

Matt A. Wood

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Education

- May 1990 **Ph.D.**, *Astronomy*, The University of Texas at Austin.
Dec 1985 **M.S.**, *Astronomy*, The University of Texas at Austin.
May 1983 **B.S.**, *Physics*, Iowa State University.

Experience

6/19-present **Professor of Physics and Astronomy**, Texas A&M University-Commerce.

Primary Responsibilities

- Teach graduate and undergraduate courses in physics and astronomy
- Maintain an active research program and mentor research students
- Department Graduate Advisor
- Faculty Senator

Accomplishments

- Faculty Senate Professional Service Award, 2020
- Dr. Harry Wade Senior Faculty Award, Spring 2021

11/17-5/19 **Vice Provost for Research and Dean of Graduate Studies**, Texas A&M University-Commerce.

Primary Responsibilities

- Overall planning, staffing, budgeting and supervision of 17 FTE staff in the Office of Sponsored Programs and the Graduate School
- Provide leadership in promoting faculty and student research, facilitate growth in sponsored research activities and expenditures, and manage research compliance efforts
- Provide leadership in the promotion, administration, and oversight of all graduate programs of instruction.

Accomplishments

- As Graduate Dean, worked with staff to implement the weekly GradNews newsletter that informs students and faculty of upcoming deadlines and required procedures.
- Streamlined the operation of the Office of Thesis and Dissertation Services so that theses and dissertations are routed more promptly than they have been previously.
- Implemented the Proposal Submission Incentive (PSI) which rewards faculty simply for submitting a proposal.
- Implemented the Faculty Research Incentive Pay Program (FRIPP) which rewards faculty who use external funding to fund any portion of their 9-month salary to support research activities.
- Implemented the Presidential GAR Initiative program providing funding for faculty to hire research GA's to assist with their projects with the goal of increasing external research funding.
- Worked to streamline the operations and efficiency of the three primary compliance committees (IACUC, IRB, and IBC).
- Implemented a new Export Control Manual for the university, and ensured the university was well positioned for export control issues.
- Visited departments and colleges to encourage the faculty to seek external funds, and demonstrate how to use our PIVOT software subscription to make keyword searches for external funding tailored to individual faculty.

8/12 – 10/17 **Department Head and Professor**, *Department of Physics & Astronomy*, Texas A&M University-Commerce.

Primary Responsibilities

- Overall planning, staffing, budgeting and supervision of 9 FTE faculty, 7 adjuncts, 8 graduate student assistants, and 1 full-time staff member for the Department of Physics & Astronomy.
- Instructor for undergraduate and graduate physics and astronomy courses
- Help faculty to secure the resources needed to support their teaching and research activities
- Chair, Council of Academic Department Heads (2016-2017 academic year)
- Serve as A&M-Commerce Board Member for the Texas Physics Consortium
- Evaluate faculty on a regular and continuing basis in the areas of teaching, research and service with appropriate recommendations for improvement

Accomplishments

- Named Texas A&M University-Commerce Distinguished Principal Investigator for Excellence in Research, 2014
- Awarded Outstanding Department Head Award by the Faculty Senate, 2015
- Undergraduate enrollment doubled and graduate enrollment up by a factor of 5.
- With Dr. William Newton, implemented revised program “Physics B.A./B.S. with Teaching Emphasis”
- With Drs. William Newton and Robynne Lock, worked to develop an online M.S. in Physics with Teaching Emphasis degree for high school physics teachers who may not have an undergraduate degree but who seek a Master’s degree in the discipline. Thirty-five (60) students currently enrolled in this program
- Established a 500 sq. ft. Undergraduate Physics Major’s Peer-Learning Lab (a.k.a. Student Lounge)
- Graduated 2 Ph.D. students and 2 M.S. students.
- Published the book *Python and Matplotlib Essentials for Scientists and Engineers*, which to date has over 26,000 chapter downloads
- Hosted "The Fourth International Workshop on AM CVn Stars" (2016)

8/04 – 7/12 **Professor**, *Department of Physics & Space Sciences*, Florida Institute of Technology.

Primary Responsibilities

- Teach graduate and undergraduate courses in physics and space sciences
- Maintain an active research program and mentor research students
- Engage in service activities for the department and university

Accomplishments

- Implemented the Astrobiology option under Space Sciences
- Chair of Graduate Research and Academic Steering Panel (2009)
- Founding Editor, Journal of the Southeastern Association for Research in Astronomy (JSARA)

8/96 – 7/04 **Associate Professor**, *Department of Physics & Space Sciences*, Florida Institute of Technology.

Primary Responsibilities

- Teaching, Research, and Service

Accomplishments

- Set up a Computational Physics Lab, funded by NSF-CCLI grant
- Graduated 1 Ph.D. student and 3 M.S. students
- Served on the University Web Advisory Committee
- Served as Board Chair for the SARA Telescope Consortium (1998-2000), and Board Member elsewhere

6/91 – 7/96 **Assistant Professor**, *Department of Physics & Space Sciences*, Florida Institute of Technology.

Primary Responsibilities

- Teaching, Research, and Service
- Colloquium Chair

Accomplishments

- Space Sciences Curriculum Coordinator
- Graduated Ph.D. student Dr. James Simpson, and 3 M.S. students
- Founding faculty advisor for student organization Students for the Exploration and Development of Space (SEDS)
- Served as Faculty Senator for 3 years
- Created departmental web pages in 1992 and maintained and updated through the years

6/90 – 5/91 **NSF–NATO Postdoctoral Fellow**, *Département de Physique*, Université de Montréal.

Sabbatical

8/08 – 5/09 **Visiting Professor**, *Department of Astrophysics*, Radboud University, Nijmegen, The Netherlands.

Professional Organizations

- American Astronomical Society
- American Physical Society
- American Association of Physics Teachers
- Royal Astronomical Society
- American Association of Variable Star Observers
- Sigma Pi Sigma

Grants (over \$2.8M as PI; \$1.1M at TAMUC since 2012)

2017-2020 **NSF AST-MRI**, *MRI: Acquisition of a 0.7-m Research Grade Telescope for Texas A&M University-Commerce*, \$338,169.

2013–2016 **NSF AST-MRI**, *MRI Consortium: Acquisition of Remote Observing Instrumentation for the Southeastern Association for Research in Astronomy Jacobus Kapteyn 1.0m Telescope*, \$473,950.

