Dr. Alan Scott

Professor of Physics, University of Wisconsin-Stout

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Education

PhD in Experimental Nuclear Physics, August 1995, Kent State University
Title of Dissertation: *Probing Excited Nuclear Matter Using Particle Yields from Nucleus-Nucleus Collisions*

Master of Arts in Physics, May 1990, Kent State University, Kent, OH.

Bachelor of Science in Education, May 1987, Bowling Green State University, Bowling Green, OH.

Major – Physics, GPA 4.0 Minor - Mathematics

Certified to Teach Secondary School Physics and Math.

Teaching and Work Experience

I have taught the following university-level courses: Physics, Physics Laboratory, Modern Physics, Quantum Mechanics, Astronomy, Geology, Soil Mechanics, Statics, Statics and Strength of Materials, Applied Engineering Mechanics, Classical Mechanics, Cultural Physical Science, Applied Science Profession I.

Professor of Physics, University of Wisconsin-Stout, Menomonie, WI, 2006-Present

Chair, Department of Physics, University of Wisconsin-Stout, Menomonie, WI, 2014-2015

Associate Professor of Physics, University of Wisconsin-Stout, Menomonie, WI 2000-2006

Assistant Professor of Physics, University of Wisconsin-Stout, Menomonie, WI, 1996-2000

Visiting Assistant Professor of Physics, College of Wooster, Wooster, OH, 1995-1996

Graduate Teaching and Research Assistant, Kent State University, Kent, OH, 1991-1995 Performed specific duties and tasks within a large collaborative effort to test, setup, and execute an experiment at the Bevalac particle accelerator at Lawrence Berkeley National Laboratory, Berkeley, CA.

Substitute Teacher, Wood County Local School Districts, Wood County, OH, 1987

Publications and Research

Research Interest: Science Education, Physics Education, Physics Computer Simulations, Engineering Education, Nuclear and Particle Physics, Science and Public Policy, Pseudoscience and Unusual Claims

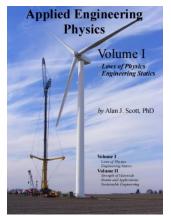
A. Scott, 2024, Applied Engineering Physics Laboratory Manual, Part of the Two-Volume Textbook Applied Engineering Physics

A. Scott, 2023, *Perspectives of Scientists Involved in World War II*, The Physics Teacher, December

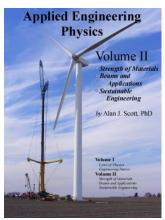
The Editors of The Physics Teacher wrote to me on April 11, 2023, saying "... The Editors felt that your article was one of the journal's best and have chosen to promote it as a Featured Article once published..."

A. Scott, 2020, *Applied Engineering Physics*, Authored an Academic Two-Volume Textbook set, Barnes & Noble Publishing [Currently, it is only available as a limited print edition or electronic access with Digital Copyright Protections. Volume I ISBN 978-1-7923-4887-7, Volume II ISBN 978-1-7923-5888-4]

Total of 1,143 Pages, 19 Chapters, 67 Detailed Applications, 136 Electronic Student Conceptual Questions, Applied Engineering Physics Solutions Manual – Volume I (303 pages, ISBN 978-1-7923-6183-8), Applied Engineering Physics Solutions Manual – Volume II (333 pages, ISBN 978-1-7923-6241-5), Educational Software program titled *Statics Engineering Ninja*.



Applied Engineering Physics, Volume I



Applied Engineering Physics, Volume II

Authored Physical Science Textbook and Solution Manual A. Scott, *Addicted to Placebos: Understanding Science and Society*, 2006, Lulu.com Publishing



Addicted to Placebos



Addicted to Placebos Solution Manual

This is a fully referenced, physical science textbook that is web interactive. It is 519 pages and is the culmination of 6 years of work. It has thirteen chapters and five appendices.

Austin Korff and Alan Scott, 2018, *World's Simplest Materials Lab*, The Physics Teacher, Vol. 56, December, p. 614-615; Online Appendix for article at http://www.dx.doi.org/10.1119/1.5080578.

