

Mike DiPompeo

Curriculum Vitae

Education

- 2009–2012 **Ph.D, Physics (emphasis on Astrophysics)**, UNIVERSITY OF WYOMING.
PhD Thesis: Erasing a False Dichotomy – The Complex Nature of BAL Quasars
- 2007–2009 **M.S., Physics (emphasis on Astrophysics)**, UNIVERSITY OF WYOMING.
- 2003–2007 **B.S., Astronomy/Physics**, UNIVERSITY OF WISCONSIN - MADISON.

Research Experience & Appointments

- 2015–present **Postdoctoral Research Associate**, DARTMOUTH COLLEGE.
Working with Professor Ryan Hickox, on the multi-wavelength properties of quasars and their environments. Responsible for maintaining my own research program, writing papers and proposals, advising students in the group, and teaching courses in the department.
- 2012–2015 **Postdoctoral Research Associate**, UNIVERSITY OF WYOMING.
Worked with Professor Adam Myers, primarily on the environments of obscured quasars. Responsible for maintaining my own research program, writing papers and proposals, and advising students in the group.
- 2008–2012 **Academic Research Scientist**, UNIVERSITY OF WYOMING.
Worked with Professor Michael Brotherton, primarily on quasar outflows and the effects of orientation on quasar observables (PhD thesis).
- 2011–2012 **WIRO Observer**, UNIVERSITY OF WYOMING.
Observed ~5 nights/month on 2.4m telescope for Professor Henry Kobulnicky, performing long slit spectroscopic observations of early-type massive binary star systems.
- 2009, 2011 **Science Fellow**, EUROPEAN SOUTHERN OBSERVATORY, Garching, Germany.
Worked with Dr. Carlos De Breuck, primarily on projects related to the radio and optical spectropolarimetric properties of quasars.
- 2005–2007 **Undergraduate Researcher**, UNIVERSITY OF WISCONSIN - MADISON.
Worked with Professor Robert Mathieu on a large spectroscopic survey of open star clusters and simulations of stellar interactions.

Teaching Experience

- 2016–Present **Instructor**, DARTMOUTH COLLEGE.
Taught *Introduction to Astronomy: Exploration of the Solar System* (Summer 2016, 41 students, non-science majors), and *Galaxies and Cosmology* (Spring 2017, 6 students, primarily majors).

6127 Wilder Laboratory – Hanover, NH 03755

☎ (603) 646 2854 • ☎ (603) 646 1446

✉ m.dipompeo@dartmouth.edu • 🌐 dartmouth.edu/~mdipompeo

1/8

- 2010–Present **Research Advisor**, DARTMOUTH COLLEGE, UNIVERSITY OF WYOMING.
Primary/co-advisor for undergraduate researchers, including REU students. Student Thomas Rochais published a peer-reviewed paper as first author in 2014, now in graduate school at Penn. Also co-advisor for several graduate students.
- 2010–Present **Lecturer**, DARTMOUTH COLLEGE, UNIVERSITY OF WYOMING.
Substitute/guest lecturer for undergraduate astronomy and physics (for both majors and non-majors), as well as graduate-level cosmology.
- 2015–2017 **Order-of-Magnitude Estimation Workshops**, DARTMOUTH COLLEGE.
Led and co-organized NSF-funded workshops to train local teachers in order-of-magnitude estimation, to help develop problem solving intuition in science classes.
- 2015 **LASSI Workshop**, UNIVERSITY OF WYOMING.
Instructor and co-organizer of NSF-funded “Launching Astronomy: Standards and STEM Integration,” a two-week professional development workshop for teachers (all grades) with an emphasis on physics and astronomy.
- 2013, 2014 **Astronomy Days Teachers Workshop**, UNIVERSITY OF WYOMING.
Led and co-organized NSF-funded three-day physics/astronomy workshop for teachers (all grades), emphasizing the cross-disciplinary nature of physics & astronomy.
- 2010 **Instructor**, UNIVERSITY OF WYOMING.
Taught *Introduction to Astronomy* (Summer 2010, 8 students, non-majors).
- 2008–2011 **Teaching Assistant**, UNIVERSITY OF WYOMING.
Assisted with introductory astronomy and physics.
- 2006–2011 **Tutor**, UNIVERSITY OF WYOMING & UNIVERSITY OF WISCONSIN.
Tutored students in physics, astronomy, and math (drop-in) and met weekly with individual students as part of the TRiO program for disadvantaged students.