2014 **APS Intl. Travel Grant**, *Visiting Scientist at University of Cape Town*, \$2,000.

2013–2016 **NSF PHY-REU**, *REU Site in Physics and Astronomy at Texas A&M University-Commerce*, \$286,945, Co-PI.

2012–2015 **NASA Kepler Mission**, *Cataclysmic Variables in the Kepler Field*, \$29,522.

- 2011–2015 **NSF Stellar Astronomy & Astrophysics**, *Kepler Field Cataclysmic Variables and the Nature of Astrophysical Plasma Viscosity*, \$224,720.
- 2010–2012 **NSF AST-REU**, *The Southeastern Association for Research in Astronomy REU Summer Intern Program*, \$385,858.
- 2006–2010 **NSF AST-REU**, *The Southeastern Association for Research in Astronomy REU Site Program*, \$478,180.
- 2004–2006 **NSF AST-MRI**, *Acquisition of a Small Telescope for Astronomical Research: Florida Tech's Rising STAR Project*, \$347,040.
- 2002–2005 **NSF Stellar Astronomy & Astrophysics**, *Understanding Cataclysmic Variable Accretion Disk Dynamics and Viscosity*, \$62,800.
- 2001–2006 **NSF AST-REU**, *The SARA REU Site Program*, \$461,200.
- 1999–2000 **NSF DUE-ILI**, *Computational Physics at Florida Tech*, \$15,516.
- 1995–2000 **NASA Astrophysics Theory Program**, *White Dwarf Astrophysics and the Age and Evolution of the Galaxy*, \$173,000.
- 1992–1996 **NSF Stellar Astronomy & Astrophysics**, *White Dwarf Evolution and the Local Star Formation History*, \$69,500.

Awards at A&M-Commerce

- Distinguished Principal Investigator for Excellence in Research, 2014. Texas A&M University-Commerce
- Outstanding Department Head, 2015, Texas A&M University-Commerce
- Faculty Senate Professional Service Award, 2020, Texas A&M University Commerce
- Dr. Harry Wade Senior Faculty Award, Spring 2021

Professional Leadership Development

- *NCURA Fundamentals I Research Administration Workshop*, February 12–14, Scottsdale, Arizona.
- *PRIME&R Advancing Ethical Research Conference*, November 5–8, 2017, San Antonio, Texas.
- *APS National Mentoring Community Conference*, October 21–23, 2016, Houston, Texas.
- *AAPT-APS Building a Thriving Physics Department Conference*, February 6–8, 2015, Seattle, Washington.
- *AAPT-APS Physics Department Chairs Conference*, June 6–8, 2014, College Park, Maryland.
- *Decision Points for Academic Leaders: Ethics, Policy, and Leadership*, July 11–12, 2013, College Station, Texas.

Teaching Experience

- Calculus-Based Physics I: Mechanics
- Calculus-Based Physics II Electricity and Magnetism
- Waves, Acoustics, and Optics
- Computational Physics with Python (undergraduate and graduate level)
- Astrophysics 1: Stellar Structure and Evolution (taught both at undergraduate and graduate levels)
- Astrophysics 2: Galactic Structure and Cosmology (both undergraduate and graduate levels)
- Astronomy and Astrophysics for Educators (graduate level)
- Stars, Galaxies and the Universe
- Solar System
- Introductory Astronomy Laboratory
- Methods & Instrumentation in Astronomy
- Introduction to Plasma Physics
- Physics of the Atmosphere
- White Dwarf Stars and Accretion Phenomena in Astrophysics (Graduate)
- Musical Acoustics: The Science of Sound
- Advanced Electricity and Magnetism
- Integrated Science I and II

Visiting Scientist

- Mauna Kea Observatory
- Kitt Peak International Observatory
- Keck Observatory
- Hubble Space Telescope
- McDonald Observatory
- International Ultraviolet Explorer Satellite

Publications:

Total Refereed: 88

Non-Refereed: 81

h-index: 35

Book and Book Chapter

- 1) Wood, M. A. "Numerical Techniques in Astrophysics," 2012, Planets, Stars, and Stellar Systems (Springer), Vol 2: Astronomical Techniques, Software and Data, 481

- 2) Wood, M. A., “Python & Matplotlib Essentials for Scientists and Engineers” 2015, Morgan & Claypool Publishers, doi: 10.1088/978-1-6270-5620-5. Online ISBN: 978-1-6270-5620-5. Print ISBN: 978-1-6270-5619-9.
- 3) Ogunc, A., Scholten, P., and Wood, M. A. “Using Python for Principles of Econometrics, 5th Edition”, in preparation.

Refereed Publications

- 1) Wood, M.A., Winget, D.E., Nather, R.E., Hessman, F.V., Liebert, J. Kurtz, D.W., Wesemael, F., and Wegner, G. “The Exotic Helium Variable PG 1346+082,” 1987, *ApJ*, 313, 757.
- 2) Robinson, E.L., Shafter, A.W., Hill, J.A., Wood, M.A., and Mattei, J.A. “Detection of Superhumps and Quasi-Periodic Oscillations in the Light Curve of the Dwarf Nova SW Ursae Majoris,” 1987, *ApJ* 313, 772.
- 3) Winget, D.E., et al. (includes Wood, M.A.) “Discovery of a Massive Non-Luminous Orbital Companion to the White Dwarf G29-38,” 1990 *ApJ* 357, 630.
- 4) Tamanaha, C.M., Silk, J., Wood, M.A., and Winget, D.E. “The White Dwarf Luminosity Function: A Possible Probe of the Galactic Halo,” 1990 *ApJ* 358, 164.
- 5) Wood, M.A. “White Dwarf Stars and the Age of the Galactic Disk,” 1990 *J. Can. Roy. Ast. Soc.*, 84, 150.
- 6) Winget, D.E., et al. (includes Wood, M.A.) “Asteroseismology of the DOV Star PG1159–035 with the Whole Earth Telescope,” 1991 *ApJ* 378, 326.
- 7) Kepler, S.O., et al. (includes Wood, M.A.) “A Measurement of the Evolutionary Timescale of the Cool White Dwarf G117-B15A with the Whole Earth Telescope,” 1991, *ApJ Letters*, 378, L45.
- 8) Wood, M.A. “Constraints on the Age and Evolution of the Galaxy from the White Dwarf Luminosity Function,” 1992, *ApJ* 386, 539.
- 9) Clemens, J.C., et al. (includes Wood, M.A.) “Whole Earth Telescope Observations of V471 Tauri - The Nature of the White Dwarf Variations” 1992, *ApJ* 391, 773.
- 10) Bradley, P.A., Winget, D.E., and Wood, M.A. “Maximum Rates of Period Change for DA White Dwarf Models with Carbon and Oxygen Cores” 1992, *ApJ Letters*, 391, L33.
- 11) Wood, M.A., and Oswalt, T. D. “The Binary System L151-81: a Test of Accretion Theory” 1992, *ApJ Letters*, 394, L53.
- 12) Bradley, P.A., Winget, D.E., and Wood, M.A. “The Potential for Asteroseismology of DB White Dwarf Stars” 1993, *ApJ* 406, 661.
- 13) Winget, D. E., et al. (includes Wood, M.A.) “Whole Earth Telescope Observations of the DBV White Dwarf GD 358” 1994, *ApJ* 430, 839.

