics*, 629, A111.  
<https://ui.adsabs.harvard.edu/abs/2019A&A...629A.111C>

9. Hardegree-Ullman, K. K., Cushing, M. C., **Muirhead, P. S.**, & Christiansen, J. L. "Kepler Planet Occurrence Rates for Mid-type M Dwarfs as a Function of Spectral Type", 2019, The Astronomical Journal,158, 75. <https://ui.adsabs.harvard.edu/abs/2019AJ....158...75H>
10. López-Valdivia, R., Mace, G. N., Sokal, K. R., Hussaini, M., Kidder, B. T., Mann, A. W., Gosnell, N. M., Oh, H., Kesseli, A. Y., **Muirhead, P. S.**, Johns-Krull, C. M., & Jaffe, D. T. "Effective Temperatures of Low-mass Stars from High-resolution H-band Spectroscopy", 2019, The Astrophysical Journal,879, 105. <https://ui.adsabs.harvard.edu/abs/2019ApJ...879..105L>
11. Kostov, V. B., Schlieder, J. E., Barclay, T., Quintana, E. V., Colón, K. D., Brande, J., Collins, K. A., Feinstein, A. D., Hadden, S., Kane, S. R., Kreidberg, L., Kruse, E., Lam, C., Matthews, E., Montet, B. T., Pozuelos, F. J., Stassun, K. G., Winters, J. G., Ricker, G., Vanderspek, R., Latham, D., Seager, S., Winn, J., Jenkins, J. M., Afanasev, D., Armstrong, J. J. D., Arney, G., Boyd, P., Barentsen, G., Barkaoui, K., Batalha, N. E., Beichman, C., Bayliss, D., Burke, C., Burdanov, A., Cacciapuoti, L., Carson, A., Charbonneau, D., Christiansen, J., Ciardi, D., Clampin, M., Collins, K. I., Conti, D. M., Coughlin, J., Covone, G., Crossfield, I., Delrez, L., Domagal-Goldman, S., Dressing, C., Ducrot, E., Essack, Z., Everett, M. E., Fauchez, T., Foreman-Mackey, D., Gan, T., Gilbert, E., Gillon, M., Gonzales, E., Hamann, A., Hedges, C., Hocutt, H., Hoffman, K., Horch, E. P., Horne, K., Howell, S., Hynes, S., Ireland, M., Irwin, J. M., Isopi, G., Jensen, E. L. N., Jehin, E., Kaltenegger, L., Kielkopf, J. F., Kopparapu, R., Lewis, N., Lopez, E., Lissauer, J. J., Mann, A. W., Mallia, F., Mandell, A., Matson, R. A., Mazeh, T., Monsue, T., Moran, S. E., Moran, V., Morley, C. V., Morris, B., **Muirhead, P.**, Mukai, K., Mullally, S., Mullally, F., Murray, C., Narita, N., Palle, E., Pidhorodetska, D., Quinn, D., Relles, H., Rinehart, S., Ritsko, M., Rodriguez, J. E., Rowden, P., Rowe, J. F., Sebastian, D., Sefako, R., Shahaf, S., Shporer, A., Tañón Reyes, N., Tenenbaum, P., Ting, E. B., Twicken, J. D., van Belle, G. T., Vega, L., Volosin, J., Walkowicz, L. M., & Youngblood, A. "The L 98-59 System: Three Transiting, Terrestrial-size Planets Orbiting a Nearby M Dwarf", 2019, The Astronomical Journal,158, 32. <https://ui.adsabs.harvard.edu/abs/2019AJ....158...32K>
12. Xu, S., Hallakoun, N., Gary, B., Dalba, P. A., Debes, J., Dufour, P., Fortin-Archambault, M., Fukui, A., Jura, M. A., Klein, B., Kusakabe, N., **Muirhead, P. S.**, Narita, N., Steele, A., Su, K. Y. L., Vanderburg, A., Watanabe, N., Zhan, Z., & Zuckerman, B. "Shallow Ultraviolet Transits of WD 1145+017", 2019, The Astronomical Journal,157, 255. <https://ui.adsabs.harvard.edu/abs/2019AJ....157..255X>
13. Kesseli, A. Y., Kirkpatrick, J. D., Fajardo-Acosta, S. B., Penny, M. T., Gaudi, B. S., Veyette, M., Boeshaar, P. C., Henderson, C. B., Cushing, M. C., Calchi-Novati, S., Shvartzvald, Y., & **Muirhead, P. S.** "Radii of 88 M Subdwarfs and Updated Radius Relations for Low-metallicity M-dwarf Stars", 2019, The Astronomical Journal,157, 63. <https://ui.adsabs.harvard.edu/abs/2019AJ....157...63K>
14. Stassun, K. G., Oelkers, R. J., Pepper, J., Paegert, M., De Lee, N., Torres, G., Latham, D. W., Charpinet, S., Dressing, C. D., Huber, D., Kane, S. R., Lépine, S., Mann, A., **Muirhead, P. S.**, Rojas-Ayala, B., Silvotti, R., Fleming, S. W., Levine, A., & Plavchan, P. "The TESS Input Catalog and Candidate Target List", 2018, The Astronomical Journal,156, 102. <https://ui.adsabs.harvard.edu/abs/2018AJ....156..102S>
15. Xu, S., Rappaport, S., van Lieshout, R., Vanderburg, A., Gary, B., Hallakoun, N., Ivanov, V. D., Wyatt, M. C., DeVore, J., Bayliss, D., Bento, J., Bieryla, A., Cameron, A., Cann, J. M., Croll, B., Collins, K. A., Dalba, P. A., Debes, J., Doyle, D., Dufour, P., Ely, J., Espinoza, N., Joner, M. D., Jura, M., Kaye, T., McClain, J. L., **Muirhead, P.**, Palle, E., Panka, P. A., Provencal, J., Randall, S.,

- Rodriguez, J. E., Scarborough, J., Sefako, R., Shporer, A., Strickland, W., Zhou, G., & Zuckerman, B. "A dearth of small particles in the transiting material around the white dwarf WD 1145+017", 2018, Monthly Notices of the Royal Astronomical Society, 474, 4795.  
<https://ui.adsabs.harvard.edu/abs/2018MNRAS.474.4795X>
16. Winters, J. G., Irwin, J., Newton, E. R., Charbonneau, D., Latham, D. W., Han, E., **Muirhead, P. S.**, Berlind, P., Calkins, M. L., & Esquerdo, G. "LHS 1610A: A Nearby Mid-M Dwarf with a Companion That Is Likely a Brown Dwarf", 2018, The Astronomical Journal, 155, 125.  
<https://ui.adsabs.harvard.edu/abs/2018AJ....155..125W>
  17. Mann, A. W., Dupuy, T., **Muirhead, P. S.**, Johnson, M. C., Liu, M. C., Ansdell, M., Dalba, P. A., Swift, J. J., & Hadden, S. "The Gold Standard: Accurate Stellar and Planetary Parameters for Eight Kepler M Dwarf Systems Enabled by Parallaxes", 2017, The Astronomical Journal, 153, 267.  
<https://ui.adsabs.harvard.edu/abs/2017AJ....153..267M>
  18. Croll, B., Dalba, P. A., Vanderburg, A., Eastman, J., Rappaport, S., DeVore, J., Bieryla, A., **Muirhead, P. S.**, Han, E., Latham, D. W., Beatty, T. G., Wittenmyer, R. A., Wright, J. T., Johnson, J. A., & McCrady, N. "Multiwavelength Transit Observations of the Candidate Disintegrating Planetesimals Orbiting WD 1145+017", 2017, The Astrophysical Journal, 836, 82.  
<https://ui.adsabs.harvard.edu/abs/2017ApJ...836...82C>
  19. Erskine, D. J., Edelstein, J., Wishnow, E., Sirk, M., **Muirhead, P. S.**, Muterspaugh, M. W., & Lloyd, J. P. "High-resolution broadband spectroscopy using externally dispersed interferometry at the Hale telescope: part 2, photon noise theory", 2016, Journal of Astronomical Telescopes, Instruments, and Systems, 2, 045001. <https://ui.adsabs.harvard.edu/abs/2016JATIS...2d5001E>
  20. Ngo, H., Knutson, H. A., Hinkley, S., Bryan, M., Crepp, J. R., Batygin, K., Crossfield, I., Hansen, B., Howard, A. W., Johnson, J. A., Mawet, D., Morton, T. D., **Muirhead, P. S.**, & Wang, J. "Friends of Hot Jupiters. IV. Stellar Companions Beyond 50 au Might Facilitate Giant Planet Formation, but Most are Unlikely to Cause Kozai-Lidov Migration", 2016, The Astrophysical Journal, 827, 8.  
<https://ui.adsabs.harvard.edu/abs/2016ApJ...827....8N>
  21. Erskine, D. J., Edelstein, J., Wishnow, E. H., Sirk, M., **Muirhead, P. S.**, Muterspaugh, M. W., Lloyd, J. P., Ishikawa, Y., McDonald, E. A., Shourt, W. V., & Vanderburg, A. M. "High-resolution broadband spectroscopy using externally dispersed interferometry at the Hale telescope: Part 1, data analysis and results", 2016, Journal of Astronomical Telescopes, Instruments, and Systems, 2, 025004.  
<https://ui.adsabs.harvard.edu/abs/2016JATIS...2b5004E>
  22. Piskorz, D., Knutson, H. A., Ngo, H., **Muirhead, P. S.**, Batygin, K., Crepp, J. R., Hinkley, S., & Morton, T. D. "Friends of Hot Jupiters. III. An Infrared Spectroscopic Search for Low-mass Stellar Companions", 2015, The Astrophysical Journal, 814, 148.  
<https://ui.adsabs.harvard.edu/abs/2015ApJ...814..148P>
  23. Yu, L., Winn, J. N., Gillon, M., Albrecht, S., Rappaport, S., Bieryla, A., Dai, F., Delrez, L., Hillenbrand, L., Holman, M. J., Howard, A. W., Huang, C. X., Isaacson, H., Jehin, E., Lendl, M., Montet, B. T., **Muirhead, P.**, Sanchis-Ojeda, R., & Triaud, A. H. M. J. "Tests of the Planetary Hypothesis for PTFO 8-8695b", 2015, The Astrophysical Journal, 812, 48.  
<https://ui.adsabs.harvard.edu/abs/2015ApJ...812...48Y>
  24. Wittenmyer, R. A., Johnson, J. A., Wright, J., McCrady, N., Swift, J., Bottom, M., Plavchan, P., Riddle, R., **Muirhead, P. S.**, Herzig, E., Myles, J., Blake, C. H., Eastman, J., Beatty, T. G., Lin, B.,

