Stephen R. Addison, PhD
President of the Arkansas Academy of Sciences (2019-2020)
Professor of Physics
Dean, College of Natural Sciences and Mathematics
University of Central Arkansas
Conway, AR 72035
Phone: (501) 450-5083; FAX (501) 450-5084
E-mail: saddison@uca.edu

Education

PhD Physics, dissertation in underwater acoustics, University of Mississippi, December 1984.
MS Physics, University of Mississippi, May 1982.
BSc Physics, University of Wales, July 1978. (Now Cardiff University)

Experience

University of Central Arkansas
Dean, College of Natural Sciences and Mathematics, July 2014-present.
Interim Dean, College of Natural Sciences and Mathematics, February 2012-June 2014.
Co-Director, UCA STEMteach, January 2012-present.
Chair, Department of Physics and Astronomy, July 2002-February 2012.
Interim Director, Arkansas Center for Mathematics and Science Education, July 2006-June 2008.
Associate Dean, College of Natural Sciences and Mathematics, July 2000-June 2003
Interim Chair, Department of Computer Science, Academic Year 2001-2002.
Assistant Dean, College of Natural Sciences and Mathematics, January 1995 - February 1998, July 99-June 2000.
Interim Dean, College of Natural Sciences and Mathematics, February 1998 - June 1999.
Interim Chair, Department of Physics, Academic Year 1993 - 1994.
Professor of Physics, 2003-present.
Associate Professor of Physics, 1990-2003.
Assistant Professor of Physics 1986-1990.
Instructor of Physics, 1984-1986.

University of Arkansas
Adjunct Research Instructor, Graduate Institute of Technology, Summer 1985. (This formerly standalone campus became part of the University of Arkansas at Little Rock in 1987.)

Administrative Roles

Dean, College of Natural Sciences and Mathematics, University of Central Arkansas (July 2014-present)
Responsible for budget, curriculum, faculty recruitment and development, recommenda-

tions for promotion, tenure, advancement, and salary increases, and long-range planning for the College. The College consists of departments of Biology, Chemistry, Computer Science, Mathematics, and Physics and Astronomy, the UCA STEM Institute, and the UCA STEM Residential College.
Notable successes include the development and implementation of the Arkansas Cyber range, Programs in Cyber Security and Data Science, the University's first engineering programs, UCA STEMteach program for pre-service teachers and the development and support of student recruiting and retention initiatives.

Interim Dean, College of Natural Sciences and Mathematics, University of Central Arkansas (February 2012-June 2014)
Responsible for budget, curriculum, faculty recruitment and development, recommendations for promotion, tenure, advancement, and salary increases, and long-range planning for the College. The College consists of departments of Biology, Chemistry, Computer Science, Mathematics, and Physics and Astronomy, the UCA STEM Institute, and the UCA STEM Residential College.
Notable successes include the development and implementation of the UCA STEMteach program for pre-service teachers and the development and support of student recruiting and retention initiatives.

Chair, Department of Physics and Astronomy, University of Central Arkansas (2002-February 2012)
Responsible for faculty recruitment and development; faculty evaluations, including promotion, tenure, advancement, and salary recommendations; budget administration, scheduling; and overseeing the curriculum.
Notable successes include implementing and recruiting students into degree tracks that had been developed but not used, recruiting and developing a diverse faculty, increasing the number of graduates, and significantly raising the departmental profile.

Interim Director, Arkansas Center for Mathematics and Science Education, University of Central Arkansas (2006-2008)
Responsible for staff recruitment and development; personnel evaluations, including salary recommendations, budget administration, grant writing, grant management and maintaining and developing relationships with teachers, school districts, and other stakeholders in P-16 education.
Notable successes include securing funding for the directorship to be funded on an ongoing basis and recruiting and hiring an effective director.

Associate Dean, College of Natural Sciences and Mathematics, University of Central Arkansas (2000-2003)
Responsible for summer budget, problem resolution in departmental budgets, student academic problems, research and grants, facilities development and planning, advisor to dean in personnel and salary issues. The College consists of departments of Biology,

Chemistry, Computer Science, Mathematics, and Physics and Astronomy.

Assistant Dean, College of Natural Sciences and Mathematics, University of Central Arkansas (1995-1998, 1999-2000)
Responsible for summer budget, problem resolution in departmental budgets, student academic problems, research and grants, facilities development and planning, advisor to dean in personnel and salary issues.
Notable successes include establishing policies and procedures for the new college, increasing the number of successful grant proposals from the college, and with many others working to foster and develop a culture of student research participation in the college.

Interim Dean, College of Natural Sciences and Mathematics, University of Central Arkansas (1998-1999)
Responsible for budget, curriculum, faculty recruitment and development, recommendations for promotion, tenure, and salary increases, and long-range planning for the College. The College consists of departments of Biology, Chemistry, Computer Science, Mathematics, and Physics and Astronomy.

Interim Chair, Department of Computer Science, University of Central Arkansas (2001-2002)
Responsible for faculty recruitment and development; faculty evaluations, including promotion, tenure, and salary recommendations; budget administration; scheduling; and overseeing the curriculum.

Interim Chair, Department of Physics, University of Central Arkansas (1993-1994)
Responsible for faculty recruitment and development; faculty evaluations, including promotion, tenure, and salary recommendations; budget administration, scheduling; and overseeing the curriculum.

Planning Committee, Arkansas Space Grant Consortium (1991-2008)
Was one of the founders, participated in the development of original and continuing proposals, aided in the development of programs, served on the budget oversight committee, organized annual conferences, reviewed submitted proposals, awarded grants, responsible for operations at the University of Central Arkansas.

National Council Member, Society of Physics Students
Zone Councilor for Zone 10, (1991-1994)
Responsible for operations in Arkansas, Louisiana, Mississippi, and West Tennessee. Participated in national policy decisions, organized zone conferences, selected outstanding chapters.

Planetarium Director, Department of Physics and Astronomy, University of Central Arkansas (1987-1994)
Participated in design and selection. Assured continued operation. Scheduled maintenance. Scheduled internal and external users. Developed audio-visual collections.