- 14) Bergeron, P., Wesemael, F., Beauchamp, A., Wood, M.A., Lamontagne, R., Fontaine, G., and Liebert, J. 1994, "A Spectroscopic Analysis of DAO and Hot DA White Dwarfs: The Implications of the Presence of Helium and The Nature of DAO Stars" *ApJ* 432, 305.
- 15) Kleinman, S.J. et al. (includes Wood, M.A.) "Observational Limits on Companions to G29-38" 1994, *ApJ* 436, 875.
- 16) Breger, M.A., et al. (includes Wood, M.A.) "The δ Scuti star FG Vir. I. Multiple pulsation frequencies determined with a combined DSN/WET campaign" 1995, *A&A*, 297, 473.
- 17) Muslimov, A.G., Van Horn, H.M., and Wood, M.A. "Magnetic Field Evolution in White Dwarfs: Complexity of the Magnetic Field and Hall Effect" 1994, *Ap.J.*, 442, 758.
- 18) Provencal, J., et al. (includes Wood, M.A.) "The Unusual Helium Variable AM CVn" 1995, *Ap.J.*, 445, 927.
- 19) Kepler, S.O., et al. (includes Wood, M.A.) "Whole Earth Telescope Observations of the DAV White Dwarf G226-29" 1995, *Ap.J.*, 447, 874.
- 20) Kawaler, S.D. et al. (includes Wood, M.A.) "Whole Earth Telescope Observations and Seismological Analysis of the Pre-White Dwarf PG 2131+066" 1995, *Ap.J.*, 450, 350.
- 21) Breger, M., et al. (includes Wood, M.A.) "The δ Scuti star FG Vir. II. A search for high pulsation frequencies" 1996, *A.&A.*, 309, 197.
- 22) Simpson, J. C., & Wood, M. A. "Classical Kinetic Theory Simulations Using Smoothed Particle Hydrodynamics" 1996, *Phys. Rev. E*, 54, 2077.
- 23) Oswalt, T., Smith, J.A., Wood, M. A., and Hintzen, P. "A Lower Limit of 9.5 Gyr on the Age of the Galactic Disk from the Oldest White Dwarf Stars" 1996, *Nature*, 382, 692.
- 24) Handler, G., et al. (includes Wood, M.A.) "New Whole Earth Telescope observations of CD-24 7599: steps towards δ Scuti star seismology" 1997, *MNRAS*, 286, 303.
- 25) Provencal, J., et al. (includes Wood, M.A.) "Whole Earth Telescope Observations of the Helium Interacting Binary PG1346+082 (CR Boo)" 1997, *Ap.J.*, 480, 383.
- 26) Richer, H.B., et al. (includes Wood, M.A.) "White Dwarfs in Globular Clusters: HST Observations of M4" 1997, *Ap.J.*, 484, 741.
- 27) Kleinman, S.J., et al. (includes Wood, M.A.), "Understanding the Cool DA White Dwarf Pulsator, G29-38," 1998, *Ap.J.*, 495, 424.
- 28) O'Brien, M. S., et al. (includes Wood, M.A.), "Whole Earth Telescope Observations of the Pulsating Pre-White Dwarf PG0122+200: a Star Cooled by Neutrinos" 1988, *Ap.J.*, 495, 458.

- 29) Wood, M.A., & Oswalt, T.D. “White Dwarf Cosmochronometry, I: Monte Carlo Simulations of Proper-Motion- and Magnitude-Limited Samples Using Schmidt’s $1/V_{max}$ Estimator” 1998, Ap.J., 497, 870.
- 30) Simpson, J.C., & Wood, M.A. “Time-Series Energy Production in SPH Accretion Disks: Superhumps in the AM CVn Stars,” 1998, Ap.J., 506, 360.
- 31) Montgomery, M.H., Klumpe, E.W., Winget, D.E., & Wood, M.A. “Evolutionary Calculations of Phase Separation in Crystallizing White Dwarf Stars,” 1999, Ap.J., 525, 482-491.
- 32) Wood, M.A., Montgomery, M.M., & Simpson, J.C. “Smoothed Particle Hydrodynamics Simulations of Apical and Nodal Superhumps,” 2000, ApJ Letters, 535, L39.
- 33) Vuille, F., et al. (includes Wood, M. A.) “Normal modes and Discovery of High-Order Cross-Frequencies in the DBV White Dwarf GD 358,” 2000, MNRAS, 314, 689.
- 34) Handler, G., et al. (includes Wood, M. A.) “Delta Scuti Network Observations of XX Pyx: Detection of 22 Pulsation Modes and of Short-Term Amplitude and Frequency Variations,” 2000, MNRAS, 318, 511.
- 35) Handler, G, et al. (includes Wood, M.A.) “Time series photometry of the δ -Scuti Star XX Pyxis,” 2000, J. Astrophys. Data, 6, 4A.
- 36) Wood, M.A., Oswalt, T.D., & Claver, C.F “Time series photometry of the δ -Scuti Star XX Pyxis: G. SARA 0.9-m Observations,” 2000, J. Astrophys. Data, 6, 4G.
- 37) Silvestri, N. M., Oswalt, T. D., Wood, M. A., Smith, J. A., Reid, I. N., & Sion, E. M. “White Dwarfs in Common Proper Motion Binary Systems: Mass Distribution and Kinematics,” A.J., 2001, 121, 503.
- 38) Breger, M., Garrido, R., Wood, M.A., Shobbrook, R.R., Handler, G., Bishof, K.M., Rodler, F., Stankov, A., Martinez, P., O’Donoghue, D., Szabo, R., Gray, R., and Kaye, A. 2002 “29 Frequencies for the δ Scuti Variable BI CMi: Results of the 1997-2000 Multisite Campaigns,” MNRAS, 329, 531-542.
- 39) Kurtz, D.K. et al. (includes Wood, M.A.) “Discovery of the Missing Mode in HR 1217 by the Whole Earth Telescope,” 2002, MNRAS, 330, 57-61
- 40) Vauclair, G. et al. (includes Wood, M.A.) “Asteroseismology of RXJ 2117+3412, the hottest pulsating PG 1159 star,” 2002, A&A, 381, 122-150.
- 41) Wood, M.A., Casey, M. J. Garnavich, P.M., & Haag, B. “Superhumps in The Helium Dwarf Nova KL Draconis,” 2002, MNRAS, 334, 87–93.
- 42) Handler, G., Metcalf, T.S., & Wood, M. A. “The Asteroseismological Potential of the Pulsating DB White Dwarf Stars CBS 114 and PG1456+103,” 2002, MNRAS, 335, 698-706.
- 43) Patterson, J., et al. (includes Wood, M. A.) “Superhumps in Cataclysmic Binaries. XXIII V442 Ophiuchi and RX J1643.7+3402,” 2002, PASP, 114, 1364-1381.