(Column editor responded saying it was "very interesting" and peer reviewers recommended the original submission be longer.)

A. Scott, 2020, American Journal of Physics submission, Journal of American History submission, World War II - The Physicists' War (*Turned Down but Recognized as being worthy of publication in other journals.*)

A. Scott, 2018, *Grand Illusions and Existential Angst*, submitted to Skeptical Inquirer, November/December

A. Scott, 2018, Conceptualizing Geological and Cosmological Time Using a Billion-Year Marble Clock Simulation, submitted to Journal of Computers in Mathematics and Science Teaching (JCMST), May 17 (Submitted, Not Accepted)

A. Scott, No Time for Certainty, Skeptical Inquirer, January/February 2017

A. Scott, Monte Carlo Simulations of Gravitational Planetary Transfers and Orbital Dynamics in Rogue Star – Solar System Interactions, Icarus, submitted August 22, 2016. (Submitted, Not Accepted)

A. Scott, Blown Away, The Physics Teacher, April 2014 (*One of three featured articles.)

A. Scott, *Busting Bolts*, Physics Education, May 2013

A. Scott, *Civic Engagement and Science Education*, International Journal of Polytechnic Studies, v1, No. 1 (2011)

A. Scott, *Blind-Sided by a Culture of Disinformation*, Skeptical Inquirer, July/August 2010

A. Scott, Gulf War Illness, Real or Myth, Letter-to-the-Editor, Skeptic, v15, No. 1, 2009

A. Scott, Sputnik - 50 Years Later, Physics and Society newsletter, October 2007

A. Scott, *Danger! Scientific Inquiry Hazard*, Skeptical Inquirer, May/June 2007

A. Scott, Sand Diver, The Physics Teacher, January 2005

A. Scott, <u>3D Spreadsheet Simulation of a Modern Particle Detector</u>, Physics Education, January 2004 (Article downloading was monitored by Andrea Pomroy, Physics Education publisher. She indicated that only 10% of Institute of Physics articles get downloaded at least 250 times. She reported that my article was downloaded more than 250 times.)

A. Scott, <u>Sniffer Plane Secrets and Political Courage</u>, Forum on Physics and Society, January 2003

A. Scott, *The Neurobiological Connection of Physics Education Research*, Letter-to-the-Editor, American Journal of Physics, April 2002; A. Scott, *The Neurobiological Connection of Physics Education Research*, Letter-to-the-Editor, Virtual Journal of Biological Physics Research, March 15, 2002

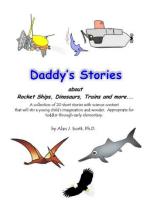
A. Scott, C. Barnhart, K. Parejko, F. Schultz, S. Schultz, Skeptical Science: Teaching Students To Think Critically About Unusual Claims, The Science Teacher, April 2001

A. Scott, Geology on the Web and In the Classroom: Designing a Curriculum For Non-Science Students, Teaching with Technology Today (TTT), December 2000

A. Scott, Physics of Dirt: An Introduction to Soil Mechanics, Physics Education, January 2000

A. Scott, Science Curriculum Goals at Odds With Academia Supported Pseudoscience, Forum on Education, APS Newsletter, October 1999

A. Scott, <u>Daddy's Stories About Rocket Ships, Dinosaurs, Trains and more...</u>, Lulu.com, 2010 (Early childhood storybook with science content.)