Teaching

Courses Taught

Physical Science For General Education	Descriptive Astronomy
College Physics 1	College Physics 2
University Physics 1	University Physics 2
Science and Engineering Physics I	Science and Engineering Physics II
Observational Astronomy	Instrumentation in Astronomy
Astrophysics	Energy
Thermal Physics	Heat and Thermodynamics
Electromagnetism 1	Electromagnetism 2
Optics	Acoustics
Mechanics	Geology
Topics in Theoretical Physics (gr)	Mathematical Methods in Physics
Fluid Mechanics	Introduction to Solid State Physics
Junior Laboratory 1	Junior Laboratory 2
Senior Laboratory	Advanced Laboratory
Computational Physics	Demonstration Experiments in Physics (gr)
Quantum Theory 1	Quantum Theory 2
Research Topics in Computer Science	Statics
Physics for Secondary Teachers	Concepts of Physical Science 1 (gr)
Research Methods	Electronics
Honors Junior Seminar: Cybersecurity	

Mentoring of Student Scholarship

Many students have been mentored, including students in Special Problems in Physics and Special Problems in Astronomy, Oxford Tutorials, Departmental Honors, Honors College Honors, and Student Fellows of the Arkansas Space Grant Consortium.

Honors Theses Mentored

Erik Young, Quasicrystals, 1991 (Departmental)
David Arnhart, Science: Evolution or Revolution, 1991 (Honors)
Christopher Sheesley, The Life and times of Albert Einstein, 1993-94 (Honors)
Brian Lemon, Quantum Interpretations, 2000-2001 (Honors)
Matt Helmus, Chaotic Thought in the Founders of Social Theory, 2000-2001 (Honors)
David James, Stepping on TOEs: Why a Theory of Everything Can Never be Scientific, 2001-2002 (Honors)
Luke Walker, Identity and Distinguishability, 2001-2002 (Departmental)

Luke Walker, Identity and Distinguishability: Paradoxes and Resolutions, 2001-2002 (Honors)
Josh Hight, Automated Surveillance: A survey of concepts and social implications, 2001-2003 (Honors)
Angela Roper, Isaac Newton and the Evolution of the Theory of Universal Gravitation, 2004-2005 (Honors)
Katie Reynolds, Chaos: Finding the needle in the Haystack, 2006-2007 (Honors)
Jeremy Lusk, Communicating Science: Turning Scientific Understanding into Public Knowledge, 2009-2010 (Honors)
Skipper Thurman, Adventures in Mathematics Through Signal processing, 2011-2012 (Honors)
Melissa A. Beltran, We are the 12%: An Exploration of Gender disparity in Computer-Related Majors and Potential Ways to Fix It, 2012-2013 (Honors)

Student Fellows of the Arkansas Space Grant Consortium

R.W. Bartlett, Earth's Magnetosphere, 1991-1992.
Lee Ann Criswell, Planetary Magnetospheres, 1991-1993.
Curtis Fields, Astronomical Databases, 1992.
Elden May, Atmospheric Contributions to the Earth's Geopotential, 1993-1994.
J. Zachary, CCD Cameras 1994-1996.
T. Johnson, CCD Cameras, 1994-1996.
M. Kerksieck, Astronomical calculations, experimental acoustics, 1994-1996.
John Lahmann, Low frequency sound production, 2010-2011.

Mentored Student Research Publications[1]

Modeling of the eye of Littorina, Christopher Melton, Faculty Mentor: Stephen R. Addison 7^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2001.

Symmetry Analysis of the Reduced Maxwell-Bloch Equations with a Permanent Dipole, Chad Fendt, Faculty Mentors: Stephen R. Addison and Danny Arrigo, 9^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2003.

Particle Induced x-ray emission experiments (PIXE) to determine sample elemental composition and unknown sample thicknesses, C. Eric Easton and Chris A. McNeill, Faculty Mentors: Rahul Mehta and Stephen R. Addison. 10^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, 2004.

Rutherford and Non-Rutherford Scattering of 1.5 MeV Protons by 28Ni, 6C, and 8O Targets, Jason House and Bart Dunlap, Faculty Mentors: Rahul Mehta and Stephen R. Addison. 10^{th} UCA College of Natural Sciences and Mathematics Annual Student Research

[1]This section lists presentation and posters of students that I mentored where I was not credited as an author

Symposium, 2004.

Kinematics in Rutherford Scattering, Scott Sullivan and Angela Roper, Faculty Mentors: Rahul Mehta and Stephen R. Addison. 10^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, 2004.

Applied chaos: Finding the needle in the haystack, Travis Hoggard, Katharina Ochterbeck, and Katie M. Reynolds, Faculty Mentors: Rahul Mehta and Stephen Addison, 11^{th} UCA College of Natural Sciences and Mathematics Annual Student Research symposium, April, 2005.

Chaos in Electric Circuits, Travis Hoggard, Katharina Ochterbeck, and Katie M. Reynolds, Faculty Mentor: Stephen R. Addison, 12^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium April, 2006.

Kinematical Scattering Factor for Alpha and Carbon Ion Beams Incident on Target Films, Sharon Jones, Holly Smith, Steven Stoll, Faculty Mentors: Stephen Addison, Rahul Mehta, 13^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2007.

Rutherford Back Scattering of Alpha and Carbon Ions From Carbon and Praseodymium, Sule Olabode, Stephanie Lanier, and Andrew Woodward, Faculty Mentors: Stephen Addison, Rahul Mehta, 13^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2007.

Verification of Rutherford Scattering (atomic number, energy and angular dependence), Saroj Adhikari and Caroline Davis, Faculty Mentors: Rahul Mehta and Stephen R. Addison 15^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2009.

Regions of Constant Magnetic Field Inside a Helmholtz Apparatus, Patrick Kells and Nathan Walsh, Faculty Mentor: Stephen R. Addison, 15^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2009.

Materials Analysis Using X-Ray Fluorescence (XRF) Spectrometry, Michael C. Kitchens and Brian Halldorson, Faculty Mentors: Rahul Mehta and Stephen R. Addison,15^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2009.

Wave-Particle Duality, Luis R. Suazo, Faculty Mentor: Stephen R. Addison, 15^{th} UCA Col-

lege of Natural Sciences and Mathematics Annual Student Research Symposium, April 2009.

Determination of thickness of Copper, Iron, Silver, and Titanium using Rutherford Scattering, Chris Willette and Joshua Lieblong, Faculty Mentors: Stephen R. Addison and Rahul Mehta, 15^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2009.

Gamma Ray Emissions in Beta-Decaying Elements, Pete Bland and Dustin Morris, Faculty Mentors: Rahul Mehta and Stephen Addison, 16^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2010.

X-Ray Fluorescence: Identification of Unknown Samples, Renee Brock and Josh Lieblong, Faculty Mentors: Stephen Addison and Rahul Mehta, 16^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2010.

Energy Loss of Alpha Particles in Copper Foils, Brando Stocks and Trey French, Faculty Mentors: Rahul Mehta and Stephen Addison, 16^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2010.

Determination of Thin-Film Sample Thickness Using a He^{+} Ion Beam, Alec Watson and Asami Nishikawa, Faculty Mentors: Stephen Addison and Rahul Mehta, 16^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2010.