- Zhao, M., Gardner, P., Falco, E., Criswell, S., Nava, C., Robinson, C., Hedrick, R., Ivarsen, K., Hjelstrom, A., de Vera, J., & Szentgyorgyi, A. "MINERVA: Small Planets from Small Telescopes", 2015, Publication of Korean Astronomical Society,30, 665.  
<https://ui.adsabs.harvard.edu/abs/2015PKAS...30..665W>
25. Swift, J. J., Montet, B. T., Vanderburg, A., Morton, T., **Muirhead, P. S.**, & Johnson, J. A. "Characterizing the Cool KOIs. VIII. Parameters of the Planets Orbiting Kepler's Coolest Dwarfs", 2015, The Astrophysical Journal Supplement Series,218, 26.  
<https://ui.adsabs.harvard.edu/abs/2015ApJS..218...26S>
26. Swift, J. J., **Bottom, M.**, Johnson, J. A., Wright, J. T., McCrady, N., Wittenmyer, R. A., Plavchan, P., Riddle, R., **Muirhead, P. S.**, Herzig, E., Myles, J., Blake, C. H., Eastman, J., Beatty, T. G., Barnes, S. I., Gibson, S. R., Lin, B., Zhao, M., Gardner, P., Falco, E., Criswell, S., Nava, C., Robinson, C., Sliski, D. H., Hedrick, R., Ivarsen, K., Hjelstrom, A., de Vera, J., & Szentgyorgyi, A. "Miniature Exoplanet Radial Velocity Array (MINERVA) I. Design, Commissioning, and First Science Results", 2015, Journal of Astronomical Telescopes, Instruments, and Systems,1, 027002.  
<https://ui.adsabs.harvard.edu/abs/2015JATIS...1b7002S>
27. Ngo, H., Knutson, H. A., Hinkley, S., Crepp, J. R., Bechter, E. B., Batygin, K., Howard, A. W., Johnson, J. A., Morton, T. D., & **Muirhead, P. S.** "Friends of Hot Jupiters. II. No Correspondence between Hot-jupiter Spin-Orbit Misalignment and the Incidence of Directly Imaged Stellar Companions", 2015, The Astrophysical Journal,800, 138.  
<https://ui.adsabs.harvard.edu/abs/2015ApJ...800..138N>
28. Montet, B. T., Johnson, J. A., **Muirhead, P. S.**, Villar, A., Vassallo, C., Baranec, C., Law, N. M., Riddle, R., Marcy, G. W., Howard, A. W., & Isaacson, H. "Characterizing the Cool KOIs. VII. Refined Physical Properties of the Transiting Brown Dwarf LHS 6343 C", 2015, The Astrophysical Journal,800, 134. <https://ui.adsabs.harvard.edu/abs/2015ApJ...800..134M>
29. Torres, G., Kipping, D. M., Fressin, F., Caldwell, D. A., Twicken, J. D., Ballard, S., Batalha, N. M., Bryson, S. T., Ciardi, D. R., Henze, C. E., Howell, S. B., Isaacson, H. T., Jenkins, J. M., **Muirhead, P. S.**, Newton, E. R., Petigura, E. A., Barclay, T., Borucki, W. J., Crepp, J. R., Everett, M. E., Horch, E. P., Howard, A. W., Kolbl, R., Marcy, G. W., McCauliff, S., & Quintana, E. V. "Validation of 12 Small Kepler Transiting Planets in the Habitable Zone", 2015, The Astrophysical Journal,800, 99.  
<https://ui.adsabs.harvard.edu/abs/2015ApJ...800...99T>
30. Zhao, M., O'Rourke, J. G., Wright, J. T., Knutson, H. A., Burrows, A., Fortney, J., Ngo, H., Fulton, B. J., Baranec, C., Riddle, R., Law, N. M., **Muirhead, P. S.**, Hinkley, S., Showman, A. P., Curtis, J., & Burruss, R. "Characterization of the Atmosphere of the Hot Jupiter HAT-P-32Ab and the M-dwarf Companion HAT-P-32B", 2014, The Astrophysical Journal,796, 115.  
<https://ui.adsabs.harvard.edu/abs/2014ApJ...796..115Z>
31. Schaefer, G. H., Brummelaar, T. T., Gies, D. R., Farrington, C. D., Kloppenborg, B., Chesneau, O., Monnier, J. D., Ridgway, S. T., Scott, N., Tallon-Bosc, I., McAlister, H. A., Boyajian, T., Maestro, V., Mourard, D., Meilland, A., Nardetto, N., Stee, P., Sturmann, J., Vargas, N., Baron, F., Ireland, M., Baines, E. K., Che, X., Jones, J., Richardson, N. D., Roettenbacher, R. M., Sturmann, L., Turner, N. H., Tuthill, P., van Belle, G., von Braun, K., Zavala, R. T., Banerjee, D. P. K., Ashok, N. M., Joshi, V., **Becker, J.**, & **Muirhead, P. S.** "The expanding fireball of Nova Delphini 2013", 2014, Nature,515, 234. <https://ui.adsabs.harvard.edu/abs/2014Natur.515..234S>