Daddy's Stories

A. Scott, B. Salt, K. Parejko, <u>A Public Debate On Science, Pseudoscience, and Spiritualism</u>
<u>From The Perspective of a Physicist, Sociologist, and Biologist</u>, Physics And Society, October 1998

Nuclear Physics Refereed Journal Publications

M. Justice, S. Albergo, F. Bieser, F.P. Brady, Z. Caccia, D.A. Cebra, A.D. Chacon, J.L. Chance, Y. Choi, S. Costa, J.B. Elliot, M.L. Gilkes, J.A. Hauger, A.S. Hirsch, E.L. Hjort, A. Insolio, D. Keane, J.C. Kintner, M.A. Lisa, H. Liu, H.S. Matis, R. McGrath, M. McMahan, C. McParland, D.L. Olson, M.D. Partlan, N.T. Porile, R. Potenza, G. Rai, J.O. Rasmussen, H.G. Ritter, J. Romanski, J.L. Romero, G.V. Russo, R.P. Scharenberg, **A. Scott**, Y. Shao, B.K. Srivastava, T.J.M. Symons, M. Tincknell, C. Tuve', S. Wang, P.G. Warren, D. Weerasundara, H.H. Wieman, T. Wienold, K. Wolf, □ *hyperons in 2 A GeV Ni + Cu collisions* (EOS Collaboration), Physics Letters B, 440 (1998), p. 12-19

E.L. Hjort, et. al. (EOS Collaboration), Λ° Resonance Production in ⁵⁸Ni + Cu Collisions at E = 1.97 A GeV, Physical Review Letters **79**, 4345 (1997)

- J.C. Kintner, et. al. (EOS Collaboration), Pion Flow and Antiflow in 1.15A GeV Au + Au, Physical Review Letters **78**, 4165 (1997)
- J. Chance, et. al. (EOS Collaboration), The Energy Dependence of Flow in Ni Induced Collisions from 400A to 1970A MeV, Physical Review Letters **78**, 2535 (1997)
- J.A. Hauger, et. al. (EOS Collaboration), Dynamics of the Multifragmentation of 1A GeV Gold on Carbon, Physical Review Letters 77, 235 (1996)
- S. Wang, et. al. (EOS Collaboration), In-plane Retardation of Collective Expansion in Au + Au Collisions, Physical Review Letters **76**, 3911 (1996)
- M.A. Lisa, et. al. (EOS Collaboration), Radial Flow in Au + Au Collisions at E = 0.25 1.15 A GeV, Physical Review Letters 75, 2662 (1995)
- M.D. Partlan, et. al. (EOS Collaboration), Fragment Flow in Au + Au Collisions, Physical Review Letters **75**, 2100 (1995)
- S. Wang, et. al. (EOS Collaboration), Light Fragment Production and Power Law Behavior in Au + Au Collisions, Physical Review Letters **74**, 2646 (1995)
- M.L. Gilkes, et. al. (EOS Collaboration), The Determination of Nuclear Matter Critical Exponents from the Multifragmentation of Gold Nuclei, Physical Review Letters **73**, 1590 (1994)

Non-Refereed, Self-Published Journal Articles

A. Scott, 2020, *Insidious Caricatures*, Daily Kos, October 21, https://www.dailykos.com/stories/2020/10/21/1988264/-Insidious-Caricatures

A. Scott, Monte Carlo Simulations of Gravitational Planetary Transfers and Orbital Dynamics in Rogue Star – Solar System Interactions, International Journal of Physics and Astronomy, Vol. 6, No. 1, June, 2018, pp. 1-12, http://ijpanet.com/vol-6-no-1-june-2018-current-issue-ijpa [*This journal purports to be peer-reviewed and refereed. Two anonymous reviewers did review my article and recommended it for publication. Though, my honest judgment is that the journal accepts almost all articles submitted.]

Local Newspaper Publications

- A. Scott, 2023, Alan Scott: What might an alien observer think of humans? (Editor assigned title. My suggested title The Alien Perspective), Chippewa Herald, tagged as Editor's Pick, October 24
- A. Scott, 2022, Space: Our Endangered Frontier, Dunn County News, February 9, p. A3
- A. Scott, 2020, *Lost Sense of Proportional Reasoning*, Chippewa Herald, December 14 [Edited version in Dunn County News, *Proportional reasoning key to literate mind*, December 14]
- A. Scott, 2020, [Comment that was submitted on the New York Times article The World Can Still Be Destroyed in a Flash was assigned a *Times Pick*.], Article: Editorial Board, 2020, *The World Can Still Be Destroyed in a Flash*, New York Times, August 6, https://www.nytimes.com/2020/08/06/opinion/hiroshima-anniversary-nuclear-weapons.html
- A. Scott, 2019, Science, Politics are Inseparably Linked, Dunn County News, May 11-12, p. A5
- A. Scott & Vern Caturia, Sustainability is focus for Scouts at UW-Stout, Dunn County News, December 27, 2017, p. A2
- A. Scott, Rocket Science and Swindles, Dunn County News, December 21, 2016

