The Ohio State University
Department of Astronomy
4055 McPherson Laboratory
140 West 18th Avenue
Columbus, OH 43210-1173

(614)-688-7426
johnson.7240@osu.edu
http://www.astronomy.ohio-state.edu/~johnson.7240/

Education

2016	**Ph.D.** The University of Texas at Austin, Astronomy Dissertation: *Spin-Orbit Misalignments, Planet Candidate Validation, and Nodal Precession via Doppler Tomography* advisor: W. D. Cochran; committee: W. D. Cochran, M. Endl, E. L. Robinson, C. Sneden, A. Collier Cameron
2013	**M.A.**, The University of Texas at Austin, Astronomy Thesis: *Doppler Tomographic Observations of Exoplanetary Transits* advisor: W. D. Cochran; committee: W. D. Cochran, S. Dodson-Robinson, M. Endl, E. L. Robinson, C. Sneden
2011	**B.A.**, Wesleyan University, Astronomy and Physics With High Honors in Astronomy, Phi Beta Kappa Honors thesis: *The Shadows of Distant Worlds: Exoplanetary Transit Timing Using the Perkin Telescope* advisor: S. Redfield (Semester abroad, University of St. Andrews, Scotland, spring 2010)

Professional Experience

2016-	Columbus Prize Postdoctoral Fellow, The Ohio State University
2012-2016	Graduate Research Assistant, University of Texas at Austin. Advisor: W. D. Cochran
2011-2012	Teaching Assistant, University of Texas at Austin.
2009	Research Experience for Undergraduates, MIT Haystack Observatory. Advisor: L. D. Matthews
2009-2011	Student Researcher, Astronomy Department, Wesleyan University. Advisors: S. Redfield, W. Herbst
2008	Research Experience for Undergraduates, Keck Northeast Astronomy Consortium, Vassar College. Advisor: A. A. Sheffield

Fellowships, Scholarships, Grants, and Awards

2017-2019	Three NASA Keck PI Data Awards ($39.5k total)
2016-	Columbus Prize Postdoctoral Fellowship, Dept. of Astronomy, The Ohio State University
2016	Rodger Doxsey Travel Prize, American Astronomical Society
2015	David Alan Benfield Memorial Fellowship in Astronomy, Department of Astronomy, University of Texas at Austin
2013	Frank N. Edmonds, Jr. Memorial Fellowship in Astronomy, Department of Astronomy, University of Texas at Austin
2012-2015	NASA Earth and Space Science Fellowship ($30k/year for 3 years)
2011	Littell Prize, Wesleyan University
2011	Dean's List, Wesleyan University (spring semester)
2011	Chambliss Astronomy Achievement Student Award, American Astronomical Society
2010	Undergraduate Fellowship, NASA CT Space Grant Consortium ($4.5k total)
2007-2011	Robert C. Byrd Honors Scholarship
2007-2011	Associated Universities, Inc. Trustees' Scholarship

Invited Talks

2019	Las Cumbres Observatory Seminar Series
2017	Harvard-Smithsonian Center for Astrophysics Exoplanet Pizza Lunch talk
2016	The Ohio State University Department of Astronomy Colloquium

Contributed Talks

2018	Exoplanets Orbiting Hot Stars, Nashville, TN
2016	Exoplanets in the Era of Extremely Large Telescopes, Pacific Grove, CA
2016	American Astronomical Society 227th Meeting, Kissimmee, FL
2015	American Astronomical Society 225th Meeting, Seattle, WA
2014	Characterizing Planetary Systems Across the HR Diagram, Cambridge, England

Teaching Experience

Teaching Assistantships

Spring 2012	University of Texas at Austin, AST 309L: Search for Extraterrestrial Life, with J. Scalo
Fall 2011	University of Texas at Austin, AST 309S: The Solar System, with S. Dodson-Robinson