Testing system components for a low-frequency, impulsive Helmholtz Resonator John Lahmann, Faculty Mentors: Stephen R. Addison,William V. Slaton, and Carl K. Frederickson, 17^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2011.

Angular Correlation of Two 511 keV Gamma-Rays from Sodium-22, Niravkumar Patel, Matthew Tubbs and Vinh Lu, Faculty Mentors: Rahul Mehta, Stephen R. Addison, and Carl K. Frederickson, 17^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2011.

A Trigger for a Helmholtz Resonator, John Lahmann, Faculty Mentors: Stephen R. Addison, William V. Slaton, and Carl K. Frederickson, 18^{th} UCA College of Natural Sciences and Mathematics Annual Student Research Symposium, April 2012.

Phase Transitions within Ferrofluids, Bryan M. Wofford, Faculty Mentor: Stephen R. Addison, 19^{th} UCA College of Natural Sciences and Mathematics Annual Student Research

Symposium, April 2013.

Phase Transitions within Ferrofluid and Piezoelectic fluid (Poster), Bryan Wofford, Joint Spring 2013 Meeting of the Texas Sections of the APS and AAPT and Zone 13 of the SPS April, 2013, Abstracted in the Bulletin of the American Physical Society, Volume 58, Number 3, 2013.

Measurements on a Chaotic Circuit, Christopher Church, Arkansas INBRE 2013, Submitted as a poster and upgraded to an invited oral presentation, Fayetteville, AR, 18 October 2013.

Experimental Exploration of Solutions to Third-Order, Chaotic Differential Equations, Douglas Roisen FacultyMentor: Stephen Addison, Oklahoma-Arkansas MAA Section Meeting, Conway, AR, 1 April, 2016

Exploring the Changeover from Macro to Nano-systems (Poster), Paul Niyonkuru, Faculty Mentor Stephen Addison, Arkansas INBRE 2017, Fayetteville, AR, 28 October 2017.

Analyzing the Changeover from a Macroscopic System to a Nanosystem by Investigating the Moving Boundary Between Two Phases (Poster), Paul Niyonkuru, Faculty Mentor Stephen Addison, 102^{nd} Meeting of Arkansas Academy of Sciences, Jonesboro, AR, 7 April, 2018.

Analyzing the Changeover from a Macroscopic System to a Nanosystem by Investigating the Moving Boundary Between Two Phases (Poster), Paul Niyonkuru, Faculty Mentor Stephen Addison, 24^{th} UCA College of Natural Sciences and Mathematics Student Research Symposium April, 2018.

Areas of Scholarly Expertise

Experimental

Underwater Acoustics, physical properties of arrays of spheres and physical properties of ocean sediments, sound absorption in fluids and fluid-solid mixtures, low frequency sound propagation, properties of chaotic electric circuits

Theoretical

Thermodynamics and Statistical Mechanics, Systems Theory and Signal Processing, Inference, Wave propagation, fluid mechanics, Biot Model of porous media, charged particle transport, physics of aerosols, mathematical physics, numerical analysis, chaotic electric circuits

Grants Received

Arkansas Highway and Transportation Department, *Acceptance tests for coarse and fine aggregates,* 1990-91, $26, 467.

National Aeronautics and Space Administration, *Arkansas Space Grant Consortium,* 1991-1996. Consortium proposal under leadership of University of Arkansas at Little Rock, one of seven authors. Funds included $150,000 to $225,000 per annum from NASA and a $75,000 per annum state match. Approximately one-tenth of these funds were spent at the University of Central Arkansas.

National Science Foundation, *Renovation of the Lewis Science Center's Research Facilities,* 1995-1998, $351,280 from NSF, matched by UCA.

UCA Student Research Fund, *Elastic Wave Velocities in Rods and Plates,* 1995, $2,000.

University of Central Arkansas Faculty Development Grant. *Enhancing the Understanding of Thermal. Statistical, and Probabilistic Concepts in the Physics Curriculum,* 2000, $520

University of Central Arkansas Faculty Development Grant, *Project Kaleidoscope F21: Taking Responsibility for Leadership,* (with J. Draves, P. Draves, C. Frederickson, S. Runge, C. Stanitski), 2000, $3,294.

University of Central Arkansas Research Council, *Encoding and decrypting signals using pseudorandom noise,* 2004-05, $7,940.

National Institutes of Health/National Center for Research Resources Biomedical Research Infrastructure Networks. *Enhancement of IT Network Capacity,* (with Paul Hamilton and Jacquie Rainey), 2005, $49,411.

Arkansas Department of Higher Education, Elementary Science Specialist Program. 2006-2007, $48,055.

Department of Education/Arkansas Department of Education, MSP Program, Developing Mathematics/Science Coaches/Teacher Leaders in Arkansas Schools, 2007-2008, $173,880.

Department of Education/Arkansas Department of Education, MSP Program, Developing Math Coaches/Teacher leaders in Arkansas, 2008-2009, $152,604.

Department of Education/Arkansas Department of Education, MSP Program, Developing Math Coaches/Teacher leaders in Arkansas, 2009-2010, $157,262.

UCA STEMteach, Governor's Workforce Cabinet, (with Gary O. Bunn), 2012-2013, $216,000.

UCA STEMteach, National Science and Mathematics Institute (NMSI), (with Gary O. Bunn), 2013-2016, $915,000.

Cyber Discovery 1.0, Cyber Innovation Center /Department of Homeland Security, 2014-2015, §152,950.

Analysis and Investigation through Cyber-Based Scenarios, AICS 2016, Cyber Innovation Center, $90,000.

Computer Science Professional Development, Arkansas Department of Education, 2016-2017, $116,998.

Analysis and Investigation through Cyber-Based Scenarios, AICS 2017, Cyber Innovation Center, $52,394.

Arkansas Cyber Range, State of Arkansas, 2017-2018, $500,000.

Analysis and Investigation through Cyber-Based Scenarios, AICS 2018, Cyber Innovation Center, $59,000.

Analysis and Investigation through Cyber-Based Scenarios, AICS 2019, Cyber Innovation Center, $64,667.