- A. Scott & E. Thompson, *From The Stacks*, (collaborative project with Menomonie Public Library), Dunn County News, July 18, 2014
- A. Scott, Mote of Dust Suspended in a Sunbeam, Dunn County News, March 5, 2014
- A. Scott, Alvarez and the Kennedy Assassination, Dunn County News, November 20, 2013
- A. Scott, Guns and Public Policy, Dunn County News, June 2, 2013
- A. Scott, Doctor Who and the Economic Implosion, Dunn County News, August 29, 2012
- A. Scott, Castles for the One-Percent, Dunn County News, June 5, 2012 (Letter)
- A. Scott, Tackling the Football Fan, Dunn County News, January 22, 2012
- A. Scott, *Beyond Theory: Modern View of the Atom Turns 100*, Dunn County News, May 29, 2011
- A. Scott, The Great Eco-Unfriendly Trade-Off, Dunn County News, February 9, 2011
- A. Scott, Tribute to Darwin, Dunn County News, July 15, 2009
- A. Scott, Flying Wedge Economics, Dunn County News, December 14, 2008
- A. Scott, Relative Degrees of Wrongness, Dunn County News, May 11, 2008
- A. Scott, Real Alien Hunters, Dunn County News, December 24, 2006
- A. Scott, Keep Politics Out of Science, Dunn County News, November 8, 2006
- A. Scott, Risky Business, Dunn County News, September 18, 2005
- A. Scott, Space Visitor Made Big Hole, Dunn County News, 2004
- A. Scott, The Wacky Politics of Energy, Dunn County News, April 21, 2004
- A. Scott, Laetrile: A Persistent, Dangerous, and Fraudulent Cancer Remedy, Dunn County News, November 12, 2000
- A. Scott, Science in Next Millennium, Dunn County News, October, 24, 1999
- A. Scott, (*Public Debate on Pseudoscience and Science*), Dunn County News, September 14, 1997

Grants & Patents

A. Scott, 2018, WiSys Patent Application Accepted for Processing, *World's Simplest Materials Lab Educational Apparatus*, December 26, 2018; Invention Disclosure Submission to WiSys, *World's Simplest Materials Lab Educational Apparatus*, November 11, 2018; Phone Conference - November 28, 2018.

A. Scott, <u>Billion Pavilion</u>, RocketHub.com Crowdsourcing Proposal, Requested \$19,784 (not funded), January 2014

A. Scott, *Submersible Pilotless Diving Platform with Instrument Payload*, Utility Patent Submission, (Submitted September 4, 2011), Application Number 13225461

A. Scott, *Astro-Compass Science Initiative*, Wisconsin ESEA Improving Teacher Quality grant program, 2008, \$26,000

A. Scott, Creating Opportunities for Educators in Science Education at UW-Stout, UW-Stout Professional Development Grant (approved for funding), grant award of \$1,872, May 2002

A. Scott, Stout Science Program For Educators: Using Good Science and Pseudoscience As A Tool To Improve Student Competencies in Science and Critical Thinking, Eisenhower Professional Development Grant, a grant of \$130,000 over a three year period. The program ran during the summers of 2000, 2001, and 2002.

