Christopher Culliton

PhD in Astronomy & Astrophysics
Department of Astronomy & Astrophysics, Penn State
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EDUCATION

The Pennsylvania State University
Ph.D., December 2018, Astronomy & Astrophysics
Advisors: Jane Charlton, Mike Eracleous
Research: Cataloguing, Analyzing, and Modeling Quasar Intrinsic Absorption Lines.

Florida Institute of Technology
B.S., May 2009, Physics, Cum Laude
B.S., May 2009, Space Sciences: Astronomy and Astrophysics, Cum Laude
Advisor: Dr. Hakeem Oluseyi
Research: LSST simulations, solar mapping

EMPLOYMENT

Graduate Research Assistant, Department of Astronomy & Astrophysics, Penn State University, University Park, PA. Summer 2009, Fall 2010, May 2011 - present

Graduate Teaching Assistant, Department of Astronomy & Astrophysics, Penn State University, University Park, PA. Fall 2009 - Spring 2010, Spring 2011

REU Student, University of Washington, Seattle, WA. June - August 2008
Research Project: *Simulated LSST Survey of RR Lyrae Stars throughout the Local Group*
Advisor: Dr. Andrew Becker

Undergraduate Research Assistant, Department of Physics and Space Sciences, Florida Institute of Technology, Melbourne, FL. January 2008 - May 2009
Advisor: Dr. Hakeem Oluseyi

TEACHING

Instructor, Astronomy 011, Elementary Astro Lab. Fall 2009, Spring 2010

Teaching Assistant/Lab Instructor, Astronomy 001, The Astronomical Universe. Spring 2011

Substitute Instructor, various astronomy courses. Fall 2016 - present

PUBLICATIONS

Culliton, C., Charlton, J., Eracleous, M., Ganguly, R., Misawa, T. *Probing Quasar Winds Using Narrow Intrinsic Absorption Lines.* MNRAS. Submitted.

Culliton, C., Roberts, A., DeMarcy, B., Muzahid, S., Charlton, J., Eracleous, M., Ganguly, R., Derseweh, J., Misawa, T. *Understanding Low-Redshift Quasar Outflows Using Intrinsic N V Absorption Lines.* MNRAS. In Prep.

Culliton, C., DeMarcy, B, Serra, V., Ganguly, R, Runnoe, J., Charlton, J., Eracleous, M., Misawa, T., Narayanan, A. *Intrinsic, Narrow N V Absorption Reveals a Clumpy Outflow in* $z < 0.4$ *Radio-Loud Quasars.* MNRAS. In Prep.

CONFERENCE PRESENTATIONS AND INVITED TALKS

Culliton, C., Charlton, J., Eracleous, M., Ganguly, R., Misawa, T. *Probing Quasar Winds Using*

Narrow Intrinsic Absorption Lines
Session Presented at: AGN Winds on the Georgia Coast, Jekyll Island, Georgia, 25-29 June 2017.

Culliton, C., Roberts, A., Muzahid, S., Charlton, J., Eracleous, M., Ganguly, R. *Understanding Low-Redshift Quasar Outflows Using Intrinsic N V Absorption Lines*
Session Presented at: AGN Winds on the Georgia Coast, Jekyll Island, Georgia, 25-29 June 2017.

Culliton, C., Charlton, J., Eracleous, M., Ganguly, R., Misawa, T. *Probing Quasar Winds Using Narrow Intrinsic Absorption Lines*
Session Presented at: Great Lakes Quasar Symposium 2016, London, Ontario, Canada, 2-4 May 2016.

Culliton, C., Roberts, A., Muzahid, S., Charlton, J., Eracleous, M., Ganguly, R. *Understanding Low-Redshift Quasar Outflows Using Intrinsic N V Absorption Lines*
Session Presented at: Great Lakes Quasar Symposium 2016, London, Ontario, Canada, 2-4 May 2016.

Culliton, C., Roberts, A., Muzahid, S., Charlton, J., Eracleous, M., Ganguly, R. Misawa, T. *Probing Quasar Winds Using Narrow Intrinsic Absorption Lines*
Session Presented at: Penn State Neighborhood Workshop 2016 Invited Talk, State College, PA, 1 April 2016

Culliton, C., Roberts, A., Muzahid, S., Charlton, J., Eracleous, M., Ganguly, R. Misawa, T. *Probing Quasar Winds Using Narrow Intrinsic Absorption Lines*
Session Presented at: New Mexico State University Invited Talk, Las Cruces, New Mexico, 29 July 2015

Culliton, C., Roberts, A., Charlton, J., Eracleous, M., Ganguly, R. Misawa, T. *Probing Quasar Winds Using Narrow Intrinsic Absorption Lines*
American Astronomical Society, AAS Meeting #225, Seattle, Washington, 4-8 January 2015. Abstract #331.02

Culliton, C., Charlton, J., Eracleous, Misawa, T. *Probing Quasar Winds Using Narrow Intrinsic Absorption Lines*
American Astronomical Society, AAS Meeting #223, Washington DC, 5-9 January 2014. Abstract #458.03

Culliton, C., Charlton, J., Eracleous, Misawa, T. *Probing Quasar Winds Using Narrow Intrinsic Absorption Lines*
Session Presented at: AGN Winds in Charlston, Charlston, South Carolina, 14-18 October 2011. Abstract #2.5

Oluseyi, H., M., Culliton, C., Furqan, M., Becker, A., *Investigation of LSST Periodic Variable Star Lightcurve Recovery* American Astronomical Society, AAS Meeting #213, Long Beach, California, 4-8 January 2009. Abstract #460.14

RESEARCH INTERESTS

- Finding and analyzing quasar absorption systems
- Modeling absorption systems in quasar spectra
- Studying quasar variability
- Using intrinsic quasar absorbers to determine the effects of quasar feedback on host galaxies

PUBLIC OUTREACH

AstroFest Volunteer, Summer 2009-14
AstroFest Volunteer and Organizer, Summer 2015-18

Four day Department of Astronomy & Astrophysics public outreach program overlapping with ArtsFest in State College, Pennsylvania.

AstroNight, Fall 2009-18
Penn State Department of Astronomy & Astrophysics Parents' Weekend outreach program.

Planetarium shows for groups visiting the Astronomy & Astrophysics Department

MEMBERSHIPS

- American Astronomical Society (10/2012 - Present)
- Sigma Pi Sigma, Physics Honor Society (inducted 2008)