Observational Experience

2018	10 m Keck II Telescope/NIRC2 AO imager; 1 night
2017	2×8.4 m Large Binocular Telescope/Large Binocular Camera imager; 3 nights
2010-2018	2.7 m Harlan J. Smith Telescope/Robert G. Tull TS21, TS23, IGRINS Echelle Spectrographs, McDonald Observatory, University of Texas at Austin; 90 nights (80.5 as sole or senior observer)
2008-2011	24-in Perkin Telescope/CCD camera, Van Vleck Observatory, Wesleyan University: CCD photometry; chief student observer, 2009-2011; ∼ 25 partial nights
2008	32-in telescope/Optomechanics 10C spectrograph, Class of 1951 Observatory, Vassar College; ∼ 10 partial nights
2008	40-in telescope/*FOBOS* spectrograph, Fan Mountain Observatory, U. Virginia; 5 nights

Awarded Observing Time

LBT	Awarded 119 hours as P.I.
Gemini	15 hours as P.I.
Keck	Awarded 3 nights as P.I. via NASA
McDonald	Awarded 15.5 nights as P.I. on 2.7 m
LCOGT	Awarded 8 hours as P.I.
TESS	368 targets as P.I.
Kepler/K2	1,418 targets as P.I., 803 targets as Science P.I.
SALT	Awarded 83,310 seconds as P.I.

Outreach Experience

2017-	Presenter at the Ohio State University Arne Slettebak Planetarium
2014-2016	Volunteer and speaker at Astronomy on Tap ATX, Austin, TX
2015-2016	Volunteer for McDonald Observatory's *Ask an Astronomer* service
2013, 2016	Volunteer at exhibit of JWST at South by Southwest (SXSW) Festival
2013-2016	Public talks for attendees at McDonald Observatory Special Viewing Nights
2012	Volunteer at University of Texas at Austin/Department of Astronomy viewing of the Transit of Venus
2011	Volunteer at McDonald Observatory booth at the Texas Science & Engineering Festival
2009-2010	Gave portable planetarium shows at elementary schools in Middletown, CT
2007-2011	Ran public observing nights on 16" telescope, Van Vleck Observatory, Wesleyan University

Professional Organizations

American Astronomical Society (full member since 2017; junior member, 2010-2017)
Division for Planetary Sciences, American Astronomical Society (full member since 2017; junior member, 2014-2017)

Service

2019	Chambliss poster competition judge, American Astronomical Society meeting
2017-2018	Member, Scientific Organizing Committee, Exoplanets Orbiting Hot Stars Conference, Nashville, TN, June 2018
2016-	Referee for MNRAS, AJ (5 papers total)
2016-	Organizer of weekly Ohio State planet group meetings
2014-2015	Graduate Student Treasurer, Department of Astronomy, University of Texas at Austin
2013-2014	Graduate Student Computer Liaison, Department of Astronomy, University of Texas at Austin

Refereed Publications

First-Author Papers

1. **Johnson, M. C.**, Dai, F., Justesen, A. B., Gandolfi, D., et al. *K2-260 b: a Hot Jupiter Transiting an F Star, and K2-261 b: a Warm Saturn around a Bright G Star* 2018, MNRAS, 481, 596

2. **Johnson, M. C.**, Rodriguez, J. E., Zhou, G., Gonzales, E. J., et al. *KELT-21b: A Hot Jupiter Transiting the Rapidly Rotating Metal-Poor Late-A Primary of a Likely Hierarchical Triple System* 2018, AJ, 155, 100

3. **Johnson, M. C.**, Cochran, W. D., Addison, B. C., Tinney, C. G., & Wright, D. J. *Spin-Orbit Misalignments of Three Jovian Planets via Doppler Tomography* 2017, AJ, 154, 137

4. **Johnson, M. C.**, Gandolfi, D., Fridlund, M., Csizmadia, Sz., et al. *Two Hot Jupiters from K2 Campaign 4* 2016, AJ, 151, 171

5. **Johnson, M. C.**, Endl, M., Cochran, W. D., Meschiari, S., et al. *A 12-Year Activity Cycle for the Nearby Planet Host Star HD 219134* 2016, ApJ, 821, 74

6. **Johnson, M. C.**, Cochran, W. D., Collier Cameron, A., & Bayliss, D. *Measurement of the Nodal Precession of WASP-33 b via Doppler Tomography* 2015, ApJL, 810, 23