- 44) Handler, G. et al. (includes Wood, M. A.) "Amplitude and Frequency Variability of the Pulsating DB White Dwarf Stars KUV 05134+2605 and PG 1654+160 Observed with the Whole Earth Telescope" 2003, MNRAS, 340, 1031-1038
- 45) Schuh, S.L., et al. (includes Wood, M. A.) "2MASS J0516288+260738: Discovery of the First Eclipsing Late K+Brown Dwarf Binary System?" 2003, A&A, 410, 649-661
- 46) Kepler, S.O. et al. (includes Wood, M. A.) "The Everchanging Pulsating White Dwarf GD358" 2003, A&A, 401, 639-654
- 47) Mukadam, A. S. et al. (includes Wood, M. A.) "Constraining the Evolution of ZZ Ceti" 2003, ApJ, 594, 961-970.
- 48) Reed, M. D. et al. (includes Wood, M. A.) "The Evolution of a Hot Subdwarf: Observations of the Pulsating Subdwarf B Star Feige 48" 2004, MNRAS, 348, 1164-1174.
- 49) Castanheira, B. G. et al. (includes Wood, M. A.) "Observations of the Pulsating White Dwarf G 185-32" 2004, A&A, 413, 623.
- 50) Kurtz, D. W et al. (includes Wood, M. A.) "Pushing the ground-based limit: 14- μ mag photometric precision with the definitive Whole Earth Telescope Asteroseismic Data Set for the Oscillating Ap star HR 1217" 2005, MNRAS, 358, 651.
- 51) Wood, M. A. et al. "DQ Herculis in Profile: Whole Earth Telescope Observations and Smoothed Particle Hydrodynamics Simulations of an Edge-on Cataclysmic Variable System" 2005, ApJ 634, 570-584
- 52) Dolez, N., et al. (includes Wood, M. A.) "Whole Earth telescope observations of the ZZ eti Star HL Tau 76" 2006, A&A, 446, 237
- 53) Wood, M. A., Dolence, J., & Simpson J. C., "FITDisk: A Cataclysmic Variable Accretion Disk Demonstration Tool," 2005, PASP, 118, 442
- 54) Vuckovic, M., et al. (includes Wood, M. A.) "Whole Earth Telescope Observations of the Pulsating Subdwarf B Star PG0014+067" 2006, ApJ 646, 1230
- 55) Hynes, R.I., et al. (includes Wood, M. A.) "Further Evidence for Variable Synchrotron Emission in XTE J1118+480 in Outburst," 2006, ApJ 651, 401
- 56) Fu, J.-N., et al. (includes Wood, M. A.) "Asteroseismology of the PG 1159 star PG 0122+200," 2007, A&A, 467, 237
- 57) Wood, M. A. & Burke, C. J. "The Physical Origin of Negative Superhumps in Cataclysmic Variables," 2007, ApJ 661, 1042
- 58) Vaccaro, T. R.; Rudkin, M.; Kawka, A.; Vennes, S.; Oswalt, T. D.; Silver, I.; Wood, M.; Smith, J. Allyn "LP 133-373: A New Chromospherically Active Eclipsing dMe Binary with a Distant, Cool White Dwarf Companion,," 2007, ApJ 661, 1112
- 59) Rodriguez, E., et al. (includes Wood, M. A.) " δ Set stars in eclipsing binaries: the case of Y Cam," 2007, Comm. Asteroseismology, 150, 63

- 60) Nitta, A., et al. (includes Wood, M. A.) “Doubling the number of DBVs and a closer look at their Instability Strip,” 2007, *Comm. Asteroseismology*, 150, 249
- 61) Sullivan et al. (includes Wood M. A.) “Whole Earth Telescope observations of the hot helium atmosphere pulsating white dwarf EC20058-5234,” 2008, *MNRAS*, 387, 137
- 62) Costa et al. (includes Wood, M. A.) “The Pulsation modes of the Pre-White Dwarf PG 1195-035,” 2008, *A&A*, 477, 627
- 63) Dolence, J., Wood, M. A., & Silver, I. M. “Smoothed Particle Hydrodynamics Simulations of Direct Impact Accretion in AM CVn Stars,” 2008, *ApJ* 683, 375
- 64) Handler, G., Romero-Colmenero, E., Provencal, J. L., Sanchawala, K., Wood, M. A., Silver, I., & Chen, W.-P. “The pulsating DA white dwarf star EC14012-1446: results from four epochs of time-resolved photometry,” 2008, *MNRAS*, 388, 1444
- 65) Wood, M. A., “Synthetic direct impact light curves of the ultracompact AM CVn binary systems V407 Vul and HM Cnc,” 2009, *MNRAS*, 395, 378
- 66) Wood, M. A., Thomas, D. M., & Simpson, J. C. “SPH simulations of negative (nodal) superhumps: a parametric study,” 2009, *MNRAS*, 298, 2110
- 67) Still, M., Howell, S. B., Wood, M. A., Cannizzo, J. K., & Smale, A. P. “Quiescent Superhumps Detected in the Dwarf Nova V344 Lyrae by Kepler,” 2010, *ApJL*, 717, L113
- 68) Rodriguez, E., et al. (includes Wood, M. A.) “ δ Sct-type pulsations in Eclipsing Binary Systems: Y Cam,” 2010, *MNRAS*, 408, 2149
- 69) Cannizzo, J. K., Still, M., Howell, S. B., Wood, M. A., Cannizzo, J. K., & Smale, A. P. “The Kepler Light Curve of V344 Lyrae: Constraining the Thermal-Viscous Limit Cycle Instability,” 2011, *ApJ*, 725, 1393
- 70) Redaelli, M., et al. (includes Wood, M. A.) “The Pulsations of PG 1351+489,” 2011, *MNRAS*, 415, 1220
- 71) Vauclair, G., et al. (includes Wood, M. A.) “The period and amplitude changes in the coolest GW Virginis variable star (PG 1159-type) PG 0122+200,” 2011, *A&A*, 528, A5
- 72) Vican, Laura, et al. (includes Wood, M.A.) “A Thousand Hours of GW Librae: The Eruption and Aftermath,” 2011, *PASP*, 123, 1156-1168
- 73) Wood, M. A., Still, M., Smale, A. P., Howell, S. B., Cannizzo, J. K. “V344 Lyrae: An SU UMa Cataclysmic Variable in the Kepler Field,” 2011, *ApJ*, 741, 105
- 74) van Haften, L. M., Nelemans, G., Voss, R., Wood, M. A., & Kuijpers, J. “The Evolution of Compact X-Ray Binaries,” 2012, *A&A*, 537, A104
- 75) Cannizzo, J. K., Smale, A. P., Wood, M. A., Still, M. D., & Howell, S. B. “The Kepler light curves of V1504 Cygni and V344 Lyrae: A study of the Outburst Properties,” 2012, *ApJ*, 747, 117

- 76) Provencal, J. L., et al. (includes Wood, M. A.) “Empirical Determination of Convection Parameters in White Dwarfs. I. Whole Earth Telescope Observations of EC14012-1446,” 2012, ApJ, 751, 91
- 77) Ramsay, G. Cannizzo, J. K., Howell, S. B., Wood, M. A., Still, M., Barclay, T., Smale, A. “Kepler observations of V447 Lyr: an eclipsing U Gem Cataclysmic Variable,” 2012, MNRAS, 425, 1479
- 78) Howell, S. B., Everett, M. E., Seebode, S. A., Szkody, P., Still, M., Wood, M. A., Ramsay, Gavin, Cannizzo, J., Smale, A. “Spectroscopy of New and Poorly Known Cataclysmic Variables in the Kepler Field,” 2013, AJ, 145, 109
- 79) Ramsay, G., Howell, S. B., Wood, M.A., Smale, A., Barclay, T. Seebode, S. A., Gelino, D., Still, M., Cannizzo, J. K. “BOKS 45906: a CV with an orbital period of 56.6 min in the Kepler field?,” 2014, MNRAS, 438, 789
- 80) Thomas, D. M., & Wood, M. A. “The Emergence of Negative Superhumps in Cataclysmic Variables: Smoothed Particle Hydrodynamics Simulations,” 2015, ApJ, 883, 55
- 81) Ramsay, G., Hakala, P., Wood, M. A, Howell, S. B, Smale, A., Still, M., & Barclay, T. 2015, “Continuous ‘stunted’ outbursts detected from the Cataclysmic Variable KIC 9202990 using Kepler data”, MNRAS, 455, 277 (arXiv:1510.07448)
- 82) Cha, S.-H., & Wood, M. A. 2016, “GodunovSPH with Shear Viscosity: Implementation and Tests”, MNRAS, 458, 480
- 83) Keel, W. C., Oswalt, T., Mack, P., Henson, G., Hillwig, T., Batcheldor, D., Berrington, R., De Pree, C., Hartmann, D., Leake, M., Licandro, J., Murphy, B., Webb, J., & Wood, M. A. 2017, “The Remote Observatories of the Southeastern Association for Research in Astronomy (SARA)”, PASP, 129, 15002, arXiv:1608.06245
- 84) Boyd, D., de Miguel, E., Patterson, J., Wood, M., et al. (31 authors) 2017, “Observation and analysis of the eclipsing novalike variable DW Ursae Majoris during low and high states”, MNRAS, 466, 3417
- 85) Ramsay, G., Wood, M. A., Cannizzo, J., Howell, S. & Smale, A. 2017 “V729 Sgr: A long period dwarf nova showing negative superhumps during quiescence,” MNRAS, 469, 950
- 86) Patterson, J., et al. (includes Wood, M.A.), 2017, “OV Bootis: Forty Nights of World-Wide Photometry”, JAAVSO, 45, 224
- 87) Patterson, J., et al. (includes Wood, M.A.), 2020 “The Spin-Period History of Intermediate Polars”, ApJ, 897, 70.
- 88) Ramsay, G., Hakala, P., and Wood, M. A., 2021 “A 10^{35} erg Flare Seen in TESS Data on the Polar MQ Draconis”, MNRAS, submitted.

Non-Refereed Publications

- 1) Wood, M.A., Winget, D.E., Nather, R.E., Liebert, J., Wesemael, F., and Wegner, G. "PG 1346+082: An Interacting Binary White Dwarf System," 1987, in *Stellar Pulsation*, ed. A.N. Cox and W.M. Sparks (New York: Springer-Verlag), p. 348.
- 2) Shafter, A.W., Hill, J.A., Robinson, E.L., Szkody, P., Thorstensen, J.R., and Wood, M.A. "The Ultrashort Period Dwarf Nova SW Ursae Majoris," 1986, in *IAU Coll. #93: Cataclysmic Variables — Recent Multi-Frequency Observations and Theoretical Developments*, ed. H. Drechsel, (Dordrecht: Reidel), *Astr. & Sp. Sci.*, 130, 125.
- 3) Wood, M.A., Winget, D.E., and Van Horn, H.M. "A Comparative Study of White Dwarf Evolution," 1987, in *IAU Coll. #95: The Second Conference on Faint Blue Stars*, eds. A.G. Davis Philip, Donald S. Hayes and James W. Liebert (New York: L. Davis Press), p. 639.
- 4) Wood, M.A., and Winget, D.E. "ZZ Ceti Mode Trapping Revisited," 1988, in *Multimode Stellar Pulsation*, eds. G. Kovács, L. Szabados, and B. Szeidl (Konkoly Observatory · Kultura: Budapest) p. 199.
- 5) Wood, M.A., and Winget, D.E. "A Variational Approach to Understanding White Dwarf Evolution," 1988, in *IAU Coll. #114: White Dwarfs*, ed. G. Wegner (Berlin: Springer-Verlag) p. 282.
- 6) Provencal, J.L., et al. (includes Wood, M.A.) "The Time Dependence of the Phases of the Harmonics Relative to the 1490 sec Fundamental in PG1346+082," 1988, in *IAU Coll. #114: White Dwarfs*, ed. G. Wegner (Berlin: Springer-Verlag), p. 296.
- 7) Bradley, P.A., Winget, D.E., and Wood, M.A. "The Effect of Varying Helium and Hydrogen Layer Masses on the Pulsation Properties of White Dwarf Models," 1988 in *IAU Coll. #114: White Dwarfs*, ed. G. Wegner (Berlin: Springer-Verlag), p. 286.
- 8) Wood, M.A. "The Age and Formation of the Galaxy: Clues from the White Dwarf Luminosity Function," 1991 in *Proceedings of the 7th European Workshop on White Dwarfs*, eds. G. Vauclair and E. M. Sion (Kluwer Academic Publ.: The Netherlands), p. 89.
- 9) Kepler, S.O., et al. (includes Wood, M.A.) "A Measurement of the Evolutionary Timescale of the Cool White Dwarf G117–B15A with WET," 1991 *Proceedings of the 7th European Workshop on White Dwarfs*, eds. G. Vauclair and E. M. Sion (Kluwer Academic Publ.: The Netherlands), p. 143.
- 10) Fontaine, G., Brassard, P., Wesemael, F., Kepler, S.O., and Wood, M.A. "On the Interpretation of the dP/dt Measurement in G117–B15A," 1991 *Proceedings of the 7th European Workshop on White Dwarfs*, eds. G. Vauclair and E. M. Sion (Kluwer Academic Publ.: The Netherlands), p. 153.
- 11) Oswalt, T.D., et al. (includes Wood, M.A.) 1992, in *A.S.P. Conf Series Vol. 28: Automated Telescopes for Photometry and Imaging*, eds. S.J. Adelman, R.J. Dukes, Jr., and C. J. Adelman (San Francisco: Astron. Soc. Pacific), p. 111.

- 12) Oswalt, T.D., et al. (includes Wood, M.A.) “The SARA Kitt Peak 0.9-m Telescope Project: Collaborative Research in Astronomy,” 1992, Council on Undergraduate Research Newsletter, 13, 53.
- 13) Bradley, P.A., and Wood M.A., 1993, “An Example Demonstrating the Potential for Asteroseismology of DB White Dwarf Stars,” in IAU Coll. 139, New Perspectives on Stellar Pulsation & Pulsating Variable Stars, eds. J. Nemeč & J.M. Matthews, (Cambridge: Cambridge Univ. Press), p. 116.
- 14) Clemens, J.C., et al. (includes Wood, M.A.) 1993, “Whole Earth Telescope Observations of the DBV White Dwarf PG1115+158: Preliminary Results” in White Dwarfs: Advances in Observation and Theory, ed. M. A. Barstow (Dordrecht: Kluwer) p. 515
- 15) Wood, M. A. “New Model Sequences from the White Dwarf Evolution Code” 1994, in IAU Coll. 147: The Equation of State in Astrophysics, eds. G. Chabrier and E. Schatzmann (Cambridge U. Press: Cambridge) p. 612.
- 16) Wood, M.A. “Theoretical White Dwarf Luminosity Functions: DA Models” 1995, in Proceedings of the 9th European Workshop on White Dwarfs, eds. D. Koester and K. Werner (Berlin: Springer-Verlag) p. 41.
- 17) Handler, G., et al. (includes Wood, M.A.) “New WET observations of the δ Scuti star CD-24 7599: amplitude variability and discovery of 13 pulsation modes” 1995, in IAU Coll. 155: Astrophysical Applications of Stellar Pulsation, eds. R.S. Stobie, and S.P.A. Whitelock, (PASPC), p. 331.
- 18) Kepler, S.O., Giovannini, A., Kanaan, A., Wood, M.A., and Claver, C. F. “Non-Variabe Stars Inside the ZZ Ceti Instability Strip” 1995, Baltic Astronomy, 4, 157.
- 19) Kepler, S.O. et al. (includes Wood, M.A.) “Study of the Periodicities of the DAV White Dwarf G117–B15A with the Whole Earth Telescope” 1995, Baltic Astronomy, 4, 221.
- 20) Wood, M. A., and Simpson, J. C. “A 3-D SPH Model of Helium Accretion Disks in the Interacting Binary White Dwarf Systems AM CVn and EC15330–1403” 1995, Baltic Astronomy, 4, 402.
- 21) Breger, M., et al. (includes Wood, M.A.) “The Delta Scuti star FG Vir. II. A search for high pulsation frequencies” 1995, Delta Scuti Star Newsletter, 9, 3-4
- 22) Fahlman, G. G., et al. (includes Wood, M.A.) “Hubble Space Telescope Observations of the Globular Cluster M4” 1996, Proceedings of IAU Colloquium #174: Dynamical Evolution of Star Clusters, eds. J. Makino and P. Hut (Kluwer: Dordrecht) p 39–48.
- 23) Pryor, C., et al. (includes Wood, M.A.) “Searches for Binary Stars in Globular Clusters” 1996, Proceedings of IAU Colloquium #174: Dynamical Evolution of Star Clusters, eds. J. Makino and P. Hut. (Kluwer: Dordrecht) p. 193–202.

- 24) Ahrens, T.J., Oswalt, T.D, Smith, J.A., and Wood, M.A., “White Dwarfs in Wide Binaries: Calibrating the Age of the Galaxy,” 1996, IAPPPC, 64, 22.
- 25) Wood, M. A. “Monte Carlo Simulations of the White Dwarf Population and Luminosity Function” 1997, in White Dwarfs, eds. J. Isern, M. Hernanz and E. Garcia-Berro (Kluwer), p. 105.
- 26) Miller, N. A., Simpson, J. C., & Wood, M. A., 1997 “Visualizing an SPH Model of Short-Period Binary Accretion Disks” IAPPP Communications, 66, 64.
- 27) Wood, M.A. (invited review) “White Dwarf Cooling Curves and Searches for White Dwarfs” in Highlights of Astronomy Vol. 11B, as presented at the XXIIIrd General Assembly of the IAU, 1997 ed. Johannes Andersen. (Kluwer: Dordrecht), 427.
- 28) Oswalt, T.D., Smith, J.A., and Wood, M.A. “Wide Binaries: Probes of the Galaxy’s Dark Matter Content” in Highlights of Astronomy Vol. 11B, as presented at the XXIIIrd General Assembly of the IAU, 1997 ed. Johannes Andersen. (Kluwer: Dordrecht), 436.
- 29) Oswalt, T.D., Smith, J.A., and Wood, M.A. “Wide Binaries and the Age of the Galaxy” in IAU Symposium 183: Cosmological Parameters and the Evolution of the Universe, (Kluwer: Dordrecht), 162.
- 30) Simpson, J.C., Wood, M. A., & Burke, C.J. “The Effects of Inclination Angle on Superhump Pseudo-Lightcurves,” 1998, Baltic Astronomy 7 255-267.
- 31) Burke, C.J, Wood, M.A., & Simpson, J.C. “Aspect-Dependent SPH Simulation Lightcurves of Cataclysmic Variable Accretion Disks,” 1998, IAPPP Communications, 71, 44.
- 32) Patterson, J.D., Blatt, J.H., Moldwin, M.B., Oswalt, T.D., Rassoul, H.K., & Wood, M.A. “A Plan for Small Physics Department for the Twenty First Century” 1998, Proceedings of the 35th Space Congress, (CCTS: Cape Canaveral).
- 33) Kuehn, K., & Wood, M.A. “Taking the Pulse of SU UMa Stars” 1999, IAPPP Communications, 73, 51
- 34) Baker-Branstetter, S., & Wood, M.A. “The Effects of Mass Ratio in Stable Superhumping Cataclysmic Variable Systems Using Smoothed Particle Hydrodynamics,” 2000, IAPPP Comm., 76, 31-40.
- 35) Arentoft, T., et al. (includes Wood, M.A.) “First Results of the 17th DSN Campaign: Photometry of XX Pyx,” 2000, in The Impact of Large-Scale Surveys on Pulsating Star Research, ASP Conf. Series Vol 203, IAU Coll #176, eds. L. Szabados and D. Kurtz, p 469-470.
- 36) Wood, M. A., et al. “Whole Earth Telescope Observations and Smoothed Particle Hydrodynamics Simulations of DQ Herculis,” 2000, Baltic Astronomy, 9, 211.
- 37) Wood, M. A. “DQ Herculis,” 2000, Encyclopedia of Astronomy and Astrophysics, IOP Publishing, Ltd..

- 38) Silvestri, N. M., Oswalt, T. D., Wood, M. A., Smith, J. A., Reid, I. N., & Sion, E. M. 2001, "The Mass Distribution and Kinematics of White Dwarfs in Wide Binary Systems," in 12th European Workshop on White Dwarf Stars, ASP Conference Series Vol. 226, Eds. J. L. Provencal et al. p 246.
- 39) Jones, K. & Wood, M. A. 2001, "IDL Visualization of $q = 0.075$ SU UMa Dwarf Novae," IAPPP Comm., in press.
- 40) Casey, M., & Wood, M. A. 2002, "Discovery of Superhumps in the Helium Dwarf KL Draconis," IAPPP Comm., in press.
- 41) Gobeille, D. & Wood, M. A. 2002, "Monte Carlo Simulations to Generate Luminosity Functions for White Dwarfs in Open and Globular Clusters," IAPPP Comm., in press.
- 42) Oswalt, T. D. & Wood, M. A. 2002, "Research in a Virtual Astronomy Department: The Southeastern Association for Research in Astronomy (SARA) and the Future of Small Telescopes," in The Future of Small Telescopes, ed. T. Oswalt.
- 43) Perrine, R. P. & Wood, M. A. 2002, "Parallelizing an SPH Code," IAPPP Comm., in press.
- 44) Zima, W. et al. (includes Wood, M.A.) 2002, "The Delta Scuti Network: Steps Towards Successful Asteroseismology of Delta Scuti Stars," ASP Conf. Ser. 259: IAU Colloq. 185: Radial and Nonradial Pulsations as Probes of Stellar Physics, 598
- 45) Handler, G., Wood, M. A., Nitta, A., & Collaborators, T. W. E. T. N. O. 2002, "Towards Ensemble Asteroseismology of the Pulsating DB White Dwarf Stars," ASP Conf. Ser. 259: IAU Colloq. 185: Radial and Nonradial Pulsations as Probes of Stellar Physics, 608
- 46) Wood, M. A. 2002, "SARA: A Node in the Whole Earth Telescope and Delta Scuti Networks," IAPPP Comm., in press.
- 47) Schuh, S.L. et al. (includes Wood, M. A.) 2003, in White Dwarfs: NATO Science Series II, 105, 263.
- 48) Smith, J. A., Oswalt, T. D., and Wood, M. A. 2003, in White Dwarfs: NATO Science Series II, 105, 399.
- 49) Castanheira, B.G., et al. (includes Wood, M.A.) 2003, "WET Observations of the DAV G185-32," Baltic Astronomy, 12, 39-44.
- 50) Kepler, S.O., et al. (includes Wood, M.A.) 2003, "WET Observations of GD 358 in 2000," Baltic Astronomy, 12, 45-53.
- 51) Schuh, S.L., et al. (includes Wood, M.A.) 2003, "PG 1605+072 in WET XCov22: Support for the Multi-Site Spectroscopic Telescope," Baltic Astronomy, 12, 55-70.
- 52) Mukadam, A.S., et al. (includes Wood, M.A.) 2003, "Constraining the Evolution of ZZ Ceti," Baltic Astronomy, 12, 71-103.