Presentations

- A. Scott, 2024, *5min Demo, Friction and Crowbars*, WAPT ISAAPT Joint Meeting, Rockford University, Rockford, IL, October 12, *Highlighted with photo on social media*.
- A. Scott, 2024, *Teaching Physics to Construction Management Majors*, WAPT-ISAAPT Joint Meeting, Rockford University, Rockford, IL, October 12
- A. Scott, 2024, *Ethics and Perspectives of Scientists Involved in World War II*, presentation for the Center for Applied Ethics, UW-Stout, March 7
- A. Scott, 2023, *Perspectives of Scientists Involved in World War II*, Invited Talk, Nuclear Dynamics Symposium, Kent State University, December 1
- A. Scott, 2023, *Easily Constructed and Inexpensive Muon Detector*, WAPT Conference, November 4
- A. Scott, 2022, Observations Regarding a 112-Year-Old Physics Textbook, WAPT, November 5, 2022
- A. Scott, 2021, *Participated in Summer PICUP Workshop* (Partnership for Integration of Computation Into Undergraduate Physics, Python Coding
- A. Scott, 2021, Celebrating Neil Armstrong and First Moon Landing, Promoting STEM Careers (Parade Float Entry UFO Days), Elmwood, WI, July 25th
- A. Scott, 2020, Conceptualizing Cosmological and Geological Time Using a Billion-Year Marble Clock Simulation, WAPT Conference, November 7, 2020 (Online).
- A. Scott, 2020, *Billion-Year Marble Clock*, YouTube Video Documentary, November 6, https://www.youtube.com/watch?v=ai7zHGtHuCo&t
- A. Scott, 2020, *Some Heroes of World War II Wore Lab Coats*, Dunn County Historical Society, Summer Speaker Series, Online Presentation, August 2
- A. Scott, 2020, Stout Connects Presenter, Skydiving 101, February 27
- A. Scott, 2019, collaborated with Chiwei (Jerry) Hui on UW-Stout concert, Stars I Shall Find: A Musical Celebration of Astronomy and Space Exploration, December 6
- A. Scott, 2019, Cosplay as Education Outreach A Year as Neil Armstrong, WAPT Conference, November 9
- A. Scott, 2019, First Man on the Moon, PBS NOVA Documentary, July 15 (Hosted a showing of this documentary at the Menomonie Public Library and answered questions afterwards as the local expert. This was a collaboration with the library staff.)
- A. Scott, 2019, Alan Scott and the Apollo 11 50th Anniversary, Menomonie Public Library Podcast, (One interview split into three separate podcasts. The interview lasted 2 hours and was done on July 5, 2019. This was a collaboration with the library staff.)
- A. Scott, 2019, *Militarization of Space*, Guest Presenter, Dr. Kim Zagorski's International Relations course, POLS-340, April 17
- A. Scott, 2019, Fermi Questions Event Supervisor, WI State Science Olympiad, March 16
- A. Scott, 2019, Key Presenters WI State Science Olympiad, *Skydiving 101: The Science and Thrill of Falling at 120 MPH*, March 15
- A. Scott, 2018, *Ultimate Physics Professional Development (i.e. Skydiving)*, WAPT Conference, October 27
- Keynote Presenter *Being Wrong* by Kathryn Schulz, Honor's Program Colloquium, September 18, 2018.
- A. Scott, A Quasi-Cheerful Long-Term Earth Destiny, WAPT Conference, October 20, 2017,

