WINDSOR ANTHONY MORGAN, JR.

Department of Physics and Astronomy Dickinson College Carlisle, PA 17013 (717)-245-1386 morgan@dickinson.edu		109 Hillside Road Harrisburg, PA 17104 (717)–238–0283	
Education	1995 Ph.D. Astronomy and Astrophysics, Pennsylvania State University Thesis: "Spectra and Luminosities of X-ray-Selected Active Galactic Nuclei" (Advisor: Richard E. Griffiths)		
	1986 A.B. cum laude, Astronomy and Astrophysics, Harvar	rd College	
Professional Experience	Associate Professor of Physics and Astronomy Dickinson College, Carlisle, PA	2002-present	
	Director, Charles M. Kanev Planetarium Dickinson College, Carlisle, PA	2002-present	
	Chair, Department of Physics and Astronomy Dickinson College, Carlisle, PA	2011-2014	
	Assistant Professor of Physics and Astronomy Dickinson College, Carlisle, PA	1994-2002	
	Multicultural Scholar-in-Residence Dickinson College, Carlisle, PA	1996-1998	
	NASA Graduate Fellow Pennsylvania State University, University Park, PA and Spanistitute, Baltimore, MD	1990–1993 pace Telescope Science	
	Graduate Research Assistant Pennsylvania State University, University Park, PA	1989–1990	
	Teaching Fellow Harvard University, Cambridge, MA	1986–1987	
	Computer Specialist Smithsonian Astrophysical Observatory, Cambridge, MA	1986–1987	
	Telescope Director Michael Telescope, Harvard University, Cambridge, MA	1984–1986	
	Research Assistant	1984–1986	

Smithsonian Astrophysical Observatory, Cambridge, ${\rm MA}$

Courses Taught

Introductory Astronomy; Introductory Astrophysics; Intermediate Astrophysics (Stellar Interiors); Intermediate Astrophysics (Extragalactic Astronomy); Advanced Astrophysics

Workshop (Introductory) Physics; Waves, Vibrations, and Optics; Mechanics; Electrodynamics; Junior Physics Seminar; Senior Research Seminar; Independent Research Projects; Meteorology

Science and Gender; Women and Science in the United States

First-Year Seminars: Star Trek: Temporal Anomaly; Time; Time and the Past, Present, and Future

Research

Astronomy Education Research

Interests

Women and Science

Multiwavelength Properties of X-ray Binaries X-ray Emission from Active Galactic Nuclei

Professional

American Astronomical Society

Societies

American Association of Physics Teachers

National Society of Black Physicists

Awarded

Willoughby Fellow, Dickinson College (2014-2015).

Fellowships and Grants

"Ever-Expanding Horizon" Mission Photography Workshop, United Methodist

Archives (2015).

Summer Research Grant (2009). "Jennie Taylor, Class of 1889."

NSF Research Planning Grant (1997-2000). "Optical, Infrared, and X-ray Properties of X-ray Binaries"

NASA Graduate Fellowship (1990–1993) "Spectra and Luminosities of X-ray-Selected

Active Galactic Nuclei"

Braddock Recognition Award, Pennsylvania State University (1987–1990) Graduate School Fellowship, Pennsylvania State University (1987–1988)

Refereed Publications

Morgan, W.A., "Quadrant to Measure the Sun's Altitude." *The Physics Teacher*, **51(7)**, 420 (2013).

Morgan, W.A. and Garcia, M.R., "Position and Variability of 2A1704+241." *Publications of the Astronomical Society of the Pacific*, **113**, 1386 (2001).

Avni, Y., Worrall, D., and Morgan, W.A., "The Underlying Distribution of Optical to X-ray Spectral Index for Quasars in the Presence of Detection Thresholds." *The Astrophysical Journal*, **454**, 673 (1995).

Morgan, W.A. *et al.* "A New Mechanism for the Formation of Meteoritic Kerogen-Like Material." *Science*, **252**, 109 (1991).

Books

Morgan, W.A., and Slater, T. "Teaching OpenStax Astronomy with Peer Instruction: Implementing Think-Pair-Share for Intellectual Engagement, CAPER (2018) (in progress).

Other Publications and Talks

Morgan, W.A., "A Way to Know What Introductory Astronomy Students are Interested In?", *The Classroom Astronomer* **11**, 26 (2012).

Morgan, W.A., "Insights Into Students' Interests by Examining Their Choices of the Astronomy Picture of the Day", *Bulletin of the American Astronomical Society*, 44, #235.04 (2012).

Morgan, W. A., "A Simple Device to Measure the Altitude of the Sun", Bulletin of the American Astronomical Society, 43, #346.08 (2011).

Morgan, W. A., "Workshop Astronomy' at Dickinson College", Bulletin of the American Astronomical Society, 38, 1074 (2007).

Boyle, R.J., Morgan, W.A., and Schrautemyer, M., "Astronomy at Dickinson College: Instrumentation, Curriculum, and Culture.", *Bulletin of the American Astronomical Society*, **37**, 1327 (2005).

Boyle, R.J. et al. "The Michael Britton Observatory of Dickinson College.", Bulletin of the American Astronomical Society, **36**, 1600 (2004).

Muyskens, J. et al. "Transforming the Curriculum: Reports from the Field." 89th Annual Meeting of the Association of American Colleges and Universities (2003).

Morgan, W.A. "Student Presentations of the Astronomy Picture of the Day." Bulletin of the American Astronomical Society, 33, 809 (2001).

Boyle, R.J. et al. "New Astronomy Facilities for Dickinson College." Bulletin of the American Astronomical Society, 33, 725 (2000).

Green, P.J. Peer Instruction for Astronomy, Prentice-Hall, (2003) (contributor).

Green, P.J. and Morgan, W.A. "Peer Instruction for Astronomy.", Bulletin of the American Astronomical Society, **32**, 1551 (2000).

Morgan, W.A. and Garcia, M.R. "Position and Variability of 2A 1704+241." Bulletin of the American Astronomical Society, **32**, 1218 (2000).

Morgan, W.A. and Garcia, M.R. "Position and Variability of 2A 1704+241." Bulletin of the American Astronomical Society, **30**, 1314 (1998).

Morgan, W.A. "Spectra and Luminosities of X-ray-Selected Active Galactic Nuclei," talk given at the Annual Meeting of The National Society of Black Physicists, Bowling Green, KY, March 1996.

Morgan, W.A. "Spectral Properties of X-Ray-Emitting Quasars." Bulletin of the American Astronomical Society, 28, 1316 (1996).

Mathis, D.F. et al. "A Deep Survey of the Lynx.3A Region." Bulletin of the American Astronomical Society, 26, 1428 (1994).

Morgan, W.A. "Spectra and Luminosities of X-ray-Selected Active Galactic Nuclei." Bulletin of the American Astronomical Society, **26**, 1412 (1994).

Morgan, W.A. et al. "L_x-L_{opt} Relation for Rosat AGN." Bulletin of the American Astronomical Society, **24**, 1154 (1992).

Morgan, W.A. et al. "X-Ray Spectral Properties of Quasars." Bulletin of the American Astronomical Society, 24, 690 (1992).

Anderson, S. et al. "Initial Results from a Rosat Deep Survey in Lynx," in X-ray Emission from AGN and the Cosmic X-ray Background, eds. W. Brinkmann and J. Trümper (1992).

Avni, Y., Worrall, D., and Morgan. W., "Analysis of Astronomical Data Containing Nondetections: Effect of Increasing the Permissible Range of the Underlying Distribution." *Institute of Mathematical Statistics Bulletin*, **20**, 260 (1991).

Morgan, W.A. et al. "A New Mechanism for the Formation of Meteoritic Kerogen-Like Material." *Meteoritics*, **26**, 374 (1991).

Morgan, W.A. et al. "Suggested New Origin of Meteoritic Kerogen." Bulletin of the American Astronomical Society, 22, 1324 (1990).

Supervised Published Research

Drake, J.S. "A Photometric Study of Phocaea Group Asteroid 1584 Fuji." Bulletin of the American Astronomical Society, **36**, 779 (2004).

Public Talks and Panels

"The Transit of Venus and the Distance from the Earth to the Sun", Dickinson College, June 2012.

"Where are the Women? The Gender Divide in Science", Clarke Center, Dickinson College, March 2005.

"The Transit of Venus and the Distance from the Earth to the Sun", Dickinson College, March 2004.

"The Position of the X-ray Source 2A1704+241", Colloquium, Gettysburg College, February 2000.

"Out of Position? The X-ray Binary 2A1704+241", Annual Science Dinner, Dickinson College, April 1999.

"Quasars", Astronomical Society of Harrisburg, February 1998.

"Profiles In Excellence Role Model", Susquehanna Middle School, February 1998.

"Other Mechanisms for Creating Hydrocarbons in Meteorites", Clarke Center, Dickinson College, August 1996.

"Mechanisms for Creating Hydrocarbons in Meteorites", Clarke Center, Dickinson College, August 1996.

"What Can You Do in Astronomy?", Love of Learning Program, Davidson College, Davidson, North Carolina, July 1992.

"What is Astronomy?", Center for Talented Youth, Johns Hopkins University, Baltimore, November 1991.

National Review Panels

National Science Foundation, Committee of Visitors, Division of Astronomical Sciences, 2014-present.

National Science Foundation, Graduate Research Fellowships Program (Physics and Astronomy), 2003, 2005-2010 (Chair, 2006-2010)

National Science Foundation, Course Curriculum and Laboratory Improvement Program, February 1999, July 2007.

National Aeronautics and Space Administration Minority University and College Education and Research Partnership Initiative, August 2003.

Ford Foundation, Predoctoral Fellowship for Minorities Program, March 2001, March 2002.

National Aeronautics and Space Administration, Rossi X-ray Timing Explorer Cycle-5 Proposals, September 1999.

National Science Foundation, Instrumentation and Laboratory Improvement Program, January 1998.

Dickinson Committees and Service

Course Scheduler, Department of Physics and Astronomy	2002 - 2017
Faculty Advisor, Astronomy Club	2015
Chair, Department of Physics and Astronomy	2011-2014
Science Executive Committee	2011-2014
All-College Committee on Planning and Budget	2010-2013
Planning and Budget 21st Century Challenges Subcommittee	2011-2012
NSF Graduate Fellowship Faculty Representative	2008-present
Secretary of the Faculty	2007-2008
Planning and Budget Parental Leave Subcommittee	2006
President's Commission for Women	2004-2008
Search Committee, Dean of Students	2004
Nominating Committee	2001
All-College Committee on Academic Program (Chair, 2002-2003)	2000-2003
Faculty Advisor, Astronomy Club	1997-2005
President's Multicultural Commission	1996-1999
Technology Advisory Group	1999
All-College Committee on General Education	1996-1997
Dean's Multicultural Working Group	1996-1997
Dickinson College Focus Program, Instructor	1995-1997
Science Executive Committee	1995-1997

Other Service

AAS Committee on the Status of Minorities	2003-2006
NURO Steering Committee Vice-Chair	2003-2005
NURO Nominating Committee	2000-2002
Londonderry School Science Fair Judge	1995-present

Conferences Central Pennsylvania Consortium Astronomers' Conference (2015, 2009, 2003,Organized 2000)