- 53) Kurtz, D.W., et al. (includes Wood, M.A.) 2003, "High Precision with the Whole Earth Telescope: Lessons and Some Results From XCov20 for the roAp Star HR 1217," *Baltic Astronomy*, 12, 105-117.
- 54) Oswalt, T. D. & Wood, M. A. "Research in a Virtual Astronomy Department: The Southeastern Association for Research in Astronomy (SARA) and the Future of Small Telescopes" 2003, in *The Future of Small Telescopes, Vol II*, ed. T. D. Oswalt (Kluwer: Dordrecht) p. 219
- 55) Robertson, J. R. & Wood, M. A. 2003, *IAPPP Comm.*
- 56) von Hippel, T., Winget, D. E., Kilic, M., Jefferyes, B., Saumon, D., & Wood, M. A. 2003, "White Dwarfs and the Star Formation History of the Galaxy," in *White Dwarfs: Galactic and Cosmologic Probes, 25th meeting of the IAU, Joint Discussion 5, 16-17 July 2003, Sydney, Australia*, 5, 21
- 57) Smith, J. A., Oswalt, T. D., Wood, M. A., & Silvestri, N. M. 2003, "Age of Local Galactic Disk from the WDLF for CPMBs," in *White Dwarfs: Galactic and Cosmologic Probes, 25th meeting of the IAU, Joint Discussion 5, 16-17 July 2003, Sydney, Australia*, 5, 27
- 58) Homewood, A., Hartmann, D. H., & Wood, M. 2005, "GRB 050505: SARA Observations," *GRB Circular Network*, 3398, 1
- 59) von Hippel, T., et al. 2005, "The White Dwarf Luminosity Function: The Shape of Things to Come," *ASP Conf. Ser. 334: 14th European Workshop on White Dwarfs*, 334, 3
- 60) Nitta, A., et al. 2005, "New DBVs from the SDSS," *ASP Conf. Ser. 334: 14th European Workshop on White Dwarfs*, 334, 585
- 61) Wood, M.A., Van Hamme, W., & Wilkat, V. 2006, "New Eclipse Timings and Preliminary Analysis of USNO-A2.0 1425-05691757" *JAAVSO*, 49, 1.
- 62) Foing, B. H., et al. (includes Wood, M. A.) 2006, *LPI Contributions*, 1327, 9
- 63) Updike, A. C., Puls, J., Hartmann, D. H., Wood, M., Cardenzana, J., Pederson, S. "GRB 070612A: continued SARA observations," 2007, *GRB Coordinates Network*, 6530, 1
- 64) Updike, A. C., Milne, P. A., Williams, G. G., Puls, J., Hartmann, D. H., Wood, M., Cardenzana, J., Pederson, S, "SWIFT J195509.6+261406 (GRB 070610): further observations,," 2007, *GRB Coordinates Network*, 6536, 1
- 65) Ehrenfreund, P., et al. (includes Wood, M. A.) "SMART-1 Impact Ground-based Campaign," 2007, *Lunar and Planetary Institute Conference Abstracts*, 38, 2446
- 66) Sullivan, D., et al (includes Wood, M. A.) "The Hottest Known DBV White Dwarf," 2007, *Astronomical Society of the Pacific Conference Series*, 372, 629
- 67) Vauclair, G., et al. (includes Wood, M. A.) "Abell 43 and PG 0122+200: a Look at the Beginning and at the End of the PG 1159 Instability Strip," 2007, *Astronomical Society of the Pacific Conference Series*, 372, 641

- 68) Teichgraeber, C., Wood, M. A., Patterson, J. Monard, B., Rea, R., & Kemp, J., “Updates on Two New Cataclysmic Variable Systems: 1RXS J173021.5-55933 and 1RXS J180340.0+401214,” 2007, JSARA, 1, 24
- 69) Cardenzana, J. V., and Wood, M. A. “Synthetic Time Series Emission Line Profiles of Negatively Superhumping Cataclysmic Variable Stars,” 2008, JSARA, 2, 35
- 70) Vauclair, G., et al. (includes Wood, M. A.) “Rate of change of the pulsation periods in the PG 1159 star PG 0122+200,” 2008, IAU Symposium, 252, 157
- 71) Handler, G., et al. (includes Wood, M. A.) “Constraining convection parameters from the light curve shapes of pulsating white dwarf stars: the cases of EC 14012-1446 and WD 1524-0030,” 2008, Journal of Physics Conference Series, 118, 012057
- 72) Nelemans, G., Wood, M. A., et al. “The Astrophysics of Ultra-Compact Binaries,” 2009, Astro2010: The Astronomy and Astrophysics Decadal Survey, 2010, 221
- 73) Provencal, J. L., et al. (includes Wood, M. A.) “Preliminary XCOV26 results for EC14012-1446,” 2009, Journal of Physics Conference Series, 172, 012061
- 74) Schwieterman, E. W., Wood, M. A., et al. “Time-Series Photometry of GW Librae One Year After Outburst,” 2010, JSARA, 3, 6
- 75) Piwowar, D. T., Wood, M. A., & Schwieterman, E. W. “Time Series Photometry of the Cataclysmic Variable Systems VY Aquarii and V2491 Cygni,” 2010, Journal of the Southeastern Association for Research in Astronomy, 3, 11
- 76) Kreidberg, L. R., Wood, M. A., & Wetzstein, M. “Modeling Cataclysmic Variable Accretion Disks with VINE,” 2010, JSARA, 4, 38
- 77) Baez, W. D., Wood, M. A., & Silver, I. M. “Hydrodynamic Simulation of the Direct Impact Accretion Model with PLUTO,” 2010, JSARA, 4, 42
- 78) Tutchton, R. M., Wood, M. A., et al., “Sonification of of Kepler Field SU UMa Cataclysmic Variable Stars V344 Lyr and V1504 Cyg,” 2012, JSARA, 5, 21
- 79) Vauclair, G., et al. (includes Wood, M. A.), “Period and Amplitude Changes in the GW Vir Variable Star PG 0122+200: Evidence for Resonant Coupling,” 2012, in Solar/Stellar Physics with Helio- and Asteroseismology, ASP Conf. Proc. 462, 160
- 80) Kinch, B.E., Wood, M. A., et al. “MV Lyrae: A Preliminary Application of Nonlinear Time-Series Analysis to a Cataclysmic Variable in the Kepler Field,” 2012, JSARA, 7, 2-12
- 81) Wood, M. A. & Simpson, J. C., “DiskSim: Modeling Accretion Disk Dynamics with SPH,” 2018, Astrophysics Source Code Library, record ascl:1811.013