Professional Society Memberships

Acoustical Society of America
Arkansas Academy of Science (Life member)
Arkansas Deans' Association
American Association of Physics Teachers
IEEE
IEEE Signal Processing Society
IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society
IEEE Big Data Community
IEEE Cybersecurity Community
National Science Teachers Association

Seismological Society of America
Sigma Pi Sigma
Sigma Xi

Professional Service

Offices Held

Arkansas Academy of Science, President, 2019-20
Arkansas Academy of Science, President-Elect, 2018-2019
Arkansas Academy of Science, Vice-President, 2017-2018
Arkansas Academy of Science, President Elect, 2018-2019
Arkansas Academy of Science, President, 2019-20
Arkansas Academy of Science, Executive Committee (Undergraduate Research Coordinator), 2019 - Present
American Association of Physics Teachers - AOK Section, Secretary 2005-2006
American Association of Physics Teachers - AOK Section, Vice-President, 2006-2007
American Association of Physics Teachers - AOK Section, President, 2007-2008
American Association of Physics Teachers - AOK Section, Past President, 2008-2009
Arkansas Deans' Association - Vice-President, 2013
Arkansas Deans' Association - President, 2013-2014
Arkansas Deans' Association - Secretary, 2014-2015
Arkansas Deans' Association - Vice-President, 2015-2016
Arkansas Deans' Association - President, 2016-2017
Arkansas Deans' Association - Executive Committee Member, 2017-2020
Society of Physics Students, National Council Member, 1991-1994

Peer Review

Journal Referee

Up to 5 reviews per year for the Journal of the Acoustical Society of America, the American Journal of Physics, and the Proceedings of the Arkansas Academy of Science.

Book Referee

Books have been refereed for Addison Wesley, Allyn and Bacon, Wm. C. Brown, Elsevier, D. C. Heath, Prentice-Hall, and Saunders.

Conference Referee

SSST- IEEE Southeastern Symposium on System Theory

Grant Reviewer

Organizations have included the Arkansas Department of Education MSP Program, Arkansas Space Grant Consortium, the Arkansas EPSCoR sub-committee for NASA, the Arkansas Science and Technology Authority, Arkansas SURF, and the Louisiana Board of Regents.

Institutional Service at the University of Central Arkansas

Search Committee, Dean, College of Liberal Arts, Chair, 2018

Search Committee, Provost, 2017-2018
Council of Deans, 2012-present.
Search Committee, Dean, College of Business, Chair, 2012-2013.
Search Committee, Biology Department Chair, Chair, 2010-2011.
Leadership Studies Task Force, 2010-2011.
Department of Computer Science Tenure and Promotion Committee, Chair, 2009-2010, 2011-12.
Search Committee, Assistant Provost for Sponsored Programs, 2008.
Provost's Budget Committee, 2007.
Concurrent Enrollment Committee, 2006-2007.
Undergraduate Council, 2005-2006.
Search Committee, Dean of Natural Sciences and Mathematics, 2005-2006.
Search Committee, Assistant Provost for Sponsored Programs, 2005-2006.
Search Committee, Chemistry Department Chair, Chair, 2004-2005.
UCA/NLSD P-16 Education Partnership on Improving Teacher and Principal Quality: No Child Left Behind, Partnership Planning Response Team, 2004-2006.
Search Committee, Mathematics Department Chair, Chair, 2003-2004.
Title III Advisory Board, 2003-2007.
Search Committee, Director of Purchasing, 2001-2002.
Search Committee, Science Education, Chair, 2000-2002.
Search Committee, Director of Physical Plant, 1999-2000.
North Central Self Study, General Education, Chair, 1998-1999.
Council of Deans, February 1998- June 1999.
UCA Distinguished Alumnus Selection Committee, 1997-1999, 2012-2016.
Jeff and Patsy Farris Scholarship Selection Committee, 1997-1999.
ADHE Self-Study, General and Physical Science, Chair, 1996-1997.
Search Committee for Director of Writing Programs, Chair, 1996.
College of Natural Sciences and Mathematics, Council of Chairs, 1995-present.
Writing Task Force, 1995-1996.
Barry M. Goldwater Scholarship, University Faculty Representative, 1995-present.
General Education Task Force, 1995-1999.
General Education Committee, Chair, 1994-1995.
College of Natural Sciences and Mathematics, Research Committee, 1994-1995.
College of Arts and Sciences, Dean Search Committee, 1993-1994.
Physics Department, Chair Search and Screening Committee, Chair, 1992-1993.
University, Radiation Safety Committee, 1992-present
University, Professional Educational Council, 1991-1994.
Physics Department, Tenure Committee, 1991-1992, 1994-1995, 1999-2000.
Committee to Establish a Science and Mathematics Center at UCA, 1991.
A.P. & L. Scholarship Committee, 1991.
University, Computer Advisory Committee, 1988-1991.
College of Sciences and Humanities, Curriculum Committee, 1988-1990.
Physics Department Library Representative 1987-1997, 1999-present.
Physics Department ADHE Self Study, Co-Chair, 1987-1988.
Physics Department Internal Review, Chair, 1987-88.

Physics Department Promotion Committee, 1988, 1992, 1993.
Physics Department Search and Screening Committee, 1986-1995, Chair 1991.

State And National Service

Arkansas Governor's Executive Committee on Cyber Security 2018-present.
Arkansas Economic Development Commission, Science Advisory Committee (Chair) 2019-present.
Arkansas Economic Development Commission, Science Advisory Committee (Vice- Chair) 2017-2019.
Arkansas Department of Education, Next Generation Science Standards Review Committee, 2013.
Arkansas Science and Technology Authority, State Science Advisory Committee, 2010-2017.
Arkansas EPSCoR Committee, 2009-2010.
Arkansas Department of Higher Education, Statewide Transfer System Faculty Team - Physics, 2006.
Arkansas Department of Higher Education, Student Undergraduate Research Fellowship Awards Committee, 2005, 2006, 2008, 2009, 2010, 2011, 2012, 2013
Advisory Committee, 3^{rd} Gordon Conference on Physics Research and Education: Classical Mechanics, 2002-2004.
Advisory Committee, 2^{nd} Gordon Conference on Physics Research and Education: Quantum Mechanics, 2000-2002.
Arkansas Science Information Liaison Office Undergraduate Research Fellowship Awards Committee, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, and 2004.
Marsh White Awards Committee, Society of Physics Students, 1993-1994.
Arkansas Space Grant Consortium, Planning Committee, 1991-2008, Alternate 2008-2013.
Organizing Committee, Statewide Mathematics and Science Leadership Conference, 1991 and 1992.
National Council, Society of Physics Students, Zone Councilor, 1991-1994.