32. Howard, A. W., Marcy, G. W., Fischer, D. A., Isaacson, H., **Muirhead, P. S.**, Henry, G. W., Boyajian, T. S., von Braun, K., **Becker, J. C.**, Wright, J. T., & Johnson, J. A. "The NASA-UC-UH ETA-Earth Program. IV. A Low-mass Planet Orbiting an M Dwarf 3.6 PC from Earth", 2014, The Astrophysical Journal, 794, 51. <https://ui.adsabs.harvard.edu/abs/2014ApJ...794...51H>
33. Rappaport, S., Swift, J., Levine, A., Joss, M., Sanchis-Ojeda, R., Barclay, T., Still, M., Handler, G., Oláh, K., **Muirhead, P. S.**, Huber, D., & Vida, K. "M-dwarf Rapid Rotators and the Detection of Relatively Young Multiple M-Star Systems", 2014, The Astrophysical Journal, 788, 114. <https://ui.adsabs.harvard.edu/abs/2014ApJ...788..114R>
34. Bechter, E. B., Crepp, J. R., Ngo, H., Knutson, H. A., Batygin, K., Hinkley, S., **Muirhead, P. S.**, Johnson, J. A., Howard, A. W., Montet, B. T., Matthews, C. T., & Morton, T. D. "WASP-12b and HAT-P-8b are Members of Triple Star Systems", 2014, The Astrophysical Journal, 788, 2. <https://ui.adsabs.harvard.edu/abs/2014ApJ...788...2B>
35. Knutson, H. A., Fulton, B. J., Montet, B. T., Kao, M., Ngo, H., Howard, A. W., Crepp, J. R., Hinkley, S., Bakos, G. Á., Batygin, K., Johnson, J. A., Morton, T. D., & **Muirhead, P. S.** "Friends of Hot Jupiters. I. A Radial Velocity Search for Massive, Long-period Companions to Close-in Gas Giant Planets", 2014, The Astrophysical Journal, 785, 126. <https://ui.adsabs.harvard.edu/abs/2014ApJ...785..126K>
36. Hillenbrand, L. A., Miller, A. A., Covey, K. R., Carpenter, J. M., Cenko, S. B., Silverman, J. M., **Muirhead, P. S.**, Fischer, W. J., Crepp, J. R., Bloom, J. S., & Filippenko, A. V. "Highly Variable Extinction and Accretion in the Jet-driving Class I-type Young Star PTF 10nvg (V2492 Cyg, IRAS 20496+4354)", 2013, The Astronomical Journal, 145, 59. <https://ui.adsabs.harvard.edu/abs/2013AJ....145...59H>
37. Swift, J. J., Johnson, J. A., Morton, T. D., Crepp, J. R., Montet, B. T., Fabrycky, D. C., & **Muirhead, P. S.** "Characterizing the Cool KOIs. IV. Kepler-32 as a Prototype for the Formation of Compact Planetary Systems throughout the Galaxy", 2013, The Astrophysical Journal, 764, 105. <https://ui.adsabs.harvard.edu/abs/2013ApJ...764..105S>
38. Schlichting, H. E., Ofek, E. O., Sari, R., Nelan, E. P., Gal-Yam, A., Wenz, M., **Muirhead, P.**, Javanfar, N., & Livio, M. "Measuring the Abundance of Sub-kilometer-sized Kuiper Belt Objects Using Stellar Occultations", 2012, The Astrophysical Journal, 761, 150. <https://ui.adsabs.harvard.edu/abs/2012ApJ...761..150S>
39. Ben-Ami, S., Gal-Yam, A., Filippenko, A. V., Mazzali, P. A., Modjaz, M., Yaron, O., Arcavi, I., Cenko, S. B., Horesh, A., Howell, D. A., Graham, M. L., Horst, J. C., Im, M., Jeon, Y., Kulkarni, S. R., Leonard, D. C., Perley, D., Pian, E., Sand, D. J., Sullivan, M., **Becker, J. C.**, Bersier, D., Bloom, J. S., **Bottom, M.**, Brown, P. J., Clubb, K. I., Dilday, B., Dixon, R. C., Fortinsky, A. L., Fox, D. B., Gonzalez, L. A., Harutyunyan, A., Kasliwal, M. M., Li, W., Malkan, M. A., Manulis, I., Matheson, T., Moskovitz, N. A., **Muirhead, P. S.**, Nugent, P. E., Ofek, E. O., Quimby, R. M., Richards, J. W., Ross, N. R., Searcy, K. J., Silverman, J. M., Smith, N., Vanderburg, A., & Walker, E. S. "Discovery and Early Multi-wavelength Measurements of the Energetic Type Ic Supernova PTF12gzk: A Massive-star Explosion in a Dwarf Host Galaxy", 2012, The Astrophysical Journal, 760, L33. <https://ui.adsabs.harvard.edu/abs/2012ApJ...760L..33B>
40. Boyajian, T. S., von Braun, K., van Belle, G., McAlister, H. A., ten Brummelaar, T. A., Kane, S. R., **Muirhead, P. S.**, Jones, J., White, R., Schaefer, G., Ciardi, D., Henry, T., López-Morales, M., Ridgway, S., Gies, D., Jao, W.-C., Rojas-Ayala, B., Parks, J. R., Sturmann, L., Sturmann, J., Turner,

N. H., Farrington, C., Goldfinger, P. J., & Berger, D. H. "Stellar Diameters and Temperatures. II. Main-sequence K- and M-stars", 2012, *The Astrophysical Journal*, 757, 112.

<https://ui.adsabs.harvard.edu/abs/2012ApJ...757..112B>

41. Johnson, J. A., Gazak, J. Z., Apps, K., **Muirhead, P. S.**, Crepp, J. R., Crossfield, I. J. M., Boyajian, T., von Braun, K., Rojas-Ayala, B., Howard, A. W., Covey, K. R., Schlawin, E., Hamren, K., Morton, T. D., Marcy, G. W., & Lloyd, J. P. "Characterizing the Cool KOIs. II. The M Dwarf KOI-254 and Its Hot Jupiter", 2012, *The Astronomical Journal*, 143, 111.  
<https://ui.adsabs.harvard.edu/abs/2012AJ....143..111J>
42. Rojas-Ayala, B., Covey, K. R., **Muirhead, P. S.**, & Lloyd, J. P. "Metallicity and Temperature Indicators in M Dwarf K-band Spectra: Testing New and Updated Calibrations with Observations of 133 Solar Neighborhood M Dwarfs", 2012, *The Astrophysical Journal*, 748, 93.  
<https://ui.adsabs.harvard.edu/abs/2012ApJ...748..93R>
43. Miller, A. A., Hillenbrand, L. A., Covey, K. R., Poznanski, D., Silverman, J. M., Kleiser, I. K. W., Rojas-Ayala, B., **Muirhead, P. S.**, Cenko, S. B., Bloom, J. S., Kasliwal, M. M., Filippenko, A. V., Law, N. M., Ofek, E. O., Dekany, R. G., Rahmer, G., Hale, D., Smith, R., Quimby, R. M., Nugent, P., Jacobsen, J., Zolkower, J., Velur, V., Walters, R., Henning, J., Bui, K., McKenna, D., Kulkarni, S. R., Klein, C. R., Kandrashoff, M., & Morton, A. "Evidence for an FU Orionis-like Outburst from a Classical T Tauri Star", 2011, *The Astrophysical Journal*, 730, 80.  
<https://ui.adsabs.harvard.edu/abs/2011ApJ...730...80M>
44. West, A. A., Morgan, D. P., Bochanski, J. J., Andersen, J. M., Bell, K. J., Kowalski, A. F., Davenport, J. R. A., Hawley, S. L., Schmidt, S. J., Bernat, D., Hilton, E. J., **Muirhead, P.**, Covey, K. R., Rojas-Ayala, B., Schlawin, E., Gooding, M., Schluns, K., Dhital, S., Pineda, J. S., & Jones, D. O. "The Sloan Digital Sky Survey Data Release 7 Spectroscopic M Dwarf Catalog. I. Data", 2011, *The Astronomical Journal*, 141, 97. <https://ui.adsabs.harvard.edu/abs/2011AJ....141...97W>
45. Rojas-Ayala, B., Covey, K. R., **Muirhead, P. S.**, & Lloyd, J. P. "Metal-rich M-Dwarf Planet Hosts: Metallicities with K-band Spectra", 2010, *The Astrophysical Journal*, 720, L113.  
<https://ui.adsabs.harvard.edu/abs/2010ApJ...720L.113R>
46. Monnier, J. D., Zhao, M., Pedretti, E., Thureau, N., Ireland, M., **Muirhead, P.**, Berger, J.-P., Millan-Gabet, R., Van Belle, G., ten Brummelaar, T., McAlister, H., Ridgway, S., Turner, N., Sturmann, L., Sturmann, J., & Berger, D. "Imaging the Surface of Altair", 2007, *Science*, 317, 342.  
<https://ui.adsabs.harvard.edu/abs/2007Sci...317..342M>

#### Unrefereed Papers, Conference Abstracts and Datasets (99)

1. Han, E., **Muirhead, P.**, & Swift, J. "The mass-radius relationship of M dwarf stars from Kepler eclipsing binaries", 2020, American Astronomical Society Meeting Abstracts, 256.07.  
<https://ui.adsabs.harvard.edu/abs/2020AAS...23525607H>
2. Stolle-McAllister, G., **Muirhead, P.**, Walker, G., & Han, E. "Investigating an Activity Cycle on Eclipsing Binary Star FL Lyr", 2020, American Astronomical Society Meeting Abstracts, 170.28.  
<https://ui.adsabs.harvard.edu/abs/2020AAS...23517028S>