- A. Scott, *Celebration of Space Movies*, Menomonie Public Library, July 25, 2016 (Also livestreamed on Facebook.)
- A. Scott, *The Incredible Story of Physicist Fritz Houtermans*, WAPT Conference, 2015, UW-La Crosse
- A. Scott, A Fatal Friction Flaw, AAPT Conference, 2014
- A. Scott, Utilizing Errors (i.e. Mistakes), WAPT Conference, 2014
- A. Scott, Bending and Busting, WAPT Conference, 2013
- A. Scott, Blown Away, University of Minnesota Mankato, March 28, 2013
- A. Scott, Blown Away, UW-Stout Science Seminar, December 6, 2012
- A. Scott, Blown Away, WAPT Conference, 2012
- A. Scott, *Civic Engagement and Science Education*, National Polytechnic Conference, Southern Polytechnic State University, Marietta, GA, June 9, 2011
- A. Scott, Busting Bolts, WAPT Conference, October, 2010
- A. Scott, Good Use For a Bad Ruler, AAPT Conference, 2009
- A. Scott, Addicted to Placebos, WAPT Meeting, Oct. 28, 2006
- A. Scott, Gravity Surveys in Geophysics, WAPT Meeting, 2005
- A. Scott, Celebrating Interplanetary Space Exploration, Public Presentation (1.5 hrs), UW-Stout, January 12, 2005
- A. Scott, *Science Literacy and Consumer Marketing of Technology*, Chippewa Falls Technology Fair, 2005 (Presentation/Workshop)
- A. Scott, A Perilous Ride With Archimedes and Newton, WAPT Meeting, 2004
- A. Scott, 3-D Spreadsheet Simulation of a Modern Particle Detector, WAPT Meeting, 2003
- A. Scott, The Risks of Not Providing Students with Risk Analysis Skills, WSST, 2003
- A. Scott, *Volcanoes of the Cascade Mountain Range in the Pacific Northwest*, Public Presentation, UW-Stout, October 9, 2003
- A. Scott, Using Unusual Claims To Teach Science, WSST Convention, 2002
- A. Scott, Consumer Protection Physics, WAPT Meeting, 2002
- A. Scott, *Using Unusual Claims in the Physics Classroom*, AAPT Conference, Boise, Idaho, 2002
- A. Scott and C. Barnhart, *Using Science to Evaluate Unusual Claims*, WEAC Convention, October 26, 2001
- A. Scott, Sand Diver, WAPT Meeting, 2001
- A. Scott, Stout Science Program For Educators, WAPT Meeting, 2000
- Stout Science Program For Educators, UW-Stout Research Day poster presentation, Fall, 2001 Stout Science Program For Educators, UW-Stout Research Day poster presentation, November 2000
- A. Scott, Fact or Fiction: Using Science Fiction Movies As An Instructional Tool, AAPT Conference, 1999
- A. Scott, *Neural Networks: Theory and Application*, University of Wisconsin-Stout, (Math Colloquium), April 1997

Service

- A. Scott, 2024, *Soda Can Physics, Hands-On Activity*, STEAM Day for High School Students, UW-Stout, November 8
- A. Scott, 2024, Thank You to Our Referees, [recognized as a referee for The Physics Teacher], June 1, 2022-May 31, 2023, Phys. Teach., 61, 422-423 (2023)