Public Outreach

- 2008–Present **Local Outreach**, DARTMOUTH COLLEGE, UNIVERSITY OF WYOMING.
Planetarium shows (50+), invited talks, evening observing sessions, physics demos.
- 2017 **Astronomy with Farms for City Kids**, DARTMOUTH COLLEGE.
Evening observing and astronomy discussions with students attending camps at a local Vermont farm via the non-profit Farms For City Kids program (<http://farmsforcitykids.org>).
- 2014 **Astrophotography Workshop**, UNIVERSITY OF WYOMING.
Led a beginners astrophotography workshop in conjunction with the Art Department.
- 2008, 2014 **Wyoming State Science Fair**, UNIVERSITY OF WYOMING.
Judged middle school science fair projects related to physics.
- 2008–2013 **WIRO Open House**, UNIVERSITY OF WYOMING.
Public event including small telescope observing and a tour of the 2.4m WIRO telescope.
- 2008 **Counselor and Teacher**, UNIVERSITY OF WYOMING.
Annual "AstroCamp" for middle school students. Prepared activities and oversaw 15 students.

6127 Wilder Laboratory – Hanover, NH 03755

☎ (603) 646 2854 • ☎ (603) 646 1446

✉ m.dipompeo@dartmouth.edu • 🌐 dartmouth.edu/~mdipompeo

Grants, Fellowships, & Awards

- 2015 Co-I on NASA ADAP research grant (~ \$330,000)
- 2015 Co-I on NSF AAG research grant (~ \$340,000 total, funding current position)
- 2009, 2011 European Southern Observatory Director General Discretionary Fund (DGDF) Fellowship (~ \$6,000 total)
- 2010 Wyoming NASA Space Grant Consortium Fellowship (\$20,000)
- 2007 Doherty Award for Excellence in Astronomy (University of Wisconsin - Madison)

Observing Experience

Principal Investigator for successful proposals with:

VLA, EVLA, VLT, GMRT, KPNO-Mayall 4m, SALT, MDM.

Co-Investigator for successful proposals with:

NuSTAR, Chandra, Effelsberg, Gemini South.

Observing Experience with:

Wyoming InfraRed Observatory (WIRO), University of Wyoming.

2.3m telescope, 30+ nights, long slit spectroscopy, broad-band optical photometry

Red Buttes Observatory (RBO), University of Wyoming.

0.6m telescope, 7 nights, broad-band photometry

WIYN Observatory, NOAO, Kitt Peak, AZ.

3.5m telescope, 8 nights, multi-fiber spectroscopy (HYDRA-MOS)

Mayall 4m Telescope, NOAO, Kitt Peak, AZ.

4m telescope, 6 nights, broad-band photometry (MOSAIC1.1)

MDM observatory, Kitt Peak, AZ.

2.4m telescope, 8 nights long slit spectroscopy

SALT, SAAO, South Africa.

11m telescope, 26 hours of optical spectropolarimetry (dynamic time)

(Expanded) Very Large Array ((E)VLA), NRAO, Socorro, NM.

Scheduled 70 hours of continuum observations (dynamic time)

Very Large Telescope (VLT), ESO, Paranal, Chile.

8.2m telescope, 25 hours of spectropolarimetric observations (service mode)

Giant Metrewave Radio Telescope (GMRT), TIFR, Pune, India.

Planned and assisted remotely for 10 hours of dual-band continuum observations

Community Service

- 2016 **Conference Organizer**, HIDDEN MONSTERS: OBSCURED AGN AND CONNECTIONS TO GALAXY EVOLUTION IN THE ERA OF NUSTAR AND WISE.
Co-organized the scientific content and program, as well as local logistics for a large (~100 participants) international conference.

6127 Wilder Laboratory – Hanover, NH 03755

☎ (603) 646 2854 • 📠 (603) 646 1446

✉ m.dipompeo@dartmouth.edu • 🌐 dartmouth.edu/~mdipompeo

- 2012–Present **Journal Referee**, *MNRAS*, *ApJ*, *A&A*, *A&SS*.
- 2012–Present **Organizer**, *AGN Journal Club*.
Organize and lead weekly journal clubs (discussion style) for junior research group members.
- 2012–Present **Member**, *American Astronomical Society (AAS)*.