7. **Johnson, M. C.**, Redfield, S., & Jensen, A. G. *The Interstellar Medium in the* Kepler *Search Volume* 2015, ApJ, 807, 162

8. **Johnson, M. C.**, Cochran, W. D., Albrecht, S., Dodson-Robinson, S. E., Winn, J. N., & Gullikson, K. *A Misaligned Prograde Orbit for Kepler-13 Ab via Doppler Tomography* 2014, ApJ, 790, 30

Other Papers

1. Johns, D., Reed, P. A., Rodriguez, J. E., Pepper, J., et al. (**M. C. Johnson** 40$^{\text{th}}$ of 57 authors) *KELT-23b: A Hot Jupiter Transiting a Near-Solar Twin Close to the* TESS *and* JWST *Continuous Viewing Zones* 2019, AAS Journals, submitted (arXiv:1903.00031)

2. Labadie-Bartz, J., Rodriguez, J. E., Stassun, K. G., Ciardi, D. R., et al. (**M. C. Johnson** 6$^{\text{th}}$ of 56 authors) *KELT-22Ab: A Massive, Short-Period Hot Jupiter Transiting a Near-Solar Twin* 2019, ApJS, 240, 13

3. Collins, K. A., Collins, K. I., Pepper, J., Labadie-Bartz, J., et al. (**M. C. Johnson** $12^{\rm th}$ of 111 authors) *The KELT Follow-Up Network and Transit False Positive Catalog: Pre-Vetted False Positives for TESS* 2018, AJ, 156, 234

4. Addison, B. C., Wang, S., **Johnson, M. C.**, Tinney, C. G., Wright, D. J., & Bayliss, D. *Stellar Obliquities & Planetary Alignments (SOPA) I. Spin-Orbit Measurements of Three Transiting Hot Jupiters: WASP-72b, WASP-100b, & WASP-109b* 2018, AJ, 156, 197

5. Strassmeier, K. G., Ilyin, I., Weber, M., Järvinen, A., et al. (**M. C. Johnson** $11^{\rm th}$ of 13 authors) *Want a PEPSI? Performance Status of the Recently Commissioned High-Resolution Spectrograph and Polarimeter for the 2×8.4m Large Binocular Telescope* 2018, Proc. SPIE, 10702, 1070212

6. Eigmüller, Ph., Csizmadia, Sz., Endl, M., Gandolfi, D., et al. (**M. C. Johnson** $10^{\rm th}$ of 14 authors) *A Transiting M-Dwarf Showing Beaming Effect in the Field of Ruprecht 147* 2018, MNRAS, 480, 3864

7. Furlan, E., Ciardi, D. R., Cochran, W. D., Everett, M. E., et al. (**M. C. Johnson** $20^{\rm th}$ of 25 authors) *The* Kepler *Follow-Up Observation Program. II. Stellar Parameters from Medium- and High-Resolution Spectroscopy* 2018, ApJ, 861, 149

8. Bowler, B. P., Dupuy, T. J., Endl, M., Cochran, W. D., et al. (**M. C. Johnson** $13^{\rm th}$ of 14 authors) *Orbit and Dynamical Mass of the Late-T Dwarf GJ 758 B* 2018, AJ, 155, 159

9. Barragán, O., Gandolfi, D., Dai, F., Livingston, J., et al. (**M. C. Johnson** $30^{\rm th}$ of 36 authors) *K2-141 b: A 5-$M_\oplus$ Super-Earth Transiting a K7V Star Every 6.7 Hours* 2018, A&A, 612, 95

10. Zhou, G., Rappaport, S., Nelson, L., Huang, C. X., et al. (**M. C. Johnson** $14^{\rm th}$ of 31 authors) *Occultations from an Active Accretion Disk in a 72-Day Detached Post-Algol System Detected by K2* 2018, ApJ, 854, 109

11. Siverd, R. J., Collins, K. A., Zhou, G., Gaudi, B. S., et al. (**M. C. Johnson** $6^{\rm th}$ of 47 authors) *KELT-19Ab: A P∼4.6 Day Hot Jupiter Transiting a Likely Am Star with a Distant Stellar Companion* 2018, AJ, 155, 35

12. Dai, F., Winn, J. N., Gandolfi, D., Wang, S. X., et al. (**M. C. Johnson** $15^{\rm th}$ of 54 authors) *The Discovery and Mass Measurement of a New Ultra-Short-Period Planet: K2-131b* 2017, AJ, 154, 226

13. Lund, M. B., Rodriguez, J. E., Zhou, G., Gaudi, B. S., et al. (**M. C. Johnson** $6^{\rm th}$ of 49 authors) *KELT-20b: A Giant Planet with a Period of $P\sim3.5$ Days Transiting the $V\sim7.6$ Early A Star HD 185603* 2017, AJ, 154, 194

14. Gandolfi, D., Barragán, O., Hatzes, A. P., Fridlund, M., et al. (**M. C. Johnson** $7^{\rm th}$ of 44 authors) *The Transiting Multi-Planet System HD 3167: A 5 $M_\oplus$ Super-Earth and a 9 $M_\oplus$ Mini-Neptune* 2017, AJ, 154, 123

15. Gaudi, B. S., Stassun, K. G., Collins, K. A., Beatty, T. G., et al. (**M. C. Johnson** $15^{\rm th}$ of 60 authors) *A Giant Planet Undergoing Extreme-Ultraviolet Irradiation by Its Hot Massive-Star Host* 2017, Nature, 546, 514

16. Mann, A. W., Dupuy, T., Muirhead, P. S., **Johnson, M. C.**, et al. *The Gold Standard: Accurate Stellar and Planetary Parameters for Eight* Kepler *M Dwarf Systems Enabled by Parallaxes* 2017, AJ, 153, 267

17. Smith, A. M. S., Gandolfi, D., Barragán, O., Bowler, B., et al. (**M. C. Johnson** $22^{\rm nd}$ of 33 authors) *K2-99: A Subgiant Hosting a Transiting Warm Jupiter in an Eccentric Orbit and a Long-Period Companion* 2017, MNRAS, 464, 2708

18. Mann, A. W., Newton, E. R., Rizzuto, A. C., Irwin, J., et al. (**M. C. Johnson** $15^{\rm th}$ of 17 authors) *Zodiacal Exoplanets in Time (ZEIT) III: A Short-Period Planet Orbiting a Pre-Main-Sequence Star in the Upper Scorpius OB Association* 2016, AJ, 152, 61

19. Mann, A. W., Gaidos, E., Mace, G. N., **Johnson, M. C.**, et al. *Zodiacal Exoplanets In Time (ZEIT) I: A Neptune-Sized Planet Orbiting an M4.5 Dwarf in the Hyades Star Cluster* 2016, ApJ, 818, 46

20. Endl, M., Brugamyer, E. J., Cochran, W. D., MacQueen, P. J., et al. (**M. C. Johnson** 10th of 19 authors) *Two New Long-Period Giant Planets from the McDonald Observatory Planet Search and Two Stars with Long-Period Radial Velocity Signals Related to Stellar Activity Cycles* 2016, ApJ, 818, 34

21. Matthews, L. D., Le Bertre, T., Gérard, E., & **Johnson, M. C.** *An H I Imaging Survey of Asymptotic Giant Branch Stars* 2013, AJ, 145, 97

22. Stark, C. C., Boss, A. P., Weinberger, A. J., Jackson, B. K., et al. (**M. C. Johnson** 7th of 13 authors) *A Search for Exozodiacal Clouds with* Kepler 2013, ApJ, 764, 195

23. Sheffield, A. A., Majewski, S. R., Johnston, K. V., Cunha, K., et al. (**M. C. Johnson** 10th of 13 authors) *Identifying Contributions to the Stellar Halo from Accreted, Kicked-out, and In Situ Populations* 2012, ApJ, 761, 161

24. Matthews, L. D., Libert, Y., Gérard, E., Le Bertre, T., **Johnson, M. C.**, & Dame, T. M. *H I Observations of the Asymptotic Giant Branch Star X Herculis: Discovery of an Extended Circumstellar Wake Superposed on a Compact High-Velocity Cloud* 2011, AJ, 141, 60

Other Publications

Conference Proceedings and Research Notes

1. Krisciunas, K., Suntzeff, N. B., Nagasawa, D. Q., **Johnson, M. C.**, Cochran, W., D., & Endl, M. *Why is the Main Sequence of NGC 2482 So Fat?* 2017, RNAAS, 1, 19

2. **Johnson, M. C.** & Cochran, W. D. *Doppler Tomographic Observations of Kepler-13b* 2013, IAU Symposium 299, 295

3. Matthews, L. D., Gérard, E., **Johnson, M. C.**, Le Bertre, T., Libert, Y., & Reid, M. J. *Tails of Stellar Mass-Loss: VLA Imaging of H I in Circumstellar Envelopes* 2011, in Why Galaxies Care about AGB Stars II, ASP Conf. Series, ed. F. Kerschbaum, T. Lebzelter, & R. Wing, 445, 305

4. **Johnson, M. C.** *First Results from the Wesleyan Transiting Exoplanet Program* 2010, Proceedings of the 2010 Undergraduate Symposium on Research in Astronomy, T. Balonek, ed.

5. **Johnson, M. C.** *H I as a Tracer of Circumstellar Envelopes* 2009, Proceedings of the 2009 Undergraduate Symposium on Research in Astronomy, D. Cohen, ed., 39

6. **Johnson, M.**, Kaplan, E., & Miller, J. *A Spectroscopic Study of the Structure of the Milky Way* 2008, Proceedings of the 2008 Undergraduate Symposium on Research in Astronomy, E. C. Moran, ed., 1

Indexed Conference Abstracts

1. **Johnson, M. C.**, Mace, G. N., Kim, H., Kaplan, K. F., McLane, J. N., & Sokal, K. R. *High-Resolution Infrared Spectroscopic Observations of the Upper Scorpius Eclipsing Binary EPIC 203868608* 2017, BAAS, 230, 315.09

2. Gaudi, B. S., Stassun, K. G., Collins, K. A., Beatty, T. G., et al. *KELT-9b: A Giant Planet with the Temperature of a Red Dwarf Star Transiting an Unevolved A0 Star* 2017, BAAS, 230, 102.06

3. Orosz, J. A., Welsh, W. F., Short, D. R., Endl, M., et al. *A Transiting Circumbinary Planet in KIC 10753734* 2016, BAAS, 228, 316.07

4. **Johnson, M. C.** *Planet Candidate Validation and Spin-Orbit Misalignments from Doppler Tomography* 2016, BAAS, 227, 306.01D

5. **Johnson, M. C.**, & Cochran, W. D. *Validation and Characterization of Planets around Hot Stars with Doppler Tomography* 2015, Extreme Solar Systems III, 114.19

6. Cochran, W. D., Endl, M., **Johnson, M. C.**, Lee, B.-C., et al. *PICK2: Planets in Clusters with K2* 2015, DPS, 47, 417.02

7. **Johnson, M. C.**, Cochran, W. D., & Endl, M. *Validation of a Warm Jupiter Transiting a Rapidly Rotating Star* 2015, BAAS, 225, 306.04

8. **Johnson, M. C.** & Cochran, W. D. *Doppler Tomographic Observations of Exoplanet Transits* 2013, BAAS, 221, 343.07

9. **Johnson, M. C.**, Jensen, A. G., & Redfield, S. *The Interstellar Medium in the* Kepler *Search Volume* 2012, BAAS, 219, 349.16

10. Schaeffer, J., **Johnson, M. C.**, & Redfield, S. *New Data from the Wesleyan Transiting Exoplanet Program* 2012, BAAS, 219, 245.05

11. **Johnson, M. C.**, Leiner, E. M., & Redfield, S. *First Results from the Wesleyan Transiting Exoplanet Program* 2011, BAAS, 217, 343.05

12. **Johnson, M. C.,** & Matthews, L. D. *Very Large Array Observations of Circumstellar Envelopes in the H I 21-cm Line* 2010, BAAS, 42, 266

13. Matthews, L. D., **Johnson, M. C.**, Gérard, E., Le Bertre, T., & Libert, Y. *HI Mapping Of The Circumstellar Envelope Of X Her: An AGB Star Associated With A High-Velocity Cloud?* 2010, BAAS, 42, 266