- A. Scott, 2024, Solar Flares Bring More Chances to See Northern Lights, Interviewed by WQOW, Eau Claire Local TV Station, October 4
- A. Scott, 2024, *Table Facilitator*, Honor's Program Colloquium, *The Right Kind of Wrong* by Amy Edmondson, October 1
- A. Scott and R. Scott, 2024, *Gathered Invertebrates from Gilbert Creek*, Assisted Menomonie Middle School science teacher, September 17
- A. Scott, 2024, Serving on the organizing committee for the Stout Science Olympiad in 2025
- A. Scott, 2024, *May 2024 Graduation Marshal*, Carried the Mace and Assisted Distributing Degrees at Two Graduation Ceremonies, UW-Stout, May 4
- A. Scott, 2024, Fermi Questions State Science Olympiad, Event Supervisor, UW-Stevens Point, April 13
- A. Scott & R. Scott; 2024, *Total Solar Eclipse Presentation* to Kalamazoo Christian High School at Otsego High School in Tontogany, OH. School was in zone of totality, April 8
- A. Scott, 2024, *Interviewed by News 8000*, La Crosse, Total Solar Eclipse and Partial Solar Eclipse, April 8
- A. Scott, 2024, Peer Reviewed State Olympiad Tests Fast Facts, Code Analysis, Experimental Design, WI State Science Olympiad, March 13
- A. Scott, 2024, Table Facilitator, Honor's Program Colloquium, True Biz book, February 15
- A. Scott, 2024, *Peer Reviewer*, The Physics Teacher national journal, American Association of Physics Teachers, February 2024
- A. Scott, 2024, *Boyceville Regional Science Olympiad Competition*, Event Supervisor for *Reach for the Stars*, Boyceville, WI, February 17
- A. Scott, 2024, served on the campus Outstanding Researcher Awards reviewing committee, Spring 2024
- A. Scott, 2024, Laminated Physics Photo Contest winnings on plexiglass for display in tutoring center, January 30
- A. Scott, 2023, *Graduation Marshal*, Carried the Mace and Assisted Distributing Degrees at Two Graduation Ceremonies, UW-Stout, December, 16
- A. Scott, 2023, Collegial Coverage for Colleague Donating a Kidney, November 8, 15, 29
- A. Scott, 2023, *Peer-Reviewed an Article in The Physics Teacher journal*, The Physics Teacher, October 16
- A. Scott, 2023, Table Facilitator, Honor's Program Colloquium, October 5
- A. Scott, 2023, Volunteered to help Menomonie Middle School science teacher gather invertebrates from local stream for study in their class, September 17
- A. Scott, 2023 and 2024, Researching the Characteristics of a Coriolis Flow Meter, mentored 2 undergraduates (Morgan Young and Grace Thoreson) in research project
- A. Scott, 2023, Fermi Questions, WI State Science Olympiad, April 1
- A. Scott, 2022 and 2023, Captain for Inquiry and Nature category, WI State Science Olympiad, 2022 and 2023. (Requires reviewing planned event activities.)
- A. Scott, 2023, Interviewed by WQOW regarding comet C/2022 E3 (ZTF), January 25, reporter Julia Lopez
- PTR committee Kuchta, Ray, Zimmerman, Fall 2022
- A. Scott, 2022, Member of Campus Sabbatical Committee, Fall Semester 2022
- A. Scott, 2022, Interviewed for article about open resource textbooks., SPARC,
- A. Scott, 2022, Table Facilitator, Honor's Colloquium, February 17
- A. Scott, 2022, Peer Reviewer, The Physics Teacher, April 19

- A. Scott, Assisted Applied Science Program Director, Campus Tours, November 4, 2022
- A. Scott, 2021, Chair of Post-Tenure Review Committee for Dr. McCullough, Fall Semester
- A. Scott, 2021, Proposed two new courses, 2021, Statics and Sustainability for the Built Environment, PHYS-190, and Mechanics for the Built Environment, PHYS-290. A third course, Built Environment Physics, was proposed but wasn't advanced in the approval process.
- A. Scott, 2019-2021, *Interdisciplinary Science concentration coordinator*, Applied Science Program
- A. Scott, 2021-2022, Chair of Tenure and Promotion Committee for Dr. Sinkovits, 2021-2022 Academic Year
- A. Scott, 2021, Member Department Curriculum Committee, Fall Semester
- A. Scott, 2021, *Table Facilitator*, Honor's Program Colloquium, Klara and the Sun, October 7 2020-2021 Senior Outstanding Researcher, University of Wisconsin-Stout
- A. Scott, 2021, Astronomy Event, Division C, Event Supervisor, Wisconsin State Science Olympiad (Online) April 17
- A. Scott, 2019-2021, Interdisciplinary Concentration coordinator, Applied Science Program
- A. Scott, 2021, *Table Facilitator*, Honor's Program Colloquium, *Between The World and Me*, February 18
- A. Scott, 2020, Reviewer for The Physics Teacher, August
- A. Scott, 2020, Table Facilitator, Honor's Program Colloquium, Land of Open Graves, October 5
- A. Scott, 2020, Volunteer Helping with 75th Commemoration of Victory in World War II Parade in Tontogany, Ohio, August 14th
- A. Scott, 2020, Table Facilitator, Honor's Program Colloquium, Garbology, February 18
- A. Scott, 2019, *Model Rocket Building*, *Testing*, and *Launching*, Menomonie Public Library, July 16, (*This was a collaboration with the library staff*.)
- Campus-Wide Energy Committee, Fall 2018, Spring 2020, Fall 2020
- A. Scott, 2019, *First Image of a Black Hole*, Wrote a brief article for the Applied Science newsletter for April 22, 2019.
- A. Scott, 2019, *Table Facilitator*, Honor's Program, The Death and Life of the Great Lakes, February 19
- A. Scott, 2018, *Played Santa at the Elk Mound Community Library*, Elk Mound Library, December 6
- Event Supervisor, Boyceville Regional Science Olympics, *Experimental Design*, Division B, December 1, 2018
- Assistant Event Supervisor, Boyceville Regional Science Olympics, *Thermodynamics*, Division C, December 1, 2018
- M. Kuchta and A. Scott, *Demonstration and Display on Electricity, Physics, and Trains*, Red Cedar Train Show, UW-Stout Field House, January 6 and 7, 2018
- Facilitated Group Discussion, Honor's Program, *A Semi-Definitive List of Worst Nightmares*, Feb. 15, 2018
- A. Scott and R. Scott, 2018, *Skywarn Storm Spotter class*, Certified Storm Spotter, St. Croix and Pierce Counties Skywarn program, Agricultural Resources and Education Center, May 5
- Began mentoring Kaylee Knott in connection with my astrophysical research. She is a Rockford, Illinois, high school student who attended my WAPT 2017 talk and wanted to get involved.
- Presenter at the STEPS engineering preview program, UW-Stout, Summer 2017 Volunteer usher at Mabel Tainter Theater productions. (Average about once per year.)