Publications & Presentations

First Author Publications

17. **DiPompeo, M.A.**, Hickox, R.C., Carroll, C.M., Mullaney, J.R., & Fischer, T.C. 2017 *ApJ*, submitted
“The [OIII] profiles of infrared-selected active galactic nuclei: More powerful outflows in the obscured population”
16. **DiPompeo, M.A.**, Hickox, R.C., Eftekharzadeh, S., & Myers, A.D. 2017, *MNRAS*, 469, 4630
“The characteristic halo masses of half-a-million WISE-selected quasars”
15. **DiPompeo, M.A.**, Hickox, R.C., Myers, A.D., & Geach, J.E. 2017, *MNRAS*, 464, 3526
“A unifying evolutionary framework for infrared-selected obscured and unobscured quasar host haloes”
14. **DiPompeo, M.A.**, Runnoe, J.C., Hickox, R.C., Myers, A.D., & Geach, J.E. 2016, *MNRAS*, 460, 175
“The Impact of the Dusty Torus on Obscured Quasar Halo Mass Measurements”
13. **DiPompeo, M.A.**, Hickox, R.C., & Myers, A.D. 2016, *MNRAS*, 456, 924
“Updated Measurements of the Dark Matter Halo Masses of Obscured Quasars with Improved *WISE* and *Planck* Data”
12. **DiPompeo, M.A.**, Bovy, J., Myers, A.D., & Lang, D. 2015, *MNRAS*, 452, 3124
“Quasar Probabilities and Redshifts from *WISE* mid-IR through *GALEX* UV Photometry”
11. **DiPompeo, M.A.**, Myers, A.D., Hickox, R.C., Geach, J.E., Holder, G., Hainline, K.N., & Hall, S.W. 2015, *MNRAS*, 446, 3492
“Weighing Obscured and Unobscured Quasar Hosts with the CMB”
10. **DiPompeo, M.A.**, Myers, A.D., Hickox, R.C., Geach, J.E., & Hainline, K.N. 2014, *MNRAS*, 442, 3443
“The Angular Clustering of Infrared-Selected Obscured and Unobscured Quasars”
9. **DiPompeo, M.A.**, Myers, A.D., Brotherton, M.S., Runnoe, J.C., & Green, R.F. 2014, *ApJ*, 787, 73
“The Intrinsic Quasar Luminosity Function: Accounting for Accretion Disk Anisotropy”
8. **DiPompeo, M.A.**, Runnoe, J.C., Myers, A.D., Boroson, T.A. 2013, *ApJ*, 774, 24
“Does Size Matter? The Underlying Intrinsic Size Distribution of Radio Sources and Implications for Unification by Orientation”
7. **DiPompeo, M.A.**, Runnoe, J.C., Brotherton, M.S., & Myers, A.D. 2013, *ApJ*, 762, 111
“An Infrared Excess Identified in Radio-loud Broad Absorption Line Quasars”

6127 Wilder Laboratory – Hanover, NH 03755

☎ (603) 646 2854 • 📠 (603) 646 1446

✉ m.dipompeo@dartmouth.edu • 🌐 dartmouth.edu/~mdipompeo

4/8

6. **DiPompeo, M.A.**, Brotherton, M.S., & De Breuck, C. 2013, MNRAS, 428, 1565
“The Orientation and Polarization of Broad Absorption Line Quasars”
5. **DiPompeo, M.A.**, Brotherton, M.S., Cales, S.L., & Runnoe, J.C. 2012, MNRAS, 427, 1135
“The Rest-frame Ultraviolet Properties of Radio-Loud Broad Absorption Line Quasars”
4. **DiPompeo, M.A.**, Brotherton, M.S., & De Breuck, C. 2012, ApJ, 752, 6
“The Viewing Angles of Broad Absorption Line versus Unabsorbed Quasars”
3. **DiPompeo, M.A.**, Brotherton, M.S., De Breuck, C., & Laurent-Muehleisen, S.A. 2011, ApJ, 743, 71
“A Very Large Array Survey of Radio-selected SDSS Broad Absorption Line Quasars”
2. **DiPompeo, M.A.**, Brotherton, M.S., & De Breuck, C. 2011, ApJS, 193, 9
“Very Large Telescope Spectropolarimetry of Broad Absorption Line QSOs”
1. **DiPompeo, M.A.**, Brotherton, M.S., Becker, R.H., Tran, H.D., Gregg, M.D., White, R.L., & Laurent-Muehleisen, S.A. 2010, ApJS, 189, 83
“Spectropolarimetry of Radio-selected Broad Absorption Line Quasars”

Publications as Contributing Author

15. Hviding, R. E., Hickox, R. C., Hainline, K. N., Carroll, C. M., **DiPompeo, M. A.**, Yan, W., Jones, M. L. 2017, MNRAS, in press (arXiv: 1711.01269)
14. Hickox, R.C., Myers, A.D., Greene, J.E., Hainline, K.N., Zakamska, N.L., **DiPompeo, M.A.** 2017, ApJ, 849, 53
13. Jones, M.L., Hickox, R.C., Mutch, S.J., Croton, D.J., Ptak, A., & **DiPompeo, M.A.** 2017, ApJ, 843, 125
12. Tuccillo, D., Bruni, G., **DiPompeo, M.A.**, Brotherton, M.S., Pasetto, A., Kraus, A., Gonzalez-Serrano, J.I., & Mack, K.-H. 2017, MNRAS, 467, 4763
11. Burrows, A.C., **DiPompeo, M.A.**, Myers, A.D., Hickox, R.C., Borowczak, M., French, D. A. & Schowitz, A.C. 2016, Problems of Education in the 21st Century, 70, 59
10. Jones, M.L., Hickox, R.C., Black, C.S., Hainline, K.N., **DiPompeo, M.A.**, & Goulding, A.D. 2016, ApJ, 826, 12
9. Brotherton, M.S., Runnoe, J.C., Shang, Z., & **DiPompeo, M.A.**. 2015, MNRAS, 451, 1290
8. Hainline, K.N., Hickox, R.C., Carroll, C.M., Myers, A.D., **DiPompeo, M.A.**, & Trouille, L. 2014, ApJ, 795, 124
7. Rochais, T.B. (*undergraduate advisee*), **DiPompeo, M.A.**, Myers, A.D., Brotherton, M.S., Runnoe, J.C., & Hall, S.W. 2014, MNRAS, 444, 2498
6. Runnoe, J.C., Brotherton, M.S., **DiPompeo, M.A.**, & Shang, X. 2014, MNRAS, 438, 3263
5. Berrington, R.C., Brotherton, M.S., Gallagher, S.C., Ganguly, R., Shang, Z., **DiPompeo, M.A.**, Chatterjee, R., Lacy, M., Gregg, M.D., Hall, P.B. & Laurent-Muehleisen, S.A. 2013, MNRAS, 436, 3321

6127 Wilder Laboratory – Hanover, NH 03755

☎ (603) 646 2854 • 📠 (603) 646 1446

✉ m.dipompeo@dartmouth.edu • 🌐 dartmouth.edu/~mdipompeo

4. Runnoe, J.C., Ganguly, R., Brotherton, M.S., & **DiPompeo, M.A.** 2013, MNRAS, 433, 1778
3. Runnoe, J.C., Brotherton, M.S., Shang, Z., & **DiPompeo, M.A.** 2013, MNRAS, 434, 848
2. Cales, S.L., Brotherton, M.S., Shang, Z., Runnoe, J.C., **DiPompeo, M.A.**, et al. 2013, ApJ, 762, 90
1. Runnoe, J.C., Brotherton, M.S., Shang, Z., Wills, B., & **DiPompeo, M.A.** 2013, MNRAS, 429, 135