Publications, Papers Read, Posters, and Seminars

Publications

Study of Sound Attenuation in Sediments, Ph.D. dissertation. (1984)

Measurement of the drag on spheres falling through the air. J. G. Ross, S. R. Addison and N. O. Gaiser, Proceedings of the Arkansas Academy of Science, 42, 112-113. (1988)

The Sun's effect on the Earth's Ozone Layer, *Magill's Survey of Science: Space Exploration Series*, 1, 348-354. (1989)

Galaxies beyond the Milky Way. *Magill's Survey of Science: Space Exploration Series*, 2, 474-480. (1989)

The Jovian System. *Magill's Survey of Science: Space Exploration Series*, 2, 677-682. (1989)

The History of the Solar System. *Magill's Survey of Science: Space Exploration Series*, 4, 1367-1373. (1989)

Lord Rayleigh in *The Nobel Prize Winners: Physics*, 1, 80-86. (1989)

Lev Davidovich Landau in *The Nobel Prize Winners: Physics*, 2, 810-817. (1989)

Lev Davidovich Landau, in *Great Lives from History: Twentieth Century*. 3, 1280-1284. (1990)

Pluto and Charon. *Magill's Survey of Science: Earth Science Series*, 4, 2094-2100. (1990)

Electron Microscopy. *Magill's Survey of Science: Life Science*, 2, 744-750. (1991)

The Greenhouse Effect. *Magill's Survey of Science: Life Science*, 3, 1225-1231. (1991)

Electrodynamic Focusing of Charged Aerosol Particles. D. K. Hutchins, J. Holm, and S. R. Addison. Aerosol Science and Technology. 14, 389-405. (1991)

Physical Science Laboratory Manual, McGraw Hill. (1991)

Homogeneous functions in thermodynamics. Proceedings of the Arkansas Academy of Science, 45, 114-117. (1991)

Acoustics. *Magill's Survey of Science: Applied Science*, 1, 17-23. (1993)

Nonlinear Acoustics. *Magill's Survey of Science: Applied Science*, 4, 1809-1815. (1993)

Is Extensivity a Fundamental Property of Entropy? Stephen R. Addison and John E. Gray. Journal of Physics A, 34, 7733-7737; Mathematical Reviews MR1863334. (2001)

Characteristic Functions in Radar and Sonar. John E. Gray and Stephen R. Addison. In *Proceedings of the 34th Southeastern Symposium on System Theory*, IEEE, 31-35. (2002)

Book Review: Classical Mechanics, 3rd Ed., Herbert Goldstein, Charles Poole, and John Safko. American Journal of Physics 70, 782-783. (2002)

The effect of nonuniform motion on the Doppler spectrum of scattered continuous-wave waveforms. John E. Gray and Stephen R. Addison. In *Proceedings of the SPIE*, Volume 5102: *Independent Component Analyses, Wavelets, and Neural Networks*, edited by Anthony J. Bell, Mladen V. Wickerhauser, and Harold H. Szu, 226-239. (2003)

Effect of nonuniform target motion on radar backscattered waveforms. J.E. Gray and S.R. Addison. IEE Proceedings Radar, Sonar, and Navigation 150, No. 4, 262-270. (2003)

General Solution to Dispersive Wave Equation and Its Application to Propagation. John E. Gray and Stephen R. Addison. In *Proceedings of the 36th Southeastern Symposium on System Theory,* IEEE, 497-501. (2004)

Establishing a state-of-the-art college computing environment. Ronald Toll, Stephen R. Addison, Qiang Duan, Carol Hambuchen, and Chenyi Hu. In *Proceedings of the Second Annual Mid-South College Computing Conference*, edited by Charlotte Owens and George Benjamin, 74-77. (2004)

The Morphology of Steve. Scott, Eugenie C., ..., Stephen Addison et al. Annals of Improbable Research, July/August, 10, Is. 4, 24-29. (2004)

A methodology for characterizing phase noise in modulated radar waveforms: an alternative 'terrain' characterization method. John E. Gray and Stephen R. Addison. In *Proceedings of the SPIE*, Volume 5410: *Radar Sensor Technology VIII and Passive Millimeter-Wave Imaging Technology VII*, edited by Robert Trebits, James L. Kurtz, Roger Appleby, Neil A. Salmon, and David A. Wikner, 74-84. (2004)

Chaotic Encryption and Decryption: Involving Undergraduates in Authentic Research. Stephen R. Addison, Katharina Ochterbeck, Katie M. Reynolds, and John E. Gray. In *Proceedings of the 37th Southeastern Symposium on System Theory,* IEEE, 244-248. (2005)

The Notion of Random Fourier Series: An Approach Based on Phase Noise. John E. Gray and Stephen R. Addison. In *Proceedings of the 37th Southeastern Symposium on System Theory,* IEEE, 419-423. (2005)

A generalization of Huygen's principle and some applications. John E. Gray and Stephen R. Addison. In *Proceedings of the SPIE*, Vol. 5788: *Radar Sensor Technology IX*, edited

by Robert N. Trebits, and James L. Kurtz, 97-107. (2005)

Chaos and encryption: problems and potential. Stephen R. Addison and John E. Gray. In *Proceedings of the 38th Southeastern Symposium on System Theory,* IEEE, 275-279. (2006)

Precision measurements of chaotic electric circuits. Travis Hoggard, Katharina Ochterbeck, Katie M. Reynolds, Stephen R. Addison, and John E. Gray. In *Proceedings of the 38th Southeastern Symposium on System Theory,* IEEE, 285-288. (2006)

Computing the characteristic function for sums of the sinusoidal random variables. John E. Gray and Stephen R. Addison. In *Proceedings of the 38th Southeastern Symposium on System Theory,* IEEE, 338-343. (2006)

Symbolic Noise and Chaos. John E. Gray and Stephen R. Addison. In *Proceedings of the 38th Southeastern Symposium on System Theory,* IEEE, 417-421. (2006)

Enhancing the Undergraduate Experience: Atomic and Nuclear Physics Experiments at an Accelerator Facility. R. Mehta, S. R. Addison, and J. L. Duggan. In *Application of Accelerators in Research and Industry: Twentieth International Conference*, CAARI 2008. AIP Conference Proceedings 1099, 234-239. (2009)

The Rayleigh problem is everywhere!, John E. Gray and Stephen R. Addison, In *Proceedings of the SPIE*, Vol. 7669: *Radar Sensor Technology XIV*, edited by Kenneth I. Ranney and Armin W. Doerry. (2010)

Enhancing the Undergraduate Experience: Measuring film thicknesses using a Helium ion beam. R. Mehta, S. R. Addison, and J. L. Duggan. In *Application of Accelerators in Research and Industry: Twenty-First International Conference*, CAARI 2010 AIP Conference Proceedings, 1336, pp. 744-747 (2011)

Generalized Extensivity, John E. Gray and Stephen R. Addison. Online as arXiv:1008.1559v4 at arxiv.org. (2012)

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The Post-Selection Operator Current, John E. Gray and Stephen R. Addison, *Quantum Studies: Mathematics and Foundations*. 5, 399-412; Mathematical Reviews MR3845337. (2018)

Application of the operator current to polarization radar and three-dimensional rotations, John E. Gray and Stephen R. Addison Proc. SPIE 10633, Radar Sensor Technology XXII, 106330H (4 May 2018); doi: 10.1117/12.2304895; https://doi.org/10.1117/12.2304895 (2018)

