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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 .....

*Adjunct Professor, Santa Ana College*

Astronomy 109 (*Introduction to the Solar System*) • Astronomy 110 (*Introduction to Stars  
and Galaxies*)

*Teaching Assistant*

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*)

<b>FORMAL MENTORING EXPERIENCE</b> .....		
Graduate Students:		
Jonathan Cohn <sup>1</sup> • Kyle Kristian Muyalde Kabasares <sup>2</sup>		2018 – Present
Undergraduate Students:		
Dilan Patel <sup>2</sup>		2017
Thayne McCombs <sup>3</sup> • Marcus Holden <sup>3</sup>		2011 – 2012
<i>assisted in mentoring with <sup>1</sup>Jonelle Walsh, <sup>2</sup>Aaron Barth, and <sup>3</sup>J. Ward Moody</i>		
<b>TELESCOPE PROPOSAL EXPERIENCE</b> .....		
PI of a total of five observing proposals and co-I in the development of an additional twelve.		
Awarded telescope time as PI:		
3 <i>HST</i> 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 <i>HST</i> Proposal (6 orbits)		2014
<b>TELESCOPE OPERATING EXPERIENCE</b> .....		
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
<b>GRANTS AND AWARDS</b> .....		
<i>HST</i> Cycle 25 GO-15909, PI	\$105,372 <sup>1</sup>	2019
<i>HST</i> Cycle 25 GO-15226, PI	\$51,044	2017
<i>HST</i> Cycle 24 GO-14920, PI	\$11,580	2017
University of California Regents Fellowship	\$10,000	2012 – 2013
<b>SELECT PROFESSIONAL SERVICE AND OUTREACH</b> .....		
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 – 2018

<b>SELECT PRESENTATIONS</b> .....	
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** .....

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

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 2017, *The Astrophysical Journal*, submitted
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