Presentations

17. "Obscured Quasars in the Cosmic Web: Dark Matter Halos and Unification Models" **DiPompeo, M.A.**, Contributed Talk, Elusive AGN in the Next Era, George Mason University, June 14, 2017
16. "Obscured Quasars in the Cosmic Web: Dark Matter Halos and Unification Models" **DiPompeo, M.A.**, Colloquium, University of Wyoming, February 2, 2017
15. "The halo masses of obscured quasars in the context of galaxy evolution" **DiPompeo, M.A.**, Contributed Talk, Hidden Monsters: Obscured AGN and Connections to Galaxy Evolution, Dartmouth College, August 12th, 2016
14. "The halo masses of obscured quasars and evolutionary models" **DiPompeo, M.A.**, Contributed Talk, North-Eastern Regional Quasar & AGN Meeting (NERQUAM), Brandeis University, June 9, 2016
13. "Obscured Quasars — Halo Masses, Host Obscuration, and Evolutionary Models" **DiPompeo, M.A.**, Quasar Tea, Harvard-Smithsonian Center for Astrophysics, May 27, 2016
12. "Probing Quasars With the CMB" **DiPompeo, M.A.**, Contributed talk, North-Eastern Regional Quasar & AGN Meeting (NERQUAM), Dartmouth College, June 6, 2015
11. "Digging for Buried Quasars with WISE and Planck" **DiPompeo, M.A.**, Lunch Talk, Pennsylvania State University, April 23, 2015
10. "Digging for Buried Quasars with WISE and Planck" **DiPompeo, M.A.**, Colloquium, University of Wisconsin - Madison, April 9, 2015
9. "Weighing Obscured Quasar Hosts with the CMB" **DiPompeo, M.A.**, Colloquium, McGill University, October 23, 2014
8. "The Halo Masses of Obscured and Unobscured Quasars: Clustering and CMB Lensing" **DiPompeo, M.A.**, Colloquium, University of Colorado - Boulder, April 4, 2014
7. "The Halo Masses of Obscured and Unobscured Quasars: Clustering and CMB Lensing" **DiPompeo, M.A.**, HEAD Lunch Talk, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, March 26, 2014
6. "The Complex Nature of Broad Absorption Line Quasars" **DiPompeo, M.A.**, Colloquium, University of Washington- Seattle, WA, October 24, 2013
5. "The Complex Nature of Broad Absorption Line Quasars" **DiPompeo, M.A.**, Colloquium, Dartmouth College, NH, October 3, 2013

6127 Wilder Laboratory – Hanover, NH 03755

☎ (603) 646 2854 • ☎ (603) 646 1446

✉ m.dipompeo@dartmouth.edu • 🌐 dartmouth.edu/~mdipompeo

4. "Does Size Matter? The Intrinsic Sizes of Radio Sources and Unification by Orientation" **DiPompeo, M.A.**, Lunch talk, European Southern Observatory, Garching, Germany June 25, 2013
3. "Does Size Matter? The Intrinsic Sizes of Radio Sources and Unification by Orientation" **DiPompeo, M.A.**, Lunch talk, Max-Planck-Institute for Astronomy, Heidelberg, Germany June 20, 2013
2. "The Wyoming Infrared Observatory Sky Survey" **DiPompeo, M.A.** & Myers, A.D., Invited talk, eBOSS Collaboration Meeting. Shanghai, China, March 25, 2013
1. "Reorienting Our Perspective of Broad Absorption Line Quasars" **DiPompeo, M.A.**, contributed talk, AGN Winds in Charleston, Charleston, SC, October 15, 2011

Computer Skills

Operating Systems

- Macintosh OS X
- Linux/Unix
- Windows

Advanced

- IDL
- IRAF
- LaTeX
- HEALPix
- MANGLE
- Microsoft Office

Intermediate/Basic

- Python
- R
- FORTRAN
- PERL
- CASA
- SUPERMONGO
- HTML
- D3

Professional References

Dr. Ryan Hickox.

Dartmouth College
 Physics & Astronomy
 6127 Wilder Laboratory
 Hanover, NH 03755
 Phone: 603-646-2962
 email: Ryan.C.Hickox@dartmouth.edu

Dr. Adam Myers.

University of Wyoming
 1000 E. University, Dept 3905
 Laramie, WY 82071
 Phone: 307-766-6150
 email: geordiemyers@gmail.com

Dr. Mike Brotherton.

University of Wyoming
 1000 E. University, Dept 3905
 Laramie, WY 82071
 Phone: 307-766-6150
 email: mbrother@uwyo.edu

6127 Wilder Laboratory – Hanover, NH 03755

☎ (603) 646 2854 • ☎ (603) 646 1446

✉ m.dipompeo@dartmouth.edu • 🌐 dartmouth.edu/~mdipompeo

Dr. Carlos De Breuck.

European Southern Observatory
Karl Schwarzschild Strasse 2
85748 Garching bei München, Germany
Phone: +49-89-3200-6613
email: cdebreuc@eso.org

Dr. Andrea Burrows (Teaching).

University of Wyoming
1000 E. University, Dept 3374
Laramie, WY 82071
Phone: 307-766-6353
email: Andrea.Burrows@uwyo.edu

6127 Wilder Laboratory – Hanover, NH 03755

☎ (603) 646 2854 • 📠 (603) 646 1446

✉ m.dipompeo@dartmouth.edu • 🌐 dartmouth.edu/~mdipompeo