3. **Muirhead, P. S.**, Veyette, M. J., Newton, E. R., Theissen, C. A., & Mann, A. W. "Intensification and saturation of M dwarf absorption lines with Rossby number", 2020, American Astronomical Society Meeting Abstracts, 148.03. <https://ui.adsabs.harvard.edu/abs/2020AAS...23514803M>
4. Cloutier, R., Astudillo-Defru, N., Bonfils, X., Jenkins, J. S., Berdinas, Z., Ricker, G., Vanderspek, R., Latham, D. W., Seager, S., Winn, J., Jenkins, J. M., Almenara, J. M., Bouchy, F., Delfosse, X., Diaz, M. R., Diaz, R. F., Doyon, R., Figueira, P., Forveille, T., Kurtovic, N. T., Lovis, C., Mayor, M., Menou, K., Morgan, E., Morris, R., **Muirhead, P.**, Murgas, F., Pepe, F., Santos, N. C., Segransan, D., Smith, J. C., Tenenbaum, P., Torres, G., Udry, S., Vezie, M., & Vilasenor, J. "VizieR Online Data Catalog: L 98-59 (TOI 175) HARPS observations (Cloutier+, 2019)", 2019, VizieR Online Data Catalog, J/A+A/629/A111. <https://ui.adsabs.harvard.edu/abs/2019yCat..36290111C>
5. **Muirhead, P. S.**, Kesseli, A., Han, E., & Veyette, M. "Are Exoplanets Orbiting M Dwarfs Extreme?", 2019, AAS/Division for Extreme Solar Systems Abstracts,51, 502.01. <https://ui.adsabs.harvard.edu/abs/2019ESS....450201M>
6. Kesseli, A. Y., Kirkpatrick, J. D., Fajardo-Acosta, S. B., Penny, M. T., Gaudi, B. S., Veyette, M., Boeshaar, P. C., Henderson, C. B., Cushing, M. C., Calchi-Novati, S., Shvartzvald, Y., & **Muirhead, P. S.** "VizieR Online Data Catalog: Radius relations for low-metallicity M-dwarf stars (Kesseli+, 2019)", 2019, VizieR Online Data Catalog, J/AJ/157/63. <https://ui.adsabs.harvard.edu/abs/2019yCat..51570063K>
7. **Muirhead, P.**, Skinner, J. N., Radigan, J., Triaud, A., Theissen, C., Bardalez Gagliuffi, D., Tamburo, P., Burgasser, A., Faherty, J., & Stephens, D. "Searching for Exosatellites Orbiting L and T Dwarfs: Connecting Planet Formation to Moon Formation and Finding New Temperate Worlds", 2019, Bulletin of the American Astronomical Society,51, 169. <https://ui.adsabs.harvard.edu/abs/2019BAAS...51c.169M>
8. Erskine, D., Buschmann, M., Easther, R., Ferraro, S., Kim, A., Linder, E., **Muirhead, P.**, Ravi, A., Safdi, B., Schaan, E., Silverwood, H., & Walsworth, R. "Direct Acceleration: Cosmic and Exoplanet Synergies", 2019, Bulletin of the American Astronomical Society,51, 53. <https://ui.adsabs.harvard.edu/abs/2019BAAS...51c..53E>
9. Cloutier, R., Astudillo-Defru, N., Bonfils, X., Jenkins, J. S., Ricker, G., Vanderspek, R., Latham, D. W., Seager, S., Winn, J., Jenkins, J. M., Almenara, J. M., Bouchy, F., Delfosse, X., Díaz, M. R., Díaz, R. F., Doyon, R., Figueira, P., Forveille, T., Jaffe, T., Kurtovic, N. T., Lovis, C., Mayor, M., Menou, K., Morgan, E., Morris, R., **Muirhead, P.**, Murgas, F., Pepe, F., Santos, N. C., Ségransan, D., Smith, J. C., Tenenbaum, P., Torres, G., Udry, S., Vezie, M., & Villansenor, J. "Characterization of the L 98-59 multi-planetary system with HARPS: two confirmed terrestrial planets and a mass upper limit on the third", 2019, arXiv e-prints, arXiv:1905.10669. <https://ui.adsabs.harvard.edu/abs/2019arXiv190510669C>
10. Stassun, K. G., Oelkers, R. J., Pepper, J., Paegert, M., de, L. N., Torres, G., Latham, D. W., Charpinet, S., Dressing, C. D., Huber, D., Kane, S. R., Lepine, S., Mann, A., **Muirhead, P. S.**, Rojas-Ayala, B., Silvotti, R., Fleming, S. W., Levine, A., & Plavchan, P. "VizieR Online Data Catalog: The TESS Input Catalog and Candidate Target List (Stassun+, 2018)", 2019, VizieR Online Data Catalog, J/AJ/156/102. <https://ui.adsabs.harvard.edu/abs/2019yCat..51560102S>
11. Sagear, S. A., Skinner, J. N., & **Muirhead, P. S.** "Constraining Planet Occurrence Around Ultracool Dwarfs Observed by K2", 2019, American Astronomical Society Meeting Abstracts #233,233, 140.19. <https://ui.adsabs.harvard.edu/abs/2019AAS...23314019S>

12. Chittidi, J. S., Muirhead, P. S., Rojas-Ayala, B., & Jorgenson, R. A. "An Updated Cool Dwarf Catalog for the Transiting Exoplanet Survey Satellite Using Gaia DR2", 2019, American Astronomical Society Meeting Abstracts #233,233, 140.01.  
<https://ui.adsabs.harvard.edu/abs/2019AAS...23314001C>
13. Kesseli, A. Y., Muirhead, P. S., Mann, A. W., & Mace, G. "VizieR Online Data Catalog: M dwarf stars rotational broadening measurements (Kesseli+, 2018)", 2018, VizieR Online Data Catalog, J/AJ/155/225. <https://ui.adsabs.harvard.edu/abs/2018yCat..51550225K>
14. Muirhead, P. S., Dressing, C. D., Mann, A. W., Rojas-Ayala, B., Lepine, S., Paegert, M., de, L. N., & Oelkers, R. "VizieR Online Data Catalog: A catalog of cool dwarf targets for the TESS (Muirhead+, 2018)", 2018, VizieR Online Data Catalog, J/AJ/155/180.  
<https://ui.adsabs.harvard.edu/abs/2018yCat..51550180M>
15. Veyette, M. J., Muirhead, P. S., Mann, A. W., Brewer, J. M., Allard, F., & Homeier, D. "VizieR Online Data Catalog: Teff, metallicity and Ti abundance of M dwarfs (Veyette+, 2017)", 2018, VizieR Online Data Catalog, J/ApJ/851/26. <https://ui.adsabs.harvard.edu/abs/2018yCat..18510026V>
16. Erskine, D. J., Muirhead, P. S., Vanderburg, A. M., & Szentgyorgyi, A. "Enhanced exoplanet biosignature detection from an interferometer addition to low resolution spectrographs", 2018, Ground-based and Airborne Instrumentation for Astronomy VII,10702, 107024G.  
<https://ui.adsabs.harvard.edu/abs/2018SPIE10702E..4GE>
17. Dalba, P., Muirhead, P., & Tamburo, P. "Transit Recovery of Kepler-167e: Providing JWST with an Unprecedented Jupiter-analog Exoplanet Target", 2018, Spitzer Proposal, 14047.  
<https://ui.adsabs.harvard.edu/abs/2018sptz.prop14047D>
18. Hardegree-Ullman, K., Cushing, M., & Muirhead, P. S. "Mid-Type M Dwarf Planet Occurrence Rates", 2018, American Astronomical Society Meeting Abstracts #231,231, 427.06.  
<https://ui.adsabs.harvard.edu/abs/2018AAS...23142706H>
19. Muirhead, P. S., & Veyette, M. "Ages of M Dwarf Stars from their Alpha Enhancement", 2018, American Astronomical Society Meeting Abstracts #231,231, 120.04.  
<https://ui.adsabs.harvard.edu/abs/2018AAS...23112004M>
20. Veyette, M., Muirhead, P. S., Mann, A., Brewer, J., Allard, F., & Homeier, D. "Calibrating Detailed Chemical Analysis of M dwarfs", 2018, American Astronomical Society Meeting Abstracts #231,231, 120.03. <https://ui.adsabs.harvard.edu/abs/2018AAS...23112003V>
21. Erskine, D. J., Muirhead, P. S., Vanderburg, A. M., & Szentgyorgyi, A. "Enhanced Exoplanet Biosignature from an Interferometer Addition to Low Resolution Spectrographs", 2017, AGU Fall Meeting Abstracts,2017, P53B-2649. <https://ui.adsabs.harvard.edu/abs/2017AGUFM.P53B2649E>
22. Rappaport, S., Swift, J., Levine, A., Joss, M., Sanchis-Ojeda, R., Barclay, T., Still, M., Handler, G., Olah, K., Muirhead, P. S., Huber, D., & Vida, K. "VizieR Online Data Catalog: Detection of Kepler multiple M-star systems (Rappaport+, 2014)", 2017, VizieR Online Data Catalog, J/ApJ/788/114.  
<https://ui.adsabs.harvard.edu/abs/2017yCat..17880114R>
23. Knutson, H. A., Fulton, B. J., Montet, B. T., Kao, M., Ngo, H., Howard, A. W., Crepp, J. R., Hinkley, S., Bakos, G. A., Batygin, K., Johnson, J. A., Morton, T. D., & Muirhead, P. S. "VizieR Online Data



Catalog: HIRES radial velocity measurements (Knutson+, 2014)", 2017, VizieR Online Data Catalog, J/ApJ/785/126. <https://ui.adsabs.harvard.edu/abs/2017yCat..17850126K>

24. Erskine, D. J., **Muirhead, P. S.**, Vanderburg, A. M., & Szentgyorgyi, A. "Greatly enhanced exoplanet biosignature from an interferometer addition to a low resolution spectrograph", 2017, American Astronomical Society Meeting Abstracts #230,230, 118.07. <https://ui.adsabs.harvard.edu/abs/2017AAS...23011807E>
25. Swift, J., Han, E., Ding, J., O'Neill, K., Lawrence, Y., Klink, D., **Muirhead, P. S.**, & Shan, Y. "Does the Eclipsing Binary KIC 10935310 Contain a Massively Inflated M Dwarf?", 2017, American Astronomical Society Meeting Abstracts #229,229, 240.20. <https://ui.adsabs.harvard.edu/abs/2017AAS...22924020S>
26. Hardegree-Ullman, K., Cushing, M., & **Muirhead, P. S.** "Characterizing Mid-Type M Dwarfs in the Kepler Field with the Discovery Channel Telescope and WIYN", 2017, American Astronomical Society Meeting Abstracts #229,229, 126.08. <https://ui.adsabs.harvard.edu/abs/2017AAS...22912608H>
27. **Muirhead, P. S.**, Croll, B., Dalba, P. A., Veyette, M., Han, E., Kesseli, A., & **Healy, B.** "The Puzzling Atmospheres of Low-mass Stars, Brown Dwarfs and Exoplanets Revealed by the Discovery Channel Telescope", 2017, American Astronomical Society Meeting Abstracts #229,229, 126.07. <https://ui.adsabs.harvard.edu/abs/2017AAS...22912607M>
28. Skinner, J. N., West, A. A., Faherty, J. K., & **Muirhead, P. S.** "Proper Motions and Parallaxes of Very Low-Mass Stars using DCT Astrometry", 2017, American Astronomical Society Meeting Abstracts #229,229, 126.05. <https://ui.adsabs.harvard.edu/abs/2017AAS...22912605S>
29. Schmidt, S. J., Douglas, S., Gosnell, N. M., **Muirhead, P. S.**, Booth, R. S., Davenport, J. R. A., & Mace, G. N. "The Role Of Gender In Asking Questions At Cool Stars 18 And 19", 2016, 19th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun (CS19), 155. <https://ui.adsabs.harvard.edu/abs/2016csss.confE.155T>
30. Dalba, P. A., & **Muirhead, P. S.** "The Third Transit of Snow-Line Exoplanet Kepler-421b", 2016, AAS/Division for Planetary Sciences Meeting Abstracts #48, 122.08. <https://ui.adsabs.harvard.edu/abs/2016DPS...4812208D>
31. Skinner, J. N., West, A. A., Faherty, J. K., & **Muirhead, P. S.** "DCT Astrometry of Very Low-Mass Stars", 2016, 19th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun (CS19), 36. <https://ui.adsabs.harvard.edu/abs/2016csss.confE..36S>
32. Croll, B., **Muirhead, P. S.**, Lichtman, J., Han, E., Dalba, P. A., & Radigan, J. "Long-term, Multiwavelength Light Curves of Ultra-Cool Dwarfs: II. The evolving Light Curves of the T2.5 SIMP 0136 & the Uncorrelated Light Curves of the M9 TVLM 513", 2016, arXiv e-prints, arXiv:1609.03587. <https://ui.adsabs.harvard.edu/abs/2016arXiv160903587C>
33. Croll, B., **Muirhead, P. S.**, Han, E., Dalba, P. A., Radigan, J., Morley, C. V., Lazarevic, M., & Taylor, B. "Long-term, Multiwavelength Light Curves of Ultra-cool Dwarfs: I. An Interplay of Starspots & Clouds Likely Drive the Variability of the L3.5 dwarf 2MASS 0036+18", 2016, arXiv e-prints, arXiv:1609.03586. <https://ui.adsabs.harvard.edu/abs/2016arXiv160903586C>

34. Veyette, M. J., **Muirhead, P. S.**, Hall, Z. J., Taylor, B., & Ye, J. "NEWS: the near-infrared Echelle for wideband spectroscopy", 2016, Ground-based and Airborne Instrumentation for Astronomy VI,9908, 99086M. <https://ui.adsabs.harvard.edu/abs/2016SPIE.9908E..6MV>
35. Erskine, D. J., Linder, E., Wishnow, E., Edelstein, J., Sirk, M., **Muirhead, P.**, Lloyd, J., & Kim, A. "Dramatic robustness of a multiple delay dispersed interferometer to spectrograph errors: how mixing delays reduces or cancels wavelength drift", 2016, Ground-based and Airborne Instrumentation for Astronomy VI,9908, 99085Y. <https://ui.adsabs.harvard.edu/abs/2016SPIE.9908E..5YE>
36. Veyette, M., **Muirhead, P.**, Mann, A., & Allard, F. "The Physical Mechanism Behind M Dwarf Metallicity Indicators And The Role Of C and O Abundances", 2016, 19th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun (CS19), 59. <https://ui.adsabs.harvard.edu/abs/2016csss.confE..59V>
37. Hardegree-Ullman, K., Cushing, M., & **Muirhead, P. S.** "Characterization of Mid-Type M Dwarfs in the Kepler Field", 2016, American Astronomical Society Meeting Abstracts #227,227, 430.12. <https://ui.adsabs.harvard.edu/abs/2016AAS...22743012H>
38. Klink, D., Swift, J., **Muirhead, P. S.**, Johnson, J. A., Han, E., & Shan, Y. "On the Recovery of Stellar Parameters from Eclipsing Binary Data", 2016, American Astronomical Society Meeting Abstracts #227,227, 345.15. <https://ui.adsabs.harvard.edu/abs/2016AAS...22734515K>
39. Kraus, A. L., Cody, A. M., Covey, K. R., Rizzuto, A. C., Mann, A., Ireland, M., Jensen, E. L. N., & **Muirhead, P. S.** "The Mass-Radius Relation of Young Stars from K2", 2016, American Astronomical Society Meeting Abstracts #227,227, 236.12. <https://ui.adsabs.harvard.edu/abs/2016AAS...22723612K>
40. Han, E., **Muirhead, P. S.**, Swift, J., Isaacson, H. T., & DeFelippis, D. "The Mass-Radius-Luminosity-Rotation Relationship for M Dwarf Stars", 2016, American Astronomical Society Meeting Abstracts #227,227, 142.21. <https://ui.adsabs.harvard.edu/abs/2016AAS...22714221H>
41. Ngo, H., Knutson, H., Hinkley, S., Levesque Bryan, M., Crepp, J., Bechter, E., Batygin, K., Howard, A., Johnson, J. A., Morton, T., & **Muirhead, P. S.** "Companion-driven dynamics: Trends in stellar companion fraction and giant exoplanet orbital properties.", 2015, AAS/Division for Extreme Solar Systems Abstracts,47, 403.04. <https://ui.adsabs.harvard.edu/abs/2015ESS.....340304N>
42. Yu, L., Winn, J., Gillon, M., Albrecht, S., Rappaport, S., Bieryla, A., Dai, F., Delrez, L., Hillenbrand, L., Holman, M., Howard, A., Huang, C., Isaacson, H. T., Jehin, E., Lendl, M., Montet, B. T., **Muirhead, P. S.**, Sanchis-Ojeda, R., & Triaud, A. H. M. J. "Tests of the planetary hypothesis for PTFO 8-8695b", 2015, AAS/Division for Extreme Solar Systems Abstracts,47, 120.04. <https://ui.adsabs.harvard.edu/abs/2015ESS.....312004Y>
43. **Muirhead, P. S.**, Mann, A., Vanderburg, A., Morton, T., Kraus, A., Ireland, M., Swift, J., Feiden, G., Gaidos, E., & Gazak, J. Z. "The Occurrence of Compact Multiples Orbiting Mid-M Dwarf Stars", 2015, AAS/Division for Extreme Solar Systems Abstracts,47, 102.03. <https://ui.adsabs.harvard.edu/abs/2015ESS.....310203M>
44. Dalba, P. A., **Muirhead, P. S.**, Fortney, J. J., Hedman, M. M., Nicholson, P. D., & Veyette, M. J. "Saturn as a Transiting Exoplanet", 2015, AAS/Division for Planetary Sciences Meeting Abstracts #47, 504.01. <https://ui.adsabs.harvard.edu/abs/2015DPS....4750401D>

45. Swift, J. J., Montet, B. T., Vanderburg, A., Morton, T., **Muirhead, P. S.**, & Johnson, J. A. "VizieR Online Data Catalog: Parameters of planets orbiting coolest dwarfs (Swift+, 2015)", 2015, VizieR Online Data Catalog, J/ApJS/218/26. <https://ui.adsabs.harvard.edu/abs/2015yCat..22180026S>
46. Veyette, M., **Muirhead, P.**, & Mann, A. "Testing the origin of compact exoplanetary systems around M dwarfs - An empirical approach to measure C/O in M dwarfs and investigate its implications for planet formation", 2015, IAU General Assembly,29, 2257462. <https://ui.adsabs.harvard.edu/abs/2015IAUGA..2257462V>
47. Ngo, H., Knutson, H. A., Hinkley, S., Crepp, J. R., Bechter, E. B., Batygin, K., Howard, A. W., Johnson, J. A., Morton, T., & **Muirhead, P. S.** "Friends of Hot Jupiters: Trends in directly imaged companion fraction", 2015, IAU General Assembly,29, 2253202. <https://ui.adsabs.harvard.edu/abs/2015IAUGA..2253202N>
48. Plavchan, P., Latham, D., Gaudi, S., Crepp, J., Dumusque, X., Furesz, G., Vanderburg, A., Blake, C., Fischer, D., Prato, L., White, R., Makarov, V., Marcy, G., Stapelfeldt, K., Haywood, R., Collier-Cameron, A., Quirrenbach, A., Mahadevan, S., Anglada, G., & **Muirhead, P.** "Radial Velocity Prospects Current and Future: A White Paper Report prepared by the Study Analysis Group 8 for the Exoplanet Program Analysis Group (ExoPAG)", 2015, arXiv e-prints, arXiv:1503.01770. <https://ui.adsabs.harvard.edu/abs/2015arXiv150301770P>
49. Rojas-Ayala, B., Boisse, I., **Muirhead, P. S.**, Binks, A., Dittmann, J. A., Donati, J.-F., Fleming, S. W., Lesage, A.-L., Morin, J., & Raetz, S. "Portraying the Hosts: Stellar Science From Planet Searches", 2015, 18th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun,18, 39. <https://ui.adsabs.harvard.edu/abs/2015csss...18...39R>
50. Caldwell, D. A., Torres, G., Kipping, D. M., Ballard, S., Batalha, N., Borucki, W. J., Bryson, S., Ciardi, D. R., Crepp, J. R., Everett, M., Fressin, F., Henze, C., Horch, E., Howard, A., Howell, S. B., Isaacson, H. T., Jenkins, J. M., Kolbl, R., Marcy, G. W., McCauliff, S. D., **Muirhead, P. S.**, Newton, E., Petigura, E., Twicken, J. D., Quintana, E. V., & Barclay, T. "Validation of Twelve Small Kepler Transiting Planets in the Habitable Zone", 2015, American Astronomical Society Meeting Abstracts #225,225, 438.02. <https://ui.adsabs.harvard.edu/abs/2015AAS...22543802C>
51. Ngo, H., Knutson, H. A., Hinkley, S., Crepp, J. R., Bechter, E. B., Batygin, K., Howard, A. W., Johnson, J. A., Morton, T. D., & **Muirhead, P. S.** "Friends of hot Jupiters II: No correspondence between hot Jupiter spin-orbit misalignment and the incidence of directly imaged stellar companions", 2015, American Astronomical Society Meeting Abstracts #225,225, 420.05. <https://ui.adsabs.harvard.edu/abs/2015AAS...22542005N>
52. **Muirhead, P. S.**, Mann, A. W., Vanderburg, A., Morton, T. D., Kraus, A. L., Ireland, M. J., Swift, J. J., Feiden, G. A., Gaidos, E., & Gazak, J. Z. "The Occurrence of Compact Multiple Exoplanetary Systems Orbiting Mid-M Dwarf Stars", 2015, American Astronomical Society Meeting Abstracts #225,225, 420.02. <https://ui.adsabs.harvard.edu/abs/2015AAS...22542002M>
53. Eastman, J. D., Swift, J., Beatty, T. G., Bottom, M., Johnson, J., Wright, J., McCrady, N., Wittenmyer, R. A., Riddle, R. L., Plavchan, P., **Muirhead, P. S.**, Blake, C., & Zhao, M. "Photometric commissioning results from MINERVA", 2015, American Astronomical Society Meeting Abstracts #225,225, 337.09. <https://ui.adsabs.harvard.edu/abs/2015AAS...22533709E>
54. McCrady, N., Johnson, J., Wright, J., Wittenmyer, R. A., Blake, C., Swift, J., Eastman, J. D., Plavchan, P., Riddle, R. L., **Muirhead, P. S.**, Bottom, M., Zhao, M., & Beatty, T. G. "MINERVA: A

- Dedicated Observatory for Detection of Nearby Low-Mass Exoplanets", 2015, American Astronomical Society Meeting Abstracts #225,225, 258.25.  
<https://ui.adsabs.harvard.edu/abs/2015AAS...22525825M>
55. Price, E., Rogers, L., Johnson, J., Shporer, A., Morton, T., Crepp, J. R., Swift, J., & **Muirhead, P. S.** "Characterizing the Hot Kepler Objects of Interest", 2015, American Astronomical Society Meeting Abstracts #225,225, 257.31. <https://ui.adsabs.harvard.edu/abs/2015AAS...22525731P>
  56. Veyette, M., **Muirhead, P.**, & Mann, A. "Accurate Alpha Abundance and C/O of Low-mass Stars", 2015, American Astronomical Society Meeting Abstracts #225,225, 138.11.  
<https://ui.adsabs.harvard.edu/abs/2015AAS...22513811V>
  57. **Muirhead, P. S.**, Becker, J., Feiden, G. A., Rojas-Ayala, B., Vanderburg, A., Price, E. M., Thorp, R., Law, N. M., Riddle, R., Baranec, C., Hamren, K., Schlawin, E., Covey, K. R., Johnson, J. A., & Lloyd, J. P. "VizieR Online Data Catalog: Cool KOIs. VI. H- and K- band spectra (Muirhead+, 2014)", 2014, VizieR Online Data Catalog, J/ApJS/213/5.  
<https://ui.adsabs.harvard.edu/abs/2014yCat..22130005M>
  58. **Muirhead, P. S.**, Hall, Z. J., & Veyette, M. J. "HiJaK: the high-resolution J, H and K spectrometer", 2014, Ground-based and Airborne Instrumentation for Astronomy V,9147, 91477T.  
<https://ui.adsabs.harvard.edu/abs/2014SPIE.9147E..7TM>
  59. Bottom, M., **Muirhead, P. S.**, Swift, J. J., Zhao, M., Gardner, P., Plavchan, P. P., Riddle, R. L., Herzig, E., Johnson, J. A., Wright, J. T., McCrady, N., & Wittenmyer, R. A. "Design, motivation, and on-sky tests of an efficient fiber coupling unit for 1-meter class telescopes", 2014, Ground-based and Airborne Instrumentation for Astronomy V,9147, 91472E.  
<https://ui.adsabs.harvard.edu/abs/2014SPIE.9147E..2EB>
  60. Dalba, P. A., **Muirhead, P. S.**, Hedman, M. M., Fortney, J. J., & Nicholson, P. D. "Modeling Exoplanet Transmission Spectra with Solar System Objects", 2014, American Astronomical Society Meeting Abstracts #224,224, 122.12. <https://ui.adsabs.harvard.edu/abs/2014AAS...22412212D>
  61. Montet, B., Johnson, J. A., **Muirhead, P. S.**, Shporer, A., Howard, A., Baranec, C., Albert, L., & Robo-AO Collaboration "LHS 6343: Precise Constraints on the Mass and Radius of a Transiting Brown Dwarf Discovered by Kepler", 2014, American Astronomical Society Meeting Abstracts #223,223, 334.03. <https://ui.adsabs.harvard.edu/abs/2014AAS...22333403M>
  62. Swift, J., **Muirhead, P. S.**, Johnson, J. A., Gonzales, A., Shporer, A., Plavchan, P., Lockwood, A., & Morton, T. "Kepler's Cool Eclipsing Binaries", 2014, American Astronomical Society Meeting Abstracts #223,223, 215.02. <https://ui.adsabs.harvard.edu/abs/2014AAS...22321502S>
  63. Wright, J., Johnson, J. A., McCrady, N., Swift, J., **Muirhead, P. S.**, Zhao, M., Plavchan, P., Bottom, M., & Wittenmyer, R. A. "MINERVA: Small Telescopes, Small Planets", 2014, American Astronomical Society Meeting Abstracts #223,223, 148.31.  
<https://ui.adsabs.harvard.edu/abs/2014AAS...22314831W>
  64. Rogers, L., Price, E., Shporer, A., Crepp, J. R., Swift, J., **Muirhead, P. S.**, & Johnson, J. A. "Characterizing the Hot Kepler Objects of Interest", 2014, American Astronomical Society Meeting Abstracts #223,223, 131.02. <https://ui.adsabs.harvard.edu/abs/2014AAS...22313102R>

65. **Muirhead, P. S.** "Planets Orbiting M Dwarf Stars: The Most Characterizable Terrestrial Exoplanets are also the Most Abundant", 2013, AAS/Division for Planetary Sciences Meeting Abstracts #45, 307.01. <https://ui.adsabs.harvard.edu/abs/2013DPS...4530701M>
66. Piskorz, D., Knutson, H. A., **Muirhead, P. S.**, Batygin, K., Crepp, J. R., Hinkley, S., Howard, A. W., Johnson, J. A., & Morton, T. D. "Cold Friends of Hot Jupiters: NIRSPEC Survey", 2013, AAS/Division for Planetary Sciences Meeting Abstracts #45, 113.02. <https://ui.adsabs.harvard.edu/abs/2013DPS...4511302P>
67. Ngo, H., Knutson, H. A., Hinkley, S., Crepp, J. R., Batygin, K., Howard, A. W., Johnson, J. A., Morton, T. D., & **Muirhead, P. S.** "Cold Friends of Hot Jupiters: AO Survey", 2013, AAS/Division for Planetary Sciences Meeting Abstracts #45, 113.01. <https://ui.adsabs.harvard.edu/abs/2013DPS...4511301N>
68. Dhital, S., Oswalt, T. D., **Muirhead, P. S.**, Weisenburger, K. L., Barnes, S. A., Janes, K. A., West, A. A., Covey, K. R., Meibom, S., & Mizusawa, T. F. "A Gyrochronology and Microvariability Survey of the Milky Way's Older Stars Using Kepler's Two-Wheels Program", 2013, arXiv e-prints, arXiv:1309.1172. <https://ui.adsabs.harvard.edu/abs/2013arXiv1309.1172D>
69. **Muirhead, P.** "Distilling Nearby M dwarfs for Low-Mass-Planet Hosts", 2013, Keck Observatory Archive HIRES, C216Hr. <https://ui.adsabs.harvard.edu/abs/2013koa..prop..448M>
70. **Muirhead, P.** "Distilling Nearby M dwarfs for Low-Mass-Planet Hosts", 2013, Keck Observatory Archive HIRES, C206Hr. <https://ui.adsabs.harvard.edu/abs/2013koa..prop..131M>
71. Swift, J., Johnson, J. A., Morton, T., Crepp, J. R., Montet, B., Fabrycky, D. C., & **Muirhead, P.** "Kepler-32 and the Formation of Planets Around Kepler's M Dwarfs", 2013, American Astronomical Society Meeting Abstracts #221,221, 407.04. <https://ui.adsabs.harvard.edu/abs/2013AAS...22140704S>
72. **Muirhead, P.**, Becker, J., Vanderburg, A., Johnson, J. A., Rojas-Ayala, B., Covey, K. R., Hamren, K., Schlawin, E., & Lloyd, J. P. "Characterizing the Cool KOIs: Sub-Earth-Sized Planet Candidates Around Mid M Dwarfs", 2013, American Astronomical Society Meeting Abstracts #221,221, 334.04. <https://ui.adsabs.harvard.edu/abs/2013AAS...22133404M>
73. Jensen-Clem, R. M., **Muirhead, P.**, Vasisht, G., Wallace, J. K., & Johnson, J. A. "Ultra-Precise Radial Velocimetry with Lock-In Amplified Externally Dispersed Interferometry", 2013, American Astronomical Society Meeting Abstracts #221,221, 149.10. <https://ui.adsabs.harvard.edu/abs/2013AAS...22114910J>
74. Vanderburg, A., Johnson, J. A., & **Muirhead, P.** "Improving Radial Velocity Precision for Faint Star Extra-Solar Planet Surveys", 2013, American Astronomical Society Meeting Abstracts #221,221, 149.08. <https://ui.adsabs.harvard.edu/abs/2013AAS...22114908V>
75. Bottom, M., **Muirhead, P.**, Johnson, J. A., & Blake, C. "Optimizing Doppler Surveys for Planet Yield", 2013, American Astronomical Society Meeting Abstracts #221,221, 149.07. <https://ui.adsabs.harvard.edu/abs/2013AAS...22114907B>
76. Hogstrom, K., Johnson, J. A., Wright, J., McCrady, N., Swift, J., **Muirhead, P.**, Bottom, M., Plavchan, P., Zhao, M., & Riddle, R. L. "Minerva: A Dedicated Observatory for the Detection of

- Small Planets in the Solar Neighborhood", 2013, American Astronomical Society Meeting Abstracts #221,221, 149.06. <https://ui.adsabs.harvard.edu/abs/2013AAS...22114906H>
77. **Muirhead, P.** "Distilling Nearby M dwarfs for Low-Mass-Planet Hosts", 2012, Keck Observatory Archive HIRES, C184Hr. <https://ui.adsabs.harvard.edu/abs/2012koa..prop..129M>
  78. **Muirhead, P.** "Distilling Nearby M dwarfs for Low-Mass-Planet Hosts", 2012, Keck Observatory Archive ESI, C184E. <https://ui.adsabs.harvard.edu/abs/2012koa..prop...58M>
  79. **Muirhead, P., Hamren, K.,** Schlawin, E., Rojas-Ayala, B., Covey, K., & Lloyd, J. "Accurate Stellar Parameters of Low-Mass Kepler Planet Hosts", 2012, American Astronomical Society Meeting Abstracts #219,219, 330.04. <https://ui.adsabs.harvard.edu/abs/2012AAS...21933004M>
  80. Denisse Rojas Ayala, B., Covey, K. R., Lloyd, J. P., & **Muirhead, P. S.** "M-Dwarf Metallicities With K-band Spectra: Testing Calibrations With Observations of 133 Solar Neighborhood M-Dwarfs", 2012, American Astronomical Society Meeting Abstracts #219,219, 330.03. <https://ui.adsabs.harvard.edu/abs/2012AAS...21933003D>
  81. West, A. A., Morgan, D. P., Bochanski, J. J., Andersen, J. M., Bell, K. J., Kowalski, A. F., Davenport, J. R. A., Hawley, S. L., Schmidt, S. J., Bernat, D., Hilton, E. J., **Muirhead, P.**, Covey, K. R., Rojas-Ayala, B., Schlawin, E., Gooding, M., Schluns, K., Dhital, S., Pineda, J. S., & Jones, D. O. "The Sloan Digital Sky Survey Data Release 7 M Dwarf Spectroscopic Catalog", 2011, 16th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun,448, 1407. <https://ui.adsabs.harvard.edu/abs/2011ASPC..448.1407W>
  82. Erskine, D. J., Edelstein, J., **Muirhead, P.**, Muterspaugh, M., Covey, K., Mondo, D., Vanderburg, A., Andelson, P., Kimber, D., Sirk, M., & Lloyd, J. "Ten-fold spectral resolution boosting using TEDI at the Mt. Palomar NIR Triplespec spectrograph", 2011, Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series,8146, 81460M. <https://ui.adsabs.harvard.edu/abs/2011SPIE.8146E..0ME>
  83. **Muirhead, P.**, Edelstein, J., Erskine, D. J., **Hamren, K. M.**, Covey, K. R., & Lloyd, J. P. "Precise Near-Infrared Radial Velocities with the TripleSpec Exoplanet Discovery Instrument (TEDI)", 2011, American Astronomical Society Meeting Abstracts #217,217, 401.03. <https://ui.adsabs.harvard.edu/abs/2011AAS...21740103M>
  84. **Muirhead, P. S.**, Edelstein, J., & Lloyd, J. "Precise infrared radial velocimetry with the triplespec exoplanet discovery instrument: current performance and results", 2010, Astronomy of Exoplanets with Precise Radial Velocities, P27. <https://ui.adsabs.harvard.edu/abs/2010aepr.confP..27M>
  85. Edelstein, J., **Muirhead, P.**, Wright, J., Covey, K., Erskine, D., Muterspaugh, M., Lloyd, J., Halverson, S., Marckwordt, M., & Mondo, D. "Infrared radial velocimetry with TEDI: performance development", 2010, Ground-based and Airborne Instrumentation for Astronomy III,7735, 773583. <https://ui.adsabs.harvard.edu/abs/2010SPIE.7735E..83E>
  86. **Muirhead, P. S.**, Edelstein, J., Wright, J. T., Erskine, D. J., Muterspaugh, M. W., Covey, K. R., Marckwordt, M. R., Halverson, S., Mondo, D., & Lloyd, J. P. "Precise infrared radial velocimetry with the Triplespec Exoplanet Discovery Instrument: current performance and results", 2010, Ground-based and Airborne Instrumentation for Astronomy III,7735, 77357X. <https://ui.adsabs.harvard.edu/abs/2010SPIE.7735E..7XM>

87. **Muirhead, P.**, Edelstein, J., & Lloyd, J. "Precise Infrared Radial Velocities with the TripleSpec Exoplanet Discovery Instrument (TEDI)", 2010, American Astronomical Society Meeting Abstracts #215,215, 421.17. <https://ui.adsabs.harvard.edu/abs/2010AAS...21542117M>
88. Halverson, S., **Muirhead, P.**, Muterspaugh, M., & Edelstein, J. "Preliminary Data Reduction Methods for TEDI: The Triplespec Exoplanet Discovery Instrument", 2010, American Astronomical Society Meeting Abstracts #215,215, 421.08. <https://ui.adsabs.harvard.edu/abs/2010AAS...21542108H>
89. Lloyd, J. P., Czeszumaska, A., Edelstein, J., Erskine, D., Feuerstein, M., Halverson, S., Marckwordt, M., Mercer, T., **Muirhead, P.**, Schwehr, J., Muterspaugh, M., Wishnow, E., & Wright, J. "Precision Radial Velocities in the Near Infrared with TEDI", 2009, Transiting Planets,253, 157. <https://ui.adsabs.harvard.edu/abs/2009IAUS..253..157L>
90. Edelstein, J., Muterspaugh, M. W., Erskine, D., Marckwordt, M., Feuerstein, W. M., Mercer, T., Czeszumaska, A., Schwer, J., Halverson, S., Lloyd, J. P., **Muirhead, P. S.**, Wright, J. T., & Herter, T. "Dispersed interferometry for infrared exoplanet velocimetry", 2008, Ground-based and Airborne Instrumentation for Astronomy II,7014, 70147F. <https://ui.adsabs.harvard.edu/abs/2008SPIE.7014E..7FE>
91. Herter, T. L., Henderson, C. P., Wilson, J. C., Matthews, K. Y., Rahmer, G., Bonati, M., **Muirhead, P. S.**, Adams, J. D., Lloyd, J. P., Skrutskie, M. F., Moon, D.-S., Parshley, S. C., Nelson, M. J., Martinache, F., & Gull, G. E. "The performance of TripleSpec at Palomar", 2008, Ground-based and Airborne Instrumentation for Astronomy II,7014, 70140X. <https://ui.adsabs.harvard.edu/abs/2008SPIE.7014E..0XH>
92. Monnier, J. D., Zhao, M., Pedretti, E., Thureau, N., Ireland, M., **Muirhead, P.**, Berger, J.-P., Millan-Gabet, R., Van Belle, G., ten Brummelaar, T., McAlister, H., Ridgway, S., Turner, N., Sturmann, L., Sturmann, J., Berger, D., Tannirkulam, A., & Blum, J. "Imaging the surface of Altair and a MIRC update", 2008, Optical and Infrared Interferometry,7013, 701302. <https://ui.adsabs.harvard.edu/abs/2008SPIE.7013E..02M>
93. Wright, J., Lloyd, J., Erskine, D., Edelstein, J., Mutterspaugh, M. W., & **Muirhead, P.** "TEDI: A New Radial Velocity Planet Hunting Instrument at Palomar", 2008, American Astronomical Society Meeting Abstracts #212,212, 24.05. <https://ui.adsabs.harvard.edu/abs/2008AAS...212.2405W>
94. **Muirhead, P. S.**, Erskine, D. J., Edelstein, J., Barman, T. S., & Lloyd, J. P. "Radial Velocity Precision in the Near-Infrared with T-EDI", 2008, Precision Spectroscopy in Astrophysics, 303. <https://ui.adsabs.harvard.edu/abs/2008psa..conf..303M>
95. Erskine, D. J., Muterspaugh, M. W., Edelstein, J., Lloyd, J., Herter, T., Feuerstein, W. M., **Muirhead, P.**, & Wishnow, E. "Externally Dispersed Interferometry for Precision Radial Velocimetry", 2007, arXiv e-prints, arXiv:0710.2130. <https://ui.adsabs.harvard.edu/abs/2007arXiv0710.2130E>
96. Edelstein, J., Muterspaugh, M. W., Erskine, D. J., Feuerstein, W. M., Marckwordt, M., Wishnow, E., Lloyd, J. P., Herter, T., **Muirhead, P.**, Gull, G. E., Henderson, C., & Parshley, S. C. "TEDI: the TripleSpec Exoplanet Discovery Instrument", 2007, Techniques and Instrumentation for Detection of Exoplanets III,6693, 66930W. <https://ui.adsabs.harvard.edu/abs/2007SPIE.6693E..0WE>

97. Erskine, D. J., Edelstein, J., Lloyd, J., & **Muirhead, P.** "Noise studies of externally dispersed interferometry for Doppler velocimetry", 2006, Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series,6269, 62692P. <https://ui.adsabs.harvard.edu/abs/2006SPIE.6269E..2PE>
98. Berger, D. H., Monnier, J. D., Millan-Gabet, R., ten Brummelaar, T. A., **Muirhead, P.**, Pedretti, E., & Thureau, N. "CHARA Michigan phase-tracker (CHAMP): design and fabrication", 2006, Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series,6268, 62683K. <https://ui.adsabs.harvard.edu/abs/2006SPIE.6268E..3KB>
99. Monnier, J. D., Pedretti, E., Thureau, N., Berger, J.-P., Millan-Gabet, R., ten Brummelaar, T., McAlister, H., Sturmman, J., Sturmman, L., **Muirhead, P.**, Tannirkulam, A., Webster, S., & Zhao, M. "Michigan Infrared Combiner (MIRC): commissioning results at the CHARA Array", 2006, Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series,6268, 62681P. <https://ui.adsabs.harvard.edu/abs/2006SPIE.6268E..1PM>