Technical Reports

Study of Attenuation of Sound in Sediments. University of Mississippi Physical Acoustics Research Group. Technical Report 81-2. DOI 10.13140/RG.2.2.23697.53605 (1982)

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Acceptance Tests for Coarse and Fine Aggregates. University of Central Arkansas, Technical Report SRA 91-01, (1991). Also published as FHWA/AR - 93/002. (1993)

Papers Read And Poster Presentations

Preliminary report on the Use of a Computerized Physical Science Tutorial at UCA, Stephen R. Addison, Maurice Ayers, Ralva Bass, Denver L. Prince and Hudson B. Eldridge. Seventieth meeting of the Arkansas Academy of Science. (1986)

On the Applicability of Stokes Law. Seventy-second meeting of the Arkansas Academy of Science. (1988)

Measurements of Drag on Spheres Falling Through the Air., J. G. Ross, N. O. Gaiser and Stephen R. Addison. Seventy-second meeting of the Arkansas Academy of Science. (1988)

Electrodynamic Funnel for Confinement and Transport of Charged Aerosol Particles. D. K. Hutchins, J. Holm and S. R. Addison. Symposium of the American Association for

Aerosol Research. (1988)

Acceptance tests for coarse and fine aggregates. 52nd Transportation Research meeting of the Arkansas Highway and Transportation Department. (1991)

Homogeneous Functions in Thermodynamics. Seventy-fifth meeting of the Arkansas Academy of Science. (1991)

On the use of a telescope simulator to teach Astrophysics and Instrumentation in Astronomy. Seventy-sixth meeting of the Arkansas Academy of Science. (1992)

Computed graphical representations of the Gregorian calendar. Stephen R. Addison and Lee Ann Criswell. Seventy-sixth meeting of the Arkansas Academy of Science. (1992)

Activities for SPS Chapters and the selection process for designation as an outstanding SPS Chapter. Society of Physics Students session at the winter meeting of the American Association of Physics Teachers, New Orleans, Louisiana (1993)

Modeling planetary magnetospheres. First Annual Arkansas Space Grant Symposium. (1993)

The construction and use of a charged coupled device (CCD). Second Annual Arkansas Space Grant Symposium. (1994)

A method to illustrate the extensive and intensive properties of thermodynamic variables. First Gordon Conference on Physics Research and Education, Plymouth State College, Plymouth, New Hampshire. (Poster) (2000)

Characteristic Functions in Radar and Sonar. John E. Gray and Stephen R. Addison. Invited Paper, 34^{th} Southeastern Symposium on System Theory (SSST 2002), University of Alabama in Huntsville, Huntsville, Alabama. (2002)

Undergraduate Research in Quantum Mechanics at the University of Central Arkansas. Second Gordon Conference on Physics Research and Education, Mt. Holyoke, South Hadley, Massachusetts. (Poster) (2002)

Symmetry Analysis of the reduced Maxwell Bloch Equations with a permanent dipole. Chad Fendt, Danny Arrigo and Steve Addison. Joint Mathematics Meetings: 109^{th} Meeting of the American Mathematical Society, 86^{th} Meeting of the Mathematical Association

of America, Baltimore, Maryland. Abstract 983-78-1024, Abstracts of Papers Presented to the American Mathematical Society, 24, 159. (2003)

Symmetry Analysis of Reduced Maxwell Bloch Equations with a permanent dipole, William A. Fendt, Stephen R. Addison, and Daniel J. Arrigo. 65^{th} Meeting of the Oklahoma-Arkansas section of the Mathematical Association of America, Tulsa, Oklahoma. (2003)

Applications of Characteristic Functions to Some Problems in Radar. John E. Gray and Stephen R. Addison. Sixth ONR/GTRI Workshop on Target Tracking and Sensor Fusion. San Diego, California. (2003)

General Solution to Dispersive Wave Equation and Its Application to Propagation. John E. Gray and Stephen R. Addison. 36^{th} Southeastern Symposium on System Theory (SSST 2004) Georgia Institute of Technology, Atlanta, Georgia. (2004)

Panel Discussion: Establishing a state-of-the-art college computing environment. Ronald Toll, Stephen R. Addison, Qiang Duan, Carol Hambuchen, and Chenyi Hu. Second Annual Mid-South College Computing Conference, UALR, Little Rock, Arkansas. (2004)

A methodology for characterizing phase noise in modulated radar waveforms: an alternative 'Terrain' characterization. J.E. Gray and S.R. Addison. SPIE Defense and Security Symposium, Orlando, Florida. [5410-10] (2004)

DyKnow: A tool for collaborative learning. Arkansas-Oklahoma-Kansas Section Meeting of the American Association of Physics Teachers, UALR, Little Rock, Arkansas. (2004)

Chaotic Encryption and Decryption: Involving Undergraduates in Authentic Research. Stephen R. Addison, Katharina Ochterbeck, Katie M. Reynolds, and John E. Gray. 37^{th} Southeastern Symposium on System Theory, Tuskegee, Alabama. (2005)

The Notion of Random Fourier Series: An Approach Based on Phase Noise. John E. Gray and Stephen R. Addison. 37^{th} Southeastern Symposium on System Theory, Tuskegee, Alabama. (2005)

A generalization of Huygen's principle and some applications. J. E. Gray and S. R. Addison. SPIE Defense and Security Symposium, Radar Sensor Technology IX, Orlando, Florida. [5788-12] (2005)

Chaos and encryption: problems and potential. S. R. Addison and J.E. Gray. 38^{th} Southeastern Symposium on System Theory, Tennessee Technological University, Cookeville,

TN. (2006)

Precision measurements of chaotic electric circuits. T. Hoggard, K. Ochterbeck, K. M. Reynolds, S. R. Addison, and J. E. Gray. 38^{th} Southeastern Symposium on System Theory, Tennessee Technological University, Cookeville, TN. (2006)

Symbolic Noise and Chaos. J. E. Gray and S.R. Addison. 38^{th} Southeastern Symposium on System Theory, Tennessee Technological University, Cookeville, TN. (2006)

A method computing the characteristic function (CF) for sums of the sinusoidal random variables J. E. Gray and S.R. Addison. 38^{th} Southeastern Symposium on System Theory, Tennessee Technological University, Cookeville, TN. (2006)

Research-based reform in Science and Mathematics Education, Keynote Address, Arkansas-Oklahoma-Kansas Section Meeting of American Association of Physics Teachers, UCA, Conway, AR. (2007)

Enhancing the Undergraduate Experience: Atomic and Nuclear Physics Experiments at an Accelerator Facility. R. Mehta, S. R. Addison, and J. L. Duggan. Application of Accelerators in Research and Industry: Twentieth International Conference, CAARI 2008, Fort Worth, TX. (2008)

