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EDUCATION

2008	Ph.D. (Astronomy), The Ohio State University Dissertation – <i>Quasar Structure from Microlensing in Gravitationally Lensed Quasars</i> Adviser: Christopher S. Kochanek
2004	M.S. (Astronomy), The Ohio State University
1995	B.S. (Physics), Vanderbilt University, <i>Magna Cum Laude</i>

EMPLOYMENT HISTORY

CIVILIAN EMPLOYMENT HISTORY

2008 – present	Assistant Professor, Department of Physics, U. S. Naval Academy, Annapolis, MD
2002 – 2005	Graduate Research Assistant and Fellow, The Ohio State University, Columbus, OH

US NAVY EXPERIENCE (ACTIVE DUTY)

2005 – 2008	Master Instructor, Department of Physics, U. S. Naval Academy, Annapolis, MD
2001 – 2002	Staff Training Officer, Naval Nuclear Power Training Unit, Charleston, SC
2000 – 2001	Shift Engineer, Naval Nuclear Power Training Unit, Charleston, SC
1996 – 2000	Division Officer, USS City of Corpus Christi (SSN 705), Groton, CT

US NAVY EXPERIENCE (SELECTED RESERVE)

2011 – present	Coordinator for Fundamental Research, Office of Naval Research Reserve Science and Technology Program, Washington DC
2010 – 2011	Executive Officer, Naval Research Laboratory Science and Technology Unit 101, Washington, DC
2008 – 2010	Project Officer, Naval Research Laboratory Science and Technology Unit 101, Washington, DC
2003 – 2005	Training Officer, USS Emory S. Land (AS 39) Detachment 413, Columbus, OH

TEACHING EXPERIENCE

2012 – present	Extragalactic Astrophysics (Physics Majors) – 1 section
2012 – present	Advanced Mechanical Physics (Physics Majors) – 1 section
2008 – present	Mechanical Physics (Physics Majors) – 4 sections
2005 – present	General Physics (Mechanics) – 7 sections
2006 – present	General Physics (Electricity and Magnetism) – 11 sections
2006 – present	Astronomy – 6 sections

FELLOWSHIPS AND AWARDS

2010	Physics Department Nominee for the Apgar Award for Excellence in Teaching, U.S. Naval Academy
2008	Military Faculty Teaching Excellence Award and William P. Clements Award for Excellence in Education, U.S. Naval Academy
2003	David G. Price Fellowship in Instrumentation, Department of Astronomy, The Ohio State University
2002	Distinguished Graduate Fellowship, The Ohio State University
1999	Junior Officer of the Year, Submarine Squadron Four, Groton, CT
1995	Phi Beta Kappa, Vanderbilt University

PROFESSIONAL MEMBERSHIPS

American Astronomical Society

LANGUAGES

Professional reading, writing and speaking fluency in German

POSTDOCTORAL RESEARCH ASSOCIATES EMPLOYED/ADVISED

2012 – present	Dr. Chelsea L. MacLeod
2010 – 2012	Dr. Laura Hainline, 4 refereed publications, advised four undergraduates, taught one section of general physics

STUDENTS SUPERVISED IN RESEARCH

James Kennington	U.S. Naval Academy, 2012 – present, undergraduate student. Developing image analysis noise reduction algorithm
Laura M. Gorinski	U.S. Naval Academy, 2012 – present, undergraduate student. Infrared astronomical instrumentation project
Roman Klimchuk	U.S. Naval Academy, 2011 – present, undergraduate student. Quasar physics project, joint refereed journal article in preparation
Shane L. Martin	U.S. Naval Academy, 2011 – present, undergraduate student. Astronomical data reduction project, joint refereed journal article in preparation
Zachary Landaal	U.S. Naval Academy, 2010 – 2012, undergraduate student. Quasar physics project, one joint refereed article submitted
Garrett L. Deletti	U.S. Naval Academy, 2010 – 2012, undergraduate student. Senior thesis research project
Joseph N. Beach	U.S. Naval Academy, 2009 – 2011, undergraduate student. Astronomical instrumentation research project, one joint refereed journal article published
Troung X. Le	U.S. Naval Academy, 2009 – 2011, undergraduate student. Astronomical data analysis project, one joint refereed journal article published
Erin Arthur	U.S. Naval Academy, 2007 – 2009, undergraduate student. Senior thesis research project
Daniel Machado	U.S. Naval Academy, 2007 – 2008, undergraduate student. Senior thesis research project
Michael E. Eyler	U.S. Naval Academy, 2006 – 2008, undergraduate student. Three joint papers published
Patrick Karalus	U.S. Naval Academy, 2006 – 2007, undergraduate student. Senior thesis research project

EXTERNAL GRANTS AND COLLABORATIONS

- 2012 – present Quasar Accretion Disk Temperature Profiles and X-Ray Continuum Emission Structure from Analysis of Quasar Microlensing
National Science Foundation \$235,489
- 2012 – present Energy Dependent X-Ray Microlensing and the Structure of Quasars
Chandrasekhar X-Ray Observatory (NASA), \$10,000
- 2011 – present Energy Dependent X-Ray Microlensing
Chandrasekhar X-Ray Center (NASA), \$7,000
- 2010 – present The Temperature Profiles of Quasar Accretion Disks
Hubble Space Telescope Science Institute, \$10,000
- 2009 – present Quasar Structure, Cosmology, and Lens Galaxy Structure from X-Ray and Optical Microlensing in Lensed Quasar Systems (PI)
National Science Foundation \$135,707
- 2009 – 2011 Probing the Structure of Quasar Accretion Disks by Analysis of Microlensing in Gravitationally Lensed Quasars (PI)
Research Corporation for Science Advancement, \$39,348
- 2009 – 2011 The Size of Quasar Non-Thermal/X-Ray Emission Regions
Chandrasekhar X-Ray Center, \$28,358
- 2008 – present U.S. Naval Observatory, Flagstaff AZ and U.S Naval Academy Lensed Quasar Monitoring Program
(PI of collaboration governed by USNO/USNA MOA - recently renewed and expanded for an additional four years)

PRESENTATIONS

8. C.W. Morgan, 2012, "The USNA/USNO Lensed Quasar Monitoring Program."
Invited Talk at SNOWPAC 2012 - Gravitational Lensing in the Age of Survey Science,
Snowbird, UT, March 15, 2012
7. C.W. Morgan, 2010, "Exploring Quasar Accretion Physics with Gravitational Microlensing."
Invited Talk at the Weekly Colloquium of the Carnegie Institution, Department of
Terrestrial Magnetism, Washington, D.C., November 5, 2010
6. C.W. Morgan, 2010, "Measuring Quasar Accretion Disk Temperature Profiles using Microlensing
in Gravitationally Lensed Quasars." Presented at the 215th Meeting of the American
Astronomical Society, Washington, DC, January 2010
5. C.W. Morgan, 2009, "Quasar Accretion Physics."
Invited Talk for the Naval Academy Research Council,
U.S. Naval Academy, October, 2009
4. C.W. Morgan, 2009, "The USNO-USNA Lensed Quasar Monitoring Program: Year 1 Results."
Invited Talk at the Weekly Colloquium of the USNO Flagstaff, April, 2009
3. C.W. Morgan, 2008, "The USNO-USNA Lensed Quasar Monitoring Program."
Invited Talk at the Combined Colloquium of the Lowell Observatory,
USNO Flagstaff and Northern Arizona University, March, 2008
2. C.W. Morgan, 2008, "Quasar Structure from Microlensing in Gravitationally Lensed Quasars."
Presented at the 211th Meeting of the American Astronomical Society,
Austin, Texas, January 2008
1. C.W. Morgan, C.S. Kochanek and D.L. DePoy, 2004, "RETROCAM: An Automated Camera
for Lensed Quasar Monitoring."
Presented at the International Astronomical Union Symposium #225: Impact of
Gravitational Lensing on Cosmology, Lausanne, Switzerland, July 2004

PRESENTATIONS BY STUDENTS AND POSTDOCTORAL ASSOCIATES

5. R. Klimchuk and S.L. Martin, 2013, "Gravitational Microlensing in the Lensed Quasar FBQ 0951+2635."
Presented at the 221st Meeting of the American Astronomical Society,
Long Beach, CA, January 2013
4. Z. Landaal, 2012, "Microlensing Variability in the Lensed Quasar SBS 0909+532",
Presented at the 219th Meeting of the American Astronomical Society,
Austin, TX, January 2012
3. G. Deletti, 2012, "Microlensing Analysis of the Gravitationally Lensed Quasar SDSS 1650+4251."
Presented at the 219th Meeting of the American Astronomical Society,
Austin, TX, January 2012
2. L. Hainline, 2012, "A New Microlensing Event in the Doubly-Imaged Quasar Q0957+561?",
Presented at the 219th Meeting of the American Astronomical Society,
Austin, TX, January 2012
1. M. Eyler, 2008, "Time Delays and Quasar Structure in Two Lensed Quasars with Significant Microlensing",
Presented at the 215th Meeting of the American Astronomical Society,
Austin, TX, January 2008

SELECTED REFEREED PUBLICATIONS

16. L.J. Hainline, **C.W. Morgan**, Z.D. Landaal, C.S. Kochanek, H.C. Harris, T. Tilleman, L.J. Goicoechea, V.N. Shalyapin, and E.E. Falco, "Time Delay and Accretion Disk Structure in the Lensed Quasar SBS 0909+532", *The Astrophysical Journal*, submitted (2012)
15. **C.W. Morgan**, L.J. Hainline, B. Chen, M. Tewes, C.S. Kochanek, X. Dai, S. Kozlowski, J.A. Blackburne, A.M. Mosquera, G. Chartas, F. Courbin, G. Meylan, "Further Evidence that Quasar X-Ray Emitting Regions are Compact: X-Ray and Optical Microlensing in the Lensed Quasar Q J0158-4325", *The Astrophysical Journal*, 756, 52-60 (2012)
14. B. Chen, X. Dai, C.S. Kochanek, G. Chartas, J.A. Blackburne, **C.W. Morgan**, "X-Ray Monitoring of Gravitational Lenses with Chandra", *The Astrophysical Journal*, 755, 24-50 (2012)
13. L.J. Hainline, **C.W. Morgan**, J.N. Beach, C.S. Kochanek, H.C. Harris, T. Tilleman, R. Fadely, E.E. Falco, T.X. Le, "A New Microlensing Event in the Doubly Imaged Quasar Q 0957+561", *The Astrophysical Journal*, 744, 104-112 (2012)
12. **C.W. Morgan**, C.S. Kochanek, N.D. Morgan and E.E. Falco, "The Quasar Accretion Disk Size – Black Hole Mass Relation", *The Astrophysical Journal*, 712, 1129-1136 (2010).
11. X. Dai, C.S. Kochanek, G. Chartas, S. Kozlowski, **C.W. Morgan**, G. Garmire and E. Agol, "The Sizes of the X-ray and Optical Emission Regions of RXJ 1131-1231", *The Astrophysical Journal*, 709, 278-285 (2010).
10. **C.W. Morgan**, C.S. Kochanek, X. Dai, N.D. Morgan and E. Falco, "X-Ray and Optical Microlensing in the Lensed Quasar PG 1115+080", *The Astrophysical Journal*, 689, 755-761 (2008).
9. C. Vuissoz, F. Courbin, D. Sluse, G. Meylan, V. Chantry, E. Eulaers, **C.W. Morgan**, M.E. Eyler, C.S. Kochanek, J. Coles, P. Saha, P. Magain and E.E. Falco, "COSMOGRAIL: Time delays and the Hubble Constant from WFI J2033-4723", *Astronomy & Astrophysics*, 488, 481-490 (2008).
8. J. Fohlmeister, C.S. Kochanek, E.E. Falco, **C.W. Morgan**, and J. Wambsganss, "The Rewards of Patience: An 822 Day Time Delay in the Gravitational Lens SDSS J1004+4112", *The Astrophysical Journal*, 676, 761-766 (2008).
7. **C.W. Morgan**, M.E. Eyler, C.S. Kochanek, N.D. Morgan, E.E. Falco, A. Eigenbrod, F. Courbin and G. Meylan, "Simultaneous Estimation of Time Delays and Quasar Structure", *The Astrophysical Journal*, 676, 80-86 (2008).

6. B.S. Gaudi, J. Patterson, D.S. Speigel, T. Krajci, R. Koff, G. Pojmanski, S. Dong, A. Gould, J.L. Prieto, C.L. Blake, P.W.A. Roming, D.P. Bennett, J.S. Bloom, D. Boyd, M.E. Eyler, P. de Ponthiere, N. Mirabal, **C.W. Morgan**, R.R. Remillard, T. Vanmunster, R.M. Wagner and L.C. Watson, “Discovery of a Very Bright, Nearby Gravitational Microlensing Event”, *The Astrophysical Journal*, 677, 1268-1277 (2008).
5. J. Yoo, J. Miralda-Escudé, D.H. Weinberg, Z. Zheng, and **C.W. Morgan**, “The Most Massive Black Holes in the Universe: Effects of Mergers in Massive Galaxy Clusters”, *The Astrophysical Journal*, 667, 813-825 (2007).
4. J. Fohlmeister, C.S. Kochanek, E.E. Falco, J. Wambsganss, N.D. Morgan, **C.W. Morgan**, E.O. Ofek, D. Maoz, C.R. Keeton, J.C. Barentine, G. Dalton, J. Demibicky, W. Ketzeback, R. McMillan and C.S. Peters, “A Time Delay for the Cluster-Lensed Quasar SDSS J1004+4112”, *The Astrophysical Journal*, 662, 62-71 (2007).
3. **C.W. Morgan**, C.S. Kochanek, N.D. Morgan and E.E. Falco, “Microlensing of the Lensed Quasar SDSS 0924+0219”, *The Astrophysical Journal*, 647, 874-885 (2006).
2. **C.W. Morgan**, P.L. Byard, D.L. DePoy, M. Derwent, C.S. Kochanek, J.L. Marshall, T.P. O'Brien and R.W. Pogge, “RETROCAM: A Versatile Optical Imager for Synoptic Studies”, *The Astronomical Journal*, 129, 2504-2510 (2005).
1. A. Gould and **C.W. Morgan**, “Transit Target Selections Using Reduced Proper Motions”, *The Astrophysical Journal*, 585, 1056-1061 (2003).

CONFERENCE PROCEEDINGS

2. C.S. Kochanek, X. Dai, **C.W. Morgan**, N.D. Morgan, S. Poindexter and G. Chartas, “Turning AGN Microlensing From A Curiosity Into a Tool”, in *Statistical Challenges in Modern Astronomy IV, 2007*, eds. G.J. Babu and E.D. Feigelson, (San Francisco: Astron. Soc. Pacific), astro-ph/0609112
1. D.L. DePoy, B. Atwood, S.R. Belville, D.F. Brewer, P.L. Byard, M. Derwent, J.L. Marshall, J.A. Mason, **C.W. Morgan**, T.P. O'Brien, P.S. Osmer, D.P. Pappalardo, R.W. Pogge, D.P. Steinbrecher, E.J. Teiga and D.H. Weinberg, “A Multiple-Object Double Spectrograph for the Large Binocular Telescope”, *Proc. SPIE*, 5492, 452, (2004)