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Education

Graduated Phi Beta Kappa, Ph.D. in Astronomy, University of Florida, 1981.

M.A. in Astronomy. Univ. of South Florida, 1976.

B.A. in Astronomy, and in Physics. University of South Florida, 1973.

Employment

Professor (tenured), Department of Physics and Astronomy, Appalachian State University, August 1984 to present.

Assistant Professor (tenure track), Department of Physical Sciences, Salisbury State College (now University), Salisbury, Maryland. August 1983 to July 1984.

Assistant Professor (soft money position), Department of Physics and Astronomy, Appalachian State University, August 1981 to June 1983.

NASA/ASEE Summer Fellow at Goddard Space Flight Center in cooperation with the University of Maryland, 1983 and 1984.

Assistant Professor (temporary), Department of Physics and Astronomy, Appalachian State University, Boone, North Carolina. August 1981 to June 1983.

Instructor (part time), Physics Department, Hillsborough Community College, Tampa, Florida. 1976-1977.

Teaching Experience

Appalachian State University: Introductory Astronomy, Observational Astronomy (techniques), Astromechanics, Astronomical Photometry Techniques. Binary and Variable Stars, Analytical Physics, General Physics, Conceptual Physics, Classical Mechanics, Waves and Oscillations, Digital Electronics, Microcomputers, Methods of Experimental Physics

Salisbury State College: Astronomy labs, Analytical Physics, Electronics, Digital Electronics.

University of Florida: Astronomy labs, Advanced Astronomy Lab.

University of South Florida: Descriptive Astronomy, Observational Astronomy. Hillsborough Community College: Astronomy, Physics labs, Physics for Electronics Technicians, Physics for Nuclear Technologists.

Professional and Honorary Societies

International Astronomical Union, American Astronomical Society, American Association of Physics Teachers, Phi Beta Kappa, Sigma Xi, Astronomical Society of the Pacific, Royal Astronomical Society of Canada, International Dark-Sky Association, Illuminating Engineering Association of North America

Personal — Born July 1, 1951, in Tampa, Florida. Married and in good health. Wife (Susan) has a masters degree in reading education, and teaches at Green Valley elementary school. Twins, born 5/31/91.

Research Interests — Eclipsing binary stars: observing and computer modeling, flare stars, apsidal motion binaries, occultation photometry, general development of instrumentation. Applications of computers to telescopes and observatories.

Telescope Experience — Small (18, 26, 30, 32, 36 inch) telescopes. Spectrographs and image-intensifiers. Single and multiple beam photometers, cameras, CCD cameras, and image processing software (MIRA).

Computer Experience — Hardware: Amdahl 470/V6, IBM 3033, and Univac 90/80 mainframes. Dec 8600, VAX 11/780, PDP 11-34 and 11-44 minicomputers. PC compatibles.

Software: FORTRAN, BASIC, FORTH, Dec VMS, MS-DOS, Windows, WordPerfect, Mira.

Grants and Honors — IUE Observation grant: Rotational Coupling of Chromospheric Activity in RS CVn Binary Stars, R.A. Parise, L. W. Twigg, D. B. Caton, and J. B. Rafert, 1981.

Chaired the Special Interest Group on Microcomputer Use in Astronomy (SIGMUA), of the American Astronomical Society's Working Group on Astronomical Software, 1983-1986.

Co-chaired with D. Hall (Vanderbilt) the Microcomputers in Astronomy conference, AAS/SIGMUA & IAPPP, July 1983.

Public Observing Programs and Lectures in Astronomy, American Academy of Science V. M. Slipher Committee award, 1983, $675.

nteractive Microcomputer Based Analysis of Eclipsing Binary Light Curves, NASA/AAS Small Research Grant, 1983, $1150.

Determination of Stellar Diameters and Positions from High Speed Photometry of Lunar Occultations, ASU Research Committee, 1984, $1595.

Modern Laboratory Exercises in Astronomy, NSF College Science Instrumentation Program, 1985-1987, $24,910.

Served on grant review panel for the NSF College Science Instrumentation Program, 1986.

Precision Multiple-Beam Photometry of Eclipsing Binary Stars, ASU Research Committee, 1986, $2336.

Starline: An Astronomical Information Service. V. M. Slipher Committee of the National Academy of Sciences, 1986-, $350.

A Digital Imaging System for Astronomical Photometry, North Carolina Board of Science and Technology, 1987-88, $21,660.

Accuracy of Methods of Determining Eclipsing Binary Times of Conjunction. National Science Foundation, 1987-88, $17,100.

Precision Multiple-Beam Photometry of Eclipsing Binary Stars, ASU Research Committee, 1987 (continuation of 1986 grant), $1971.

A Modern Technology Telescope for Undergraduate Student Research, NSF Instruments and Laboratory Improvements Program, 1988, $100,000.

Observatory Director, 1988-present

Served on grant review panel for NSF Instruments and Laboratory Improvements Program, 1989.

Loan-A-Scope: A Program to Loan Telescopes to the General Public. V. M. Slipher Committee of the National Academy of Sciences, 1989-, $720.

Served on grant review panel for NSF Instrument and Laboratory Improvements Program, 1990.

Automated Photometry of Eclipsing Binaries, American Astronomical Society Small Research Program, 1990, $2930.

Development of an Automatic Photoelectric Telescope (APT) for Photometry of Variable Stars, ASU Research Committee, 1990, $1964.

Astronomy Instrumentation, North Carolina Board of Science and Technology, 1990, $25,000.

Development of Modern Observational Astronomy Lab Projects, National Science Foundation's Instrumentation and Laboratory Improvement program (under the new Leadership in Laboratory Development guidelines), 1991-1994 $64,455.

A CCD Camera and Image Processing System for Astronomical Research, National Science Foundation, under the Research in Undergraduate Institutions (RUI) program, 1991-1994 $68,850.

Automated Photometry of Eclipsing Binaries,the Small Research Grant program of the American Astronomical Society, 1992, $2930.

Served on grant review panel for NSF Instrument and Laboratory Improvements Program, 1993.

Development of an CCD-Camera System for Searching for Supernova Events in External Galaxies, ASU Research Committee, 1991-2 ($1,000) and 1992-3 ($1,057).

Natality and the Moon: Are Birthrates Dependent on the Phase of the Moon?, ASU Research Council, Summer 1994 ($1,000).

Diffraction Spikes and Art: An Investigation ofthe Origin of the Stellar "Cross" in Art, ASU Research Council, Summer 1995 ($1,000).

Photoelectric Photometry of Eclipsing Binaries, ASU Research Council, Fall 1995 ($2,160).

Photometry of Times of Minimum Light of Eccentric binary systems, the Small Research Grant program of the American Astronomical Society, 1995, $2949.

Filters for CCD Photometry, Fund for Astrophysical Research, 1995 ($820).

Imaging, Photometry and Discovery of Quasars and Variable Stars, (with J.T. Pollock), ASU Research Council, Summer 1996 ($1,112).

Measurement of Double Stars by Speckle Interferometry, ASU Research Council, Summer 1996 ($1,346).

Spectral and Photometric Monitoring of Mira Variables, (with M. W. Castelaz at East Tennessee State Univ.),the Small Research Grant program of the American Astronomical Society, 1997 ($3,975).

Acquisition of CCD Camera and Instrument Selector, National Science Foundation's Research at Undergraduate Institutions program ($64,200).

A Scientific Investigation of the Brown Mountain Lights, ASU Research Council, Fall 1997 ($2,000).

Multi-Passband CCD Photometry of Variable Stars and QSOs, Fund for Astrophysical Research, 1997 ($1,639).

A Search for Impact Events on the Moon, ASU Research Council, Fall 1997 ($2,485).

Served on grant review panel for NSF Research at Undergraduate Institutions Program, 1999.

Exploratory Search for Extrasolar Trojan Planets in Binary Systems, National Science Foundation Small Grants for Exploratory Research, 2000-2002, $98,764.

Served on grant review panel for NSF IGERT Program, 2000.

Precision Photometry and Spectroscopy of Faint Variable Stars, ASU Research Council, Fall 2000 ($3,800).

CCD Photometry and SpectralMonitoring of Variable Stars. Fund for Astrophysical Research, Oct. 2000 ($3,275).

Acquisition of a Telescope and Dome System for Research Training, National Science Foundation's Major Research Instrumentation program. ($119,663,)

"Exploratory Search for Extrasolar Trojan Planets in Binary Systems", $98,764, to the National Science Foundation's Small Grants for Exploratory Research program. Author and Principal Investigator.

"CCD Photometry and Spectral Monitoring of Variable Stars", $3,275, to the Dunham Fund for Astrophysical Research.

"Weather Station Upgrade for DSO," requested from local resident Jack Ewing, and funded. $1,000.

"The GoTo Astronomy Laboratory Facility," co-PI with PI J. Pollock and co-PI's R. Gray and L. Hawkins. Re-submitted to the National Science Foundation's CCLI program, $76,052

"Acquisition of Instrumentation and Technology Improvements for a Research and Education Observatory," PI with co-PI's R. Gray , L. Hawkins, and J. Pollock. Submitted to the National Science Foundation's MRI program, funded 7/05, $77,423.

"Acquisition of Improved Optics and New Instrumentation for a Research and Instructional Observatory," PI with co-PI's R. Gray , L. Hawkins, J. Saken, and J. Pollock. Submitted to the National Science Foundation's MRI program, funded 7/05, $213,082.

"Acquisition of Equipment in Support of Automatic Telescope Systems at a Research and Teaching Observatory," PI with co-PI's L. Hawkins and J. Pollock. Submitted to the National Science Foundation's MRI program, funded 2/10, $88,810.

Publications

Caton, D.B., Fallon, F.W., and Wilson, R.E.,1977, "An Observed Eclipse of $?_1$ Orionis A", Publ. A.S.P. **89**, 530.

Caton, D.B. and Oliver, J.P., 1979, "Photometric Observations of RZ Eridani". IAU Inf. Bull. Var. Stars, No. 1665.

Caton, D.B., 1983, "A Photoelectric Secondary Minimum of AR Lac", IAU Inf. Bull. Var. Stars, No. 2303.

Oliver, J.P., Caton, D.B., and Parise, R.A., 1983, "FORTH for Telescope Control", a chapter in Microcomputers In Astronomy, R.M. Genet, ed., Bookmasters.

Caton, D.B., 1983, "Light Curve Display and Analysis", a chapter in Microcomputers In Astronomy, R.M. Genet, ed., Bookmasters.

St. Cyr, C., Pollock, J.T., Pica, A.J., and Caton, D.B., 1983, "Observations of the Eclipsing Variable KT Hydrae", Publ. A.S.P. **95**, 639.

Caton, D.B., 1984, "Sky Travel", software review in Commodore Microcomputer magazine, March/April 1985.

Caton, D.B., and Pollock, J.T., 1985, "A Four Star Photometer for Use on Small Telescopes", International Astronomical Union Symposium No. 118, Instrumentation and Research Programmes for Small Telescopes, pp. 81-82, 1986.

Caton, D.B., 1986, "A Light-Curve Distortion Wave Analysis of Eight RS Canum Venaticorum Systems", A.J. **91**, 132-138.

Caton, D.B., and Pollock, J.T., 1986, "Design Considerations for a Multiple-Star Photometer", Proceedings of the SPIE, **627**, Part 1, 132-135.

Caton, D.B., and Pollock, J.T., 1986, "Modern Lab Exercises in Astronomy I: Solid State Photometry", Bulletin of the American Astronomical Society **18**, 1986.

Caton, D.B. and Hawkins, R.L., 1987, "Observations and a Time of Minimum of TV Cet", IAU Inf. Bull.Var. Stars, No. 3004.

Caton, D.B., Hawkins, R.L., and Burns, W.C., 1989, "Times of Minimum Light for 16 Eclipses of 8 Apsidal Motion Binaries", IAU Inf.Bull.Var.Stars, No. 3408.

Caton, D.B., 1990, "Modern Photometry Lab Exercises for Students in Introductory Astronomy", in the Proceedings of IAU Colloquium #105: The Teaching of Astronomy, Cambridge Press, pp 144148.

Caton, D.B., 1990, "Curriculum for the Training of Astronomers", in the Proceedings of IAU Colloquium #105: The Teaching of Astronomy, Cambridge Press, pp 36-37.

Caton, D.B. and Hawkins, R.L., 1989, "Photometry from the East U.S.: Considerations for the GNAT", a chapter in Remote-Access Automatic Telescopes, Fairborn Press, 1989.

"A Multiple-Star Photometer", D.B. Caton and R.L. Hawkins, Bulletin of the American Astronomical Society 22, No. 1, 1990, p. 737.

"An Eclipsing Binary Light Curve Synthesis Computer Program for Instructional Use", D.B. Caton and J.T. Pollock, Bulletin of the American Astronomical Society 22, No. 1, 1990, p. 737.

"Modern Laboratory Exercises in Astronomy III: Filar Micrometer Measurementsl", J.T. Pollock and D.B. Caton, Bulletin of the American Astronomical Society 22, No. 4, 1990, p. 1237.

Caton, D.B., Burns, W.C., and Hawkins, R.L., 1991, "Times of Minimum Light for 17 Eclipses of 7 Detached Binaries", IAU Inf.Bull.Var.Stars, No. 3552.

Caton, D.B. and Burns, W.C., 1993, "Times of Minimum Light for 35 Eclipses of 21 Apsidal Motion Binaries", IAU Inf. Bull. Var. Stars, No. 3900.

"A Blind Man's Buff Through Astronomy", Mercury, Vol 25, No. 6, November-December 1996.

Caton, D.B. and Burns, W.C., "Times of Minimum Light for 22 Eclipses of 12 Detached Binaries", in preparation for submission to the IAU Inf. Bull. Var. Stars.

Bloomer, R., Wetterer, C., Mumpower, A., and Caton, D., 1998, "CCD Photometry of V1147 Cyg",IAU Inf. Bull. Var. Stars No. 4568.

Caton, D., "Supernova 1998aq in NGC 3982", IAU Circular No. 6898, May 8, 1998.

Castelaz, M.W., Luttermoser,D.G., Caton, D.B., and Piontek, R.A., "Phase Dependent Spectroscopy of Mira Variable Stars" to appear in the November, 2000, Astronomical Journal.

Caton, D.B., "Seeing Far: Building an Observational Astronomy Program," December, 2000 Physics Teacher.

Guest columnist on topics in science, technology and education, Charlotte Observer, 1996-current. with 60 columns written and published to date.

D.B. Caton, S.A. Davis and B.D. Walls," A Search for Trojan Planets: A Novel Approach for Looking for Transits of Extrasolar Planets," *Bulletin of the American Astronomical Society* **31** (5), 1534 (1999), non-refereed.

Castelaz, M.W., Luttermoser,D.G., Caton, D.B., and Piontek, R.A., "Phase Dependent Spectroscopy of Mira Variable Stars", Astronomical Journal **120**, 2627-2637 (2000).

McCollum, B., Castelaz, and Caton, D.B.,"First Detection of H-Alpha Emission in the Bright, Variable B Star HD6226", *Bulletin of the American Astronomical Society* 333 (1), (2001)

Caton, D.B., Davis, S.A. and Kluttz, K.A.," A Search for Trojan Extrasolar Planets: Planets in V442 Cas and YZ Aql?," *Bulletin of the American Astronomical Society* 332 (4), (2000)

Caton, D.B., "Seeing Far: Building an Observational Astronomy Program,"December, 2000 Physics Teacher.

Caton, D.B., Davis, S.A., Kluttz, K.A., Stamilio,R.J., and Wohlman, K.D., "Searching for Extrasolar Planets: A Status Report." Bulletin of the American Astronomical Society **33**, No.2., , p.890, 2001.

Caton, D.B., "What Should Students Remember." Physics Teacher **39,** pp.382-3, September 2001.

Davis, S.A., Caton, D.B., Kluttz, K.A., Wohlman, K.D., Stamilio,R.J., and Hix, K.B., "The Search for Extrasolar Planets: An Update." Bulletin of the American Astronomical Society **33**, No.4., , p.1303, 2001.

Caton, D.B., "Natality and the Moon Revisited: Do Birth Rates Depend on the Phase of the Moon?" Bulletin of the American Astronomical Society **33**, No.4., , p.1371, 2001.

Hawkins, R.L. and Caton, D.B., "Light Pollution: A Primer." Bulletin of the American Astronomical Society **33**, No.4., , p.1469, 2001.

J.R. Robertson, S.C.Stutts, D.B. Caton, "A Light Curve of Theta-1 Orionis A." Bulletin of the American Astronomical Society **34**, No.4., p.1096, 2002.

"Research at Appalachian State University's Dark Sky Observatory." Bulletin of the American Astronomical Society **35**, No.5, pp 1369-1370, 2003.

"Astronomy Back East: The Future of the University Telescope," a chapter in *The Future of Small Telescopes in the New Millennium*, *Volume II – The Telescopes We Use*. Dordrecht: Kluwer Academic Publishers, 2003.

Caton, D.B., "Discovery of a Scuti Star in V469 Cyg",", IAU Information Bulletin on Variable Stars, No. 5531, May 21, 2004.

Caton, D.B, Pollock, J.T., and Davis, S.A., "Automatic CCD Imaging Systems for Time-series CCD Photometry." Bulletin of the American Astronomical Society **36**, No.5, p. 1600, December, 2004.

Caton, D.B. and Smith. A.B, "Times of Minimum Light of Neglected Eclipsing Binaries", IAU Information Bulletin on Variable Stars, No. 5595. January 17, 2005

Caton, D.B. and Smith, A.B., "The Correct Period of V1898 Cyg"," part of IAU Information Bulletin on Variable Stars, No. 5599

Caton, D.B and Smith, A.B, "Discovery of the True Period and Solution of the Light Curve for V1898 Cygni," Bulletin of the American Astronomical Society **37**, No.4, p. 1169, December, 2005.

Bergey, N.A., Hawkins, R.L., Ellsworth, C.C. and Caton, D.B, "A Data Acquisition Program for an Astronomical Photometer," Bulletin of the American Astronomical Society **37**, No.4, p. 1291, December, 2005.

Wetterer, C.J., Bloomer, R.H. and Caton, D.B., "Photometric Study of the Eccentric-Orbit Binary V1147 Cygni," Publ. Astron. Soc. Pac., 118, 436-441 (2006)

"A GRB Optical Afterglow Automatic Response Telescope on Skynet," Smith, A.B. (student) and Caton, D.B, 2006, Bulletin of the American Astronomical Society, 38, No.4, p. 1109

"The Light Curve and Parameters of Eclipsing Binary System FL Orionis," Caton, D.B, and Smith, A.B.2006, Bulletin of the American Astronomical Society **38**, No.4, p. 1104

"Sleep and the Amateur Astronomer," D.B. Caton and J.E. Roberts, *Sky and Telescope*, December, 2006, pp. 49-52

"Precise Times of Minimum Light of Neglected Eclipsing Binaries," Smith, A.B. (student) and Caton, D.B., 2007, IAU Inf. Bull. Var. Stars, No. 5745

"An Increase in Stellar Activity in the Eclipsing Binary CM Dra," Nelson, T.E. (student) and Caton, D.B., 2007, IAU Inf. Bull. Var. Stars, No. 5789

Smith, A.B, Caton, D.B, Hawkins, RL., and Ivarsen, K., "Developing a Remote Robotic Observatory for a Global Network of Rapid-Response GRB Telescopes," Bulletin of the American Astronomical Society **41**, No.1, p. 431, January, 2009.

Caton, D.B and Hawkins, R.L., "Remote Observing: Equipment, Methods and Experiences at the Dark Sky Observatory," Bulletin of the American Astronomical Society **41**, No.1, p.p. 427-8, January, 2009.

Caton, D.B., Pollock, J.T. and Saken J.M, "Outreach Plans for Appalachian State University's Observatories," Bulletin of the American Astronomical Society **41**, No.1, p. 413, January, 2009.

Reed, P.A., McCluskey, G.E, Kondo, Y., Sahde, J., Guinan, E.F., Giménez, A., Caton, D.B., Riechart, D.E., Ivarsen, K.M., and Nysewander, M.C. "Ultraviolet Study of the Active Interacting Binary Star R Arae using Archival *IUE* Data," Mon. Not. R. Astron. Soc. **401**, 913-923, 2010.

"Several Well-observed Asteroidal Occultations in 2010," B. Timerson,, H. Abramson, J. Brooks, D. Caton, D. Clark, S. Conard, B. Cooke, D. W. Dunham, J. Dunham, S. Edberg, C. Ellington, J. Faircloth, S. Herchak, E. Iverson, R. Jones, G. Lucas, G. Lyzenga, P. Maley, L. Martinez, J. Menke, G. Mroz, P. Nolan, R. Peterson, S. Preston, G. Rattley, J. Ray, A. Scheck, J. Stamm, R. Stanton, R. Suggs, R. Tatum, W. Thomas, Minor Planet Bulletin **38**, No. 4,. 200-204, 2011.

Papers Presented

Oliver, J.P. and Caton, D.B., 1979, "Low Cost Computer Controlled Data System for Astronomical Photometry", Bull. A.A.S. **11**, 396.

Caton, D.B., 1982, "Starspot Observability: Observations and Models", Bull. A.A.S. **13**, 833.

Rafert, J.B. and Caton, D.B., 1982, "Design Considerations for a Computer Based Astronomical Announcements Service", Bull. A.A.S. **13**, 838.

Caton, D.B., 1984, "A Microcomputer Based Light Curve Display and Analysis System", Bull. A.A.S. **15**, 1000.

Caton, D.B., and Pollock, J.T., 1985, "A Four Star Photometer for Use on Small Telescopes", IAU Symposium No. 118, Christchurch, New Zealand, December 1985.

Caton, D.B., and Pollock, J.T., 1986, "A Four-Star Photoelectric Photometer Design", Bull.A.A.S. **17**, 1985, 899.

Caton, D.B., and Pollock, J.T., 1986, "Design Considerations for a Multiple-Star Photometer", SPIE Instrumentation in Astronomy VI, Tucson, March 4-8, 1986.

Caton, D.B., and Pollock, J.T., 1986, "Modern Lab Exercises in Astronomy I: Solid State Photometry", Bull. A.A.S. **18**, 1986.

Caton, D.B., 1988, "Modern Photometry Lab Exercises for Students in Introductory Astronomy", IAU Colloquium #105: The Teaching of Astronomy, Williams College, 1988.

Caton, D.B., 1989, "The Accuracy of Methods of Determining Time of Conjunction of Eclipsing Binary Systems", Bull. A.A.S. **21**, No. 1, 714.

Caton, D.B. and Hawkins, R.L., 1989, "Photometry from the East U.S.: Considerations for the GNAT", Tenth Annual Fairborn/Smithsonian /IAPPP Symposium, 1989.

Caton, D.B. and Hawkins, R.L., "A Two-Star Photoelectric Photometer", Society of PhotoOptical Instrumentation Engineers, Tucson AZ, 2/9. Caton, D.B. and Pollock, J.T.,1990, "An Eclipsing Binary Light Curve Synthesis Computer Program for Instructional Use", Bull. A.A.S. **22**, No. 1, 737.

Hawkins, R.L. and Caton, D.B.,1990, "A MultipleStar Photometer", Bull. A.A.S. **22**, No. 1, 737.

"Modern Laboratory Exercises in Astronomy III: Filar Micrometer Measurements", J.T. Pollock and D.B. Caton,1991, Bull. A.A.S. 22, No. 4, 1237.

"Modern Observational Astronomy Lab Projects", D.B. Caton, in the American Association of Physics Teachers' Announcer 21, No. 4, 1991, p. 64.

"An Automatic Observatory Dome Rotation System", K.A. Massopust and D.B. Caton in the Bull. A.A.S. **23**, No. 4, 1991, p. 1316.

"PC-Based Data Acquisition Software for Differential Photoelectric Photometry", W.B. Safley, G.A. Cone, and D.B. Caton in the Bull. A.A.S. **23**, No. 4, 1991, p. 1434.

"Modern Observational Astronomy Lab Projects", D.B. Caton, Bull. A.A.S. **23**, No. 4, 1991, p. 1442. "Modern Laboratory Exercises in Astronomy IV: CCD Imaging for Introductory Astronomy", D.B. Caton, 1992, Bull. A.A.S. **24**, No. 4, 1124.

"Development of an Automatic Photometric Telescope", W.C. Burns and D.B. Caton, Bull. A.A.S. **24**, No. 4, 1992, p. 1186.

"Modern Laboratory Exercises in Astronomy V: New Lab Exercises, Electronic Publication and Dissemination", D.B. Caton, R. O. Gray, J.T.Pollock, R. L. Hawkins, 1993, Bull. A.A.S. **25**, No. 4, 1430.

"Nativity and the Moon: Do Birthrates Depend on the Phase of the Moon?", D.B. Caton, Bull. A.A.S. **26**, No. 4, 1994, p. 1311.

"Astronomy in the News: A Non-linear Approach to Teaching Introductory Astronomy", D.B. Caton, Bull. A.A.S. **27**, No. 4, 1995, p. 1291.

"Research and Education through Eastern Skies: Astronomy at ASU's Dark Sky Observatory", First Annual Lowell Observatory Fall Workshop: The Role of Small Telescopes in Modern Astronomy", October 15-16, 1996, Flagstaff, Arizona. [See at www.acs.appstate.edu/dept/physics/lowell.html]

"Research and Education at Appalachian State University's Dark Sky Observatory", D.B. Caton, Bull. A.A.S. **28**, No. 4, 1996, p. 1323.

"A Speckle Interferometer System for Double Star Observations", C. True, D. Caton, B. Walls, Bull. A.A.S. **29**, No. 2, 1997, p. 788.

"CCD Photometry of Apsidal Motion Eclipsing Binaries", D.B. Caton, S. Templeton Bull. A.A.S. **29**, No. 2, 1997, p. 814.

"Times of Minimum Light of Eclipsing Binaries: Recent Results", D.B. Caton, S. Templeton, B. Walls, Bull. A.A.S. **29**, No. 5, 1997, p. 1281.

"Searching for New Variable Stars: An Educational Project to Mine Archival Data", B.D. Walls, C.E. Redmond, L.J. Murdick, D.B. Caton, Bull. A.A.S. **30**, No. 4, 1998, p. 1293.

"Variable Stars in M3: A Modern Versionof the Sky and Telescope Lab Exercise", D.B. Caton, B.D. Walls, Bull. A.A.S. **30**, No. 4, 1998, p. 1294.

"A Search for Trojan Planets: A Novel Approach for Looking for Transits of Extrasolar Planets", D.B. Caton, S.A. Davis, B.D. Walls, Bull. A.A.S. **31**, No. 5, 1999, p. 1534.

"A Search for Trojan Planets: A Novel Approach for Looking for Transits of Extrasolar Planets," (with students Brian Walls and Stephen Davis), American Astronomical Society's 195th Meeting, Atlanta, GA, January 15, 2000.

"A Search for Trojan Extrasolar Planets: Planets in V442 Cas and YZ Aql?," (with students Stephen Davis, Rebecca Stamilio and Kayce Wohlman), American Astronomical Society's 197th Meeting, San Diego, CA, January 8, 2001.

"Light Pollution", at Southern Star, Little Switzerland, NC, 5/26/00.

Light Pollution presentation given at the Triad Section meeting of the Illuminating Engineering Society of North America, in Winston-Salem, 10/17/00.

"First Detection of H-Alpha Emission in the Bright, Variable B Star HD6226", American Astronomical Society's 197th Meeting, San Diego, CA, January 11, 2001.

"Searching for Extrasolar Planets: A Status Report." American Astronomical Society's 198th Meeting, Pasadena, CA, June 7, 2001.

"Searching for Extrasolar Planets: An Update." American Astronomical Society's 199th Meeting, Pasadena, CA, January 7, 2002.

"Natality and the Moon Revisited: Do Birth Rates Depend on the Phase of the Moon?" American Astronomical Society's 199th Meeting, Pasadena, CA, January 8, 2002

"Light Pollution: A Primer." American Astronomical Society's 199th Meeting, Pasadena, CA, January 9, 2002.

"A Light Curve of Theta-1 Orionis A." American Astronomical Society's 201st Meeting, Seattle, WA, January 5-9, 2003

"Research at Appalachian State University's Dark Sky Observatory," American Astronomical Society's 2013rd Meeting, Atlanta, GA, January 4-8, 2004.

"The Observations of an Observer: The Ups and Downs of Lighting. Presented at the Comprehensive Outdoor Lighting Seminar, Triad Section of the Illuminating Engineering Society of North America, Greensboro, NC, May 20, 2003.

Caton, D.B, Pollock, J.T., and Davis, S.A., "Automatic CCD Imaging Systems for Time-series CCD Photometry," presented at the American Astronomical Society's 205th Meeting, San Diego, CA, January 9-13, 2005

Caton, D.B. "Public Outreach at Appalachian State's Dark Sky Observatory," presented at the topical annual meeting of the Astronomical Society of the Pacific, on 'Building Community: the Emerging EPO [Education and Public Outreach] Profession,' Tucson, AZ, September 14-16, 2005.

Caton, D.B and Smith, A.B, "Discovery of the True Period and Solution of the Light Curve for V1898 Cygni," presented at the American Astronomical Society's 207th Meeting, Washington, DC, January 8-12, 2006.

Bergey, N.A., Hawkins, R.L., Ellsworth, C.C. and Caton, D.B, "A Data Acquisition Program for an Astronomical Photometer," presented at the American Astronomical Society's 207th Meeting, Washington, DC, January 8-12, 2006.

Caton, D. B., and Ellsworth, C.C., "Astronomical Computing and .NET at the ASU Dark Sky Observatory," presented at the CodeCamp Microsoft .NET Development group meeting, Microsoft campus, Charlotte, NC, April 30, 2005

"A GRB Optical Afterglow Automatic Response Telescope on Skynet," Smith, A.B. (student) and Caton, D.B, presented at the American Astronomical Society's 209th Meeting, Seattle, WA, January 5-10, 2007.

"The Light Curve and Parameters of Eclipsing Binary System FL Orionis," Caton, D.B, and Smith, A.B, (student), presented at the American Astronomical Society's 209th Meeting, Seattle, WA, January 5-10, 2007

"A GRB Optical Afterglow Automatic Response Telescope on Skynet," Smith, A.B. (student), Caton, D.B, and Hawkins, R.L., presented at the annual North Carolina Astronomers meeting, held at Guilford Technical Community College, 9/28-29/07.

"An Increase in Stellar Activity in the Eclipsing Binary CM Dra," Nelson, T.E., and Caton, D.B, presented at the annual North Carolina Astronomers meeting, held at Guilford Technical Community College, 9/28-29/07.

"Public Outreach at Appalachian State's Dark Sky Observatory Cline Visitor Center," Caton, D.B, presented at the annual North Carolina Astronomers meeting, held at Guilford Technical Community College, 9/28-29/07

"Developing a Remote Robotic Observatory for a Global Network of Rapid-Response GRB Telescopes," Smith, A.B (graduate student), Caton, D.B, Hawkins, RL., and Ivarsen, K., presented at the American Astronomical Society's 213th Meeting, Long Beach, CA, January 4-8, 2009.

"Remote Observing: Equipment, Methods and Experiences at the Dark Sky Observatory, Smith, A.B., Caton, D.B and Hawkins, R.L., presented at the American Astronomical Society's 213th Meeting, Long Beach, CA, January 4-8, 2009.

"Outreach Plans for Appalachian State University's Observatories,@ Caton, D.B., Pollock, J.T. and Saken J.M,, presented at the American Astronomical Society's 213th Meeting, Long Beach, CA, January 4-8, 2009.

"The Cline Visitor Center: Trials and Tribulations of Public/Private Construction", Caton, D.B, presented at the annual North Carolina Astronomers meeting, held at Guilford Technical Community College, 10/18/09.

"STEMming the Loss of Science Majors: Astronomy as a Gateway to Science, Technology, Engineering and Math," invited after-dinner talk given to the North Carolina Section of the American Association of Physics Teachers meeting, 3/27/09, Catawba Valley Community College.

"Did the Cross-spiked Star Appear in Art Due to Telescope Optics?", Hensley, B. D. and Caton, D.B., presented at the American Astronomical Society's 215th Meeting, Washington, DC, January 3-7, 2010.

"An Unusual Interacting Eclipsing Binary", Hensley, Kelley, J., Gray, R., Mais, D., Caton, D. And Smith, A., presented at the American Astronomical Society's 215th Meeting, Washington, DC, January 3-7, 2010.

"Is the k Coefficient Constant?", Weaver, Christine and Caton, D.B., presented at the American Astronomical Society's 217th Meeting, Seattle WA, January 10-14, 2011.

"An Update on Activities at ASU's Dark Sky Observatory", Caton, D.B, presented at the annual North Carolina Astronomers meeting, held at Guilford Technical Community College, 10/1/11.

"A Search for the Eclipses of Neglected Southern Binary Stars", Pandolfi, L. And Caton, D.B, presented at the annual North Carolina Astronomers meeting, held at Guilford Technical Community College, 10/1/11.

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