Campus-Wide Energy Committee (Faculty at-large member), Fall 2017

Volunteered to help with at least one shift, sometimes two, with the laptop rollout and refresh from 2007 to 2017 at the beginning of each academic year.

Interviewed by University Communications about the Great American Solar Eclipse of 2017.

Built an Apollo 11 Spacesuit Replica, 2017

Built a Moon Gravity Simulator, 2017

STEM Promotion Committee Member, Full Professor, Fall 2016

Volunteered at Freedom Fest, Menomonie, 2011, 2012, 2013, 2014, 2015, 2016, 2017

Selected as Director of Biology Department Chair Elections, Spring 2017.

Honor's Program, Group Facilitator, Spring Colloquium "What If?", February 16, 2017

Presenter at local elementary STEM day, St. Joseph Elementary School, February 2, 2017

Honor's Program, Group Facilitator, Fall Colloquium "Nonsense: The Power Of Not Knowing", September 22, 2016

Presentation at National Science Olympiad, UW-Stout, *Celebration of Space Movies*, May 2016 Presentation at National Science Olympiad, UW-Stout, *Indiana State Fair Stage Collapse*, May 2016

Modified and Updated Chemistry and Physics Department Kiosk Slide Show, 2016

Honor's Program, Group Facilitator, Spring Colloquium "Can't We Talk about Something More Pleasant?", February 11, 2016

School of Science Model Committee, AY 2015-16

Physics Scheduling Committee, Fall 2015, Spring 2016

Member of School Restructuring Committee, Spring 2015

Developed Physics Department Kiosk Slide Show, 2015

Built a Spaceship/Time Machine (i.e. movie prop TARDIS)

Wisconsin Science Festival, *Phun Physics*, Model Rocket Engine Tests and various demonstrations, October 22, 2015

Event Supervisor, *Crave the Wave*, Regional Science Olympiad, Boyceville Invitational, Dec. 5, 2015

Event Supervisor, Wisconsin State Science Olympiad

Sustainable Energy, 2017

Crave The Wave, 2016

Bungee Drop Competition, 2014, 2015

Technical Problem Solving, 2015

Fermi Questions, 2006, 2007, 2009, 2010, 2012, 2013

Astronomy, 2006

Shock Value, 2011

Event Supervisor, Wisconsin State Science Olympiad, 2001, 2002, 2003, 2004, 2005

Event Supervisor, Regional Science Olympiad, Menomonie High School, 2008

Event Supervisor, Regