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RESEARCH INTERESTS
Supermassive black holes • Kinematic properties and modeling of circumnuclear gas disks •
Submillimeter/radio astronomy • Active, low-luminosity, and quiescent galaxy nuclei • Dust
attenuation • Stellar-dynamical modeling of galaxies • Optical and infrared integral-field
spectroscopy • Reverberation mapping • Optical transients • Data calibration techniques

EDUCATION
M.S. / Ph.D., Physics & Astronomy Dec 2014 / Jun 2018
University of California, Irvine (advisor: Aaron Barth)
THESIS - Precision Black Hole Mass Measurements
in Luminous Early-Type Galaxies
B.S., Physics & Astronomy Aug 2012
Brigham Young University (advisor: J. Ward Moody)
THESIS - Establishing a Multi-year Monitoring Project of
Low-luminosity Active Galactic Nuclei

POSITIONS HELD
Assistant Professor 2020 – Present
Brigham Young University
Postdoctoral Research Associate 2018 – 2020
Texas A&M University (advisor: Jonelle Walsh)
Adjunct Professor 2015 – 2017
Santa Ana College
Graduate Student Researcher 2013 – 2018
University of California, Irvine (advisor: Aaron Barth)
Teaching Assistant 2010 – 2015
Brigham Young University & University of California, Irvine

TEACHING EXPERIENCE
Assistant Professor, Brigham Young University 2021
Physics 127 (*Descriptive Astronomy*) • Physics 428 (*Galaxies and Cosmology*) • Physics 529
(*Advanced Observational Astronomy*)
Adjunct Professor, Santa Ana College 2015 – 2017
Astronomy 109 (*Introduction to the Solar System*) • Astronomy 110 (*Introduction to Stars
and Galaxies*)
Teaching Assistant 2010 – 2015
UCI: Physics 2 (*Introduction to Mathematical Methods for Physics*) • Physics 7C/D (*Classical
Physics*) • Physics 7LC (*Classical Physics Laboratory*) • Physics 20A (*Introduction
to Astronomy*) • Physics 52C (*Fundamentals of Experimental Physics*) • Physics 139
(*Observational Astrophysics*)
BYU: Physics 127 (*Descriptive Astronomy*) • Physics 140 (*Electronics Lab*) • Physics 329
(*Observational Astronomy*)

FORMAL MENTORING EXPERIENCE

Graduate Students:

Jared Davidson 2021 – Present
 Jonathan Cohn¹ • Kyle Kristian Muyalde Kabasares² 2018 – 2020

Undergraduate Students:

Mayalen Laker³ • Conner Camacho³ • Ben Derieg • Jacob Gehrett • Edison Carlisle • Josh Jones • Christian Hall • Tyler Blanchard 2020 – Present

Emma Rasmussen 2020

Dilan Patel² 2017

Thayne McCombs³ • Marcus Holden³ 2011 – 2012

assisted in mentoring with ¹Jonelle Walsh, ²Aaron Barth, and ³J. Ward Moody

TELESCOPE PROPOSAL EXPERIENCE

PI of a total of ten observing proposals and co-I in the development of an additional seventeen.

Awarded telescope time as PI:

3 Astrophysical Research Consortium 3.5m Proposals (12 half-nights) 2021

3 *HST* Proposals (25 orbits) 2016 – 2019

Awarded telescope time as Co-I:

6 ALMA Proposals (35.5 hrs) 2015 – 2019

2 Keck (OSIRIS) Proposals (2.5 nights) 2014 / 2016

1 *HST* Proposal (6 orbits) 2014

TELESCOPE OPERATING EXPERIENCE

Astrophysical Research Consortium 3.5m (13 half-nights) 2021

Astrophysical Research Consortium Small Aperture Telescope 0.5m (2 nights) 2021

Gemini North Observatory, NIFS (6 nights) 2020

Lick Observatory, Kast spectrograph (16 nights) 2013 – 2017

Keck Observatory, OSIRIS (3 nights) 2013 – 2016

ROVOR telescope, 16-inch operator 2011 – 2012

West Mountain Observatory, 12/20/36-inch operator 2011 – 2012

GRANTS AND AWARDS

NRAO Student Observing Support Program, PI \$10,000 2021

HST Cycle 25 GO-15909, PI \$105,372 2019

HST Cycle 25 GO-15226, PI \$51,044 2017

HST Cycle 24 GO-14920, PI \$11,580 2017

University of California Regents Fellowship \$10,000 2012 – 2013

SELECT PROFESSIONAL SERVICE AND OUTREACH	
American Astronomical Society Ambassador	Jan 2022
ALMA Distributed Peer Review, Cycle 7	June 2021
Faculty Advisor, BYU Astronomical Society	2020 – Present
Public astronomy talk, College Station, TX	Nov 2019
Organizer, Texas A&M University Astrosymposium	2019 – 2020
Speaker, Texas A&M University REU lecture series	Jun 2019
Telescope Allocation Committee, <i>HST</i> Mid-Cycle 25	Apr 2018
Panelist, UCI Cal-Bridge Scholar Workshop	2017 – 2018
Volunteer, UCI Prospective Graduate Student Visits	2013 – 2018
Volunteer, BYU Astrofest	2012
Planetarium show presenter, BYU	2011 – 2012
Telescope operator and host at numerous public and private star parties, especially at Southern CA elementary schools and regularly using BYU's facilities in the Carl F. Eyring Science Building	2011 – Present

SELECT PRESENTATIONS	
Invited Talk, APS Four Corners Meeting	Oct 2021
HEAP Seminar, University of Utah	Sep 2021
Physics and Astronomy Colloquium, University of Wyoming	Mar 2021
American Astronomical Society 237th Meeting, virtual	Jan 2021
Physics Colloquium, Brigham Young University – Idaho	Dec 2020
Supermassive Black Holes Conference, Universidad de Concepción, Concepción, Chile	Dec 2020
Physics and Astronomy Seminar, University of Utah, Salt Lake City, UT	Oct 2020
Astronomy Seminar, Texas A&M University, College Station, TX	Aug 2020
Physics Colloquium, Brigham Young University, Provo, UT	Jan 2020
Astronomy Seminar, University of Texas at Austin, Austin, TX	Nov 2019
Frank N. Bash Symposium, University of Texas at Austin, Austin, TX	Oct 2019
Astronomy Seminar, University of Vienna, Vienna, Austria	Oct 2019
ALMA2019: Science Results and Cross-Facility Synergies, Cagliari, Sardinia, Italy	Oct 2019
Astronomy Seminar, University of Vienna, Vienna, Austria	Oct 2019
Radio/Millimeter Astrophysical Frontiers in the Next Decade, Charlottesville, VA	Jun 2019
Astronomy Seminar, Texas A&M University, College Station, TX	Sep 2018
American Astronomical Society 231th Meeting, National Harbor, MD	Jan 2018
ALMA2017: The Origin of Galaxies, Stars, and Planets in the Era of ALMA, Pasadena, CA	Nov 2017
American Astronomical Society 229th Meeting, Grapevine, TX	Jan 2017
Half a Decade of ALMA: Cosmic Dawns Transformed, Indian Wells, CA	Sep 2016
Keck Science Meeting, Pasadena, CA	Oct 2014
American Astronomical Society 219th Meeting, Austin, TX	Jan 2012

PUBLICATIONS.....

Nine papers (three first-author) in peer-reviewed journals and one conference paper.

10. *The Lick AGN Monitoring Project 2016: Velocity-Resolved H β Lags in Luminous Seyfert Galaxies.* Vivian U, A. J. Barth, H. A. Vogler, H. Guo, T. Treu, V. N. Bennert, G. Canalizo, A. V. Filippenko, E. Gates, F. Hamann, M. D. Joner, M. A. Malkan, A. Pancoast, P. R. Williams, J.-H. Woo, B. Abolfathi, L. E. Abramson, S. F. Armen, H.-J. Bae, T. Bohn, **B. D. Boizelle**, A. Bostroem, A. Brandel, T. G. Brink, S. Channa, M. C. Cooper, M. Cosens, E. Donohue, S. P. Fillingham, D. González-Buitrago, G. Halevi, A. Halle, C. E. Hood, K. Horne, J. C. Horst, M. de Kouchkovsky, B. Kuhn, S. Kumar, D. C. Leonard, D. Loveland, C. Manzano-King, I. McHardy, R. Michel, M. K. B. Olaes, D. Park, S. Park, L. Pei, T. W. Ross, J. N. Runco, J. Samuel, J. Sánchez, B. Scott, R. O. Sexton, J. Shin, I. Shivvers, C. L. Spencer, B. E. Stahl, S. Stegman, I. Stomberg, S. Valenti, L. Villafaña, J. L. Walsh, H. Yuk, W. Zheng. 2021, ApJ, submitted
9. *Gas Inflows in the Polar Ring of NGC 4111: the Birth of an AGN.* G. R. Hauschild Roier, T. Storchi-Bergmann, R. M. McDermid, J. L. Walsh, J. Tan, J. Cohn, D. Krajnović, J. Greene, M. Valluri, K. Gültekin, S. Thater, G. van de Ven, K. Gebhardt, N. Lützgendorf, **B. D. Boizelle**, C-P Ma, A. J. Barth. 2021, MNRAS, submitted
8. *An ALMA Gas-dynamical Mass Measurement of the Supermassive Black Hole in the Local Compact Galaxy UGC 2698.* J. Cohn, J. Walsh, **B. D. Boizelle**, A. J. Barth, K. Gebhardt, K. Gültekin, A. Yildirim, D. A. Buote, J. Darling, A. J. Baker, L. C. Ho, , K. M. Kabasares. 2021, ApJ, 919, 77
7. *Black Hole Mass Measurements of Radio Galaxies NGC 315 and NGC 4261 Using ALMA CO Observations.* **B. D. Boizelle**, J. Walsh, A. J. Barth, D. A. Buote, A. J. Baker, J. Darling, L. C. Ho, J. Cohn, K. M. Kabasares. 2021, ApJ, 908, 18
6. *A Precision Measurement of the Mass of the Black Hole in NGC 3258 from High-Resolution ALMA Observations of its Circumnuclear Disk.* **B. D. Boizelle**, A. J. Barth, J. L. Walsh, D. A. Buote, A. J. Baker, J. Darling, L. C. Ho. 2019, ApJ, 881, 10
Press coverage: *ALMA Dives Into Black Hole's 'Sphere of Influence'*, 2019, NRAO, <https://public.nrao.edu/news/2019-alma-soi/>
5. *Precision Gas-dynamical Mass Measurement of Supermassive Black Holes with the ngVLA.* **B. D. Boizelle**, K. Nyland, T. A. Davis. 2018, Science with a Next Generation Very Large Array, ASP Conference Series, 517
4. *ALMA Observations of Circumnuclear Disks in Early Type Galaxies: 12CO(2-1) and Continuum Properties.* **B. D. Boizelle**, A. J. Barth, J. Darling, A. J. Baker, D. A. Buote, L. C. Ho, J. Walsh. 2017, The Astrophysical Journal, 845, 170
3. *Measurement of the Black Hole Mass in NGC 1332 from ALMA Observations at 0.044 Arcsecond Resolution.* A. J. Barth, **B. D. Boizelle**, J. Darling, A. J. Baker, D. A. Buote, L. C. Ho, J. L. Walsh. 2016, The Astrophysical Journal Letters, 822:L28
Press coverage: *ALMA Measures Mass of Black Hole with Extreme Precision*, 2016, NRAO, <https://public.nrao.edu/news/2016-gr-domain-smbh/>
2. *Toward Precision Black Hole Masses with ALMA: NGC 1332 as a Case Study in Molecular Disk Dynamics.* A. J. Barth, J. Darling, A. J. Baker, **B. D. Boizelle**, D. A. Buote, L. C. Ho, J. L. Walsh. 2016, The Astrophysical Journal, 823, 51
1. *Remote Observatory for Variable Object Research (ROVOR).* J. W. Moody, **B. D. Boizelle**, K. Bates, B. Little, T. McCombs, J. Nelson, C. Pace, R. L. Pearson, J. Harrison, P. J. Brown, J. Barnes. 2012, Publications of the Astronomical Society of the Pacific, 124, 956