Research with Undergraduates and Preparing Undergraduates to Participate In Authentic Research. Invited presentation. Arkansas INBRE 2008, Fayetteville, AR. (2008)

Enhancing the Undergraduate Experience: Measuring film thicknesses using a Helium ion beam. R. Mehta, S. R. Addison, and J. L. Duggan. Application of Accelerators in Research and Industry: Twenty-First International Conference, CAARI 2010. Fort Worth, TX. (2010)

A Trigger for a Helmholtz Resonator (Poster). John Lahmann, Stephen R. Addison, and William V. Slaton. Seventh Meeting of the MidSouth Chapter of the Acoustical Society of America, Memphis, TN and Arkansas INBRE 2010, Fayetteville, AR. (2010)

Testing system components for a low-frequency, impulsive Helmholtz Resonator, John Lahmann, Stephen R. Addison, William V. Slaton, and Carl K. Frederickson. Eighth Meeting of the MidSouth Chapter of the Acoustical Society of America, Oxford Mississippi (2011)

Determining Neutron Flux of a Plutonium-Beryllium source using Neutron Activation of

Indium Watson, Kristopher; Jacob D. Fenske; Shuang Xu; Carl F. Frederickson; Stephen R. Addison; Rahul Mehta. Ninety-Fifth meeting of the Arkansas Academy of Sciences, Monticello, Arkansas (2011)

Angular Correlation of Two 511 keV Gamma-Rays from Sodium-22 Tubbs, Matthew; Niravkumar D. Patel; Vinh Lu; Carl F. Frederickson; Stephen R. Addison; Rahul Mehta. Ninety-Fifth meeting of the Arkansas Academy of Sciences, Monticello, Arkansas (2011)

A Trigger for a Helmholtz Resonator (Poster). John Lahmann, Stephen R. Addison, William V. Slaton, and Carl K. Frederickson, Arkansas INBRE Research Conference 2011, Fayetteville, Arkansas and the Ninth Meeting Acoustical Society of America Midsouth Chapter, Fall Meeting, Conway, Arkansas (2011)

Panel Discussion: Higher Education STEM Policies and Licensure Efforts (Moderator), Steve Addison, Andy Novobilski, Angela Sewall, Mary Benjamin, Karen Cushman, Arkansas STEM Coalition STEM Policy Summit, Petit Jean, Arkansas. (2012)

Addressing Arkansas' Need for Math and Science Teachers through the UTeach Program. Gary Bunn and S. Addison. ArACTE Spring Conference, Conway AR. (2012)

Metamaterials: Ferro and Piezoelectric Fluids, Bryan M. Wofford and Stephen R. Addison, Arkansas INBRE 2012, Springdale, AR (2012)

UCA STEMteach: Transforming a Teacher Education Program, Stephen R. Addison and Gary O. Bunn, 2013 Winter Meeting of the American Association of Physics Teachers, New Orleans, La. (2013)

Recruiting and Retaining Women in Physics in Central Arkansas (Poster), Stephen R. Addison, 2013 Winter Meeting of the American Association of Physics Teachers, New Orleans, La. (2013)

How to be Successful in College and in a STEM Career, Steve Addison and Leigh Ann DenHartog, East Conference, Hot Springs, Ar. (2013)

What's it take to be a UTeach Co-Director? (Panel Discussion), Larry Abraham, Stephen Addison, Ann Cavallo, Anita Greenwood, Ramon Lopez, Mary Urquhart, and Alistair Windsor, UTeach Conference 2013, Austin, Tx. (2013)

University replication panel: lessons learned (Panel Discussion), Martha Day, Matthew Wigglesworth, Kelly Chaney, Stephen Addison, Gail Marshall, and Deb Nolan, UTeach

Conference 2013, Austin, Tx. (2013)

How to succeed in a STEM career, Stephen Addison, Arkansas Department of Education 2014 Career Development Conference: Set Sail to Success, Hot Springs, Ar. (2014)

How to succeed in a STEM career, Gary Bunn and Stephen Addison, NOW Your future is trending: EAST Conference 2014, Hot Springs, Ar. (2014)

Synchronization Limits of Chaotic Circuits, Christopher M. Church and Stephen R. Addison, Ninety-Eighth meeting of the Arkansas Academy of Sciences, Searcy, Ar. (2014)

Being a Dean, Stephen R. Addison, Arkansas Deans' Association, DeGray Lake, Ar. (2014)

UTeach Arkansas, Stephen Addison, Sheri Vaughan, and Tony Hall, 40th Annual Summer Conference of the Arkansas Association of Educational Administrators, Little Rock, Ar. (2015)

Experimental Measurements of Chaotic Circuits. Douglas Roisen, Paul Niyonkuru, Stephen Addison, INBRE 2015, Fayetteville, AR. (2015)

Using Computer Technology to Make Progress in Science, Code.Connect.Innovate - The Arkansas Computer Science & Information Technology Conference, National Park College, Hot Springs, Ar. (2016)

Does the Central Limit Theorem Always Apply to Phase Noise? Some Implications for Radar Problems, John E. Gray and Stephen R. Addison, SPIE Defense and Security Symposium, Radar Sensor Technology XXI. (2017)

Enrollment and Retention. Stephen Addison, Martin Eggensperger Julie Hixson-Wallace Scott Kuttenkuler Arkansas Deans' Association, DeGray Lake, Ar. (2017)

Application of the operator current to polarization radar and three-dimensional rotations, John E. Gray and Stephen R. Addison, SPIE Defense + Security, Orlando, Florida. (2018)

A formulation of noise operators and their applications, John E. Gray and Stephen R. Addison, SPIE Defense + Security, Baltimore, Maryland. (2019)

Arkansas - Outreach and Development in Data Science, Arkansas Center for Data Sciences:Solving the Data Science Riddle, A Year of Data Sceince, Part 1. Little Rock, Arkansas.

(2019)

Seminars and Local Presentations Since 1990

The surface on which a particle executes simple harmonic motion, UCA Physics Department Senior Seminar, Spring 1990.

Quantum Electrodynamics and Quantum Chromodynamics, Arkansas Governor's School, July 1990.

Particle Shape Measurement, Arkansas Highway and Transportation Department, November 1990.

Arkansas Space Grant Consortium, UCA Science Faculty Seminar Series, November 1990.

Cosmology, Arkansas Governor's School, July 1991.

Astronomy and Light (workshop), Arkansas Statewide Science and Mathematics Leadership Conference, July 1991.

What Newton hath joined together let no man put asunder (with Steve Butcher), Arkansas Statewide Science and Mathematics Leadership Conference, July 1992.

Particle Drag Forces, Graduate Institute of Technology, University of Arkansas at Little Rock, October 1993.

Fluid Dynamic Drag Forces on Spheres, UCA Physics Department, March 15, 1994.

Cosmology, Arkansas Governor's School, July 9, 1994.

High Tech In Arkansas, Conway Morning Rotary Club, March 28, 1995.

Acoustics Laboratory (Demonstrations and Presentations on Musical Acoustics applied to dulcimers), Ozark Folk Center Dulcimer Jamboree, April 22, 1995.

Cosmology: *An Introduction to its Methods and Current Limitations*, Arkansas Governor's School, July 8, 1995.

Discovery Based Education in Science, UCA Physics and Astronomy Seminar Series, November 1996.

Discovery Based Education in Science, UCA Biology Department Seminar, January 1997.

SILO Undergraduate Research Fellowships Through the Eyes of a Reviewer, UCA Sponsored Programs Workshop, April and May 1997, May 1998.

SILO Undergraduate Research Fellowship Proposal Workshop, UCA Sponsored Programs Workshop, September 10, 1998.

Scientific Inference, UCA Physics and Astronomy Seminar Series, October 19, 1998.

Science and Scientists in the Baroque era, First Annual Baroque Festival, University of Central Arkansas, Department of Music, January 28, 1999.

Uncertainty in Physics, UCA Physics and Astronomy Seminar Series, September 27, 1999.

The place of probability in physics curricula, UCA Physics and Astronomy Seminar Series, April 3, 2000.

Report from the Gordon Conference on Physics Research and Education: Visualization tools, models, and other tools that can be used to aid the understanding of thermal concepts. UCA Physics and Astronomy Seminar Series, September 18, 2000.

Proposal Reviewers Panel, IDC Workshop, University of Central Arkansas, October 26, 2000.

Visualization Tools in the classroom and on the web, IDC Workshop, University of Central Arkansas, February 13, 2001.

Using TeX/LaTeX to Enhance Science Courses, Techfest, University of Central Arkansas, April 17, 2001.

Preparing SURF proposals, University of Central Arkansas, Sponsored Programs Workshop, October 1, 2001.

Student Research Proposals, University of Central Arkansas, Honors College, September

23, 2002.

Research Proposals for Students, University of Central Arkansas, Honors College, September 22, 2003.

Elements of a Successful SURF Proposal, University of Central Arkansas, Sponsored Programs Workshop, September 2, 2004.

The Arkansas Department of Higher Education SURF Program, University of Central Arkansas, Sponsored Programs Workshop, September 8, 2005.

Last Best Chance, Screening and Panel Discussion. Panel: Congressman Vic Snyder, Stephen Addison, Gloria Cabe, Mark Mullenbach, Adam Silverman, University of Central Arkansas, March 13, 2006.

Bayesian Probability, Physics Department, Harding University, September 4, 2006.

Signal Processing: Areas of Research, Student Contributions, and Careers, Chemistry Department, Harding University, September 4, 2006.

The ADHE SURF Grant Program, University of Central Arkansas, Sponsored Programs Workshop, September 5, 2006.

SURF Workshop, Panel Discussion. Panel J.D. Swanson, Amanda Allen, Allicia Kellogg, Stephen R. Addison, University of Central Arkansas, September 6, 2007.

The Arkansas Department of Higher Education SURF Program, University of Central Arkansas, October 1, 2008.

The Arkansas Department of Higher Education SURF Program: Science Students, University of Central Arkansas, September 9, 2009.

The Arkansas Department of Higher Education SURF Program: Arts, Social Sciences, Honors College and other students, University of Central Arkansas, September 10, 2009.

Long-Range Infrasound Propagation: Production, Detection and Signal Processing, Physics Department, Harding University, September 28, 2009.

The Arkansas Department of Higher Education SURF Program: 2010, University of Central Arkansas, September 14, 2010.

The Arkansas Department of Higher Education SURF Program, 2011: Planning for Students, University of Central Arkansas, April 26, September 14, September 15, 2011.

Research and Opportunities for Physics Majors, SPS Meeting, University of Central Arkansas, November 29, 2011.

The Arkansas Department of Higher Education SURF Program, 2012: Planning for Students, University of Central Arkansas, September 11, 2012.

The Arkansas Department of Higher Education SURF Program, 2013: Planning for Students, University of Central Arkansas, April 15, 2013.

The Illusion of Time, Science Cafe Little Rock, Little Rock, AR, Steve Addison, Lyndel Roe, and Bob Sanderson, May 28, 2013.

Panel on Women's Rights, Honors College Challenge Week 2013: The State of the Dream in Arkansas, Stephen Addison, Rifat Akhter, and Linda Tyler, moderated by Taine Duncan, University of Central Arkansas, October 28, 2013.

Higher Education and Technology as a Disruptive Change Agent, Central Arkansas Chapter, Sigma Xi Luncheon, Harding University, March 27, 2014.

Why do I want to write a grant? Steve Addison. Jacquie Rainey, Elson Bihm, and Tansel Halic, Sponsored Programs Panel Discussion, University of Central Arkansas, September 19, 2016.

Panel Discussion: Student Undergraduate Research Fellowship (SURF), Danny Arrigo, Shawn Charlton, Stephen Addison, and Taylor Dague, , September 12, 2017.

Algorithms: What they are, how we use them, and why you should know about them, Stephen R. Addison, Honors College Challenge Week 2017, University of Central Arkansas, October 2, 2017.
(DOI 10.6084/m9.figshare.5462494.v1)

Research Opportunities in Physics at UCA: The Joy of Unfettered Research, Stephen R. Addison, UCA Society of Physics Students, February 1, 2018

(DOI 10.6084/m9.figshare.5851698.v1)

Surf Panel, Danny Arrigo, Ashley Hicks, Michael Scoles, Sponsored Programs Panel Discussion, University of Central Arkansas, April 18, 2018.

The Science of Cyber Security, Science Wednesday, Panel: Stephen R. Addison, Zach King, Mary Beth Sullivan, Conway, AR, August 29, 2018.

Surf Panel, Danny Arrigo, Ashley Hicks, Pamela Ashcraft, Stephen R. Addison, Sponsored Programs Panel Discussion, University of Central Arkansas, March 5, 2019.

Panel Discussion: Expert Resources in Arkansas (Moderator), Stephen Addison, Martial Trigeaud, Jason Huselton, and Rebecca Todd, AR Conductor Health Sciences Entrepreneurship Boot Camp 2019, University of Central Arkansas, May 21, 2019.

Cybersecurity at UCA, UCA Cybersecurity Club, University of Central Arkansas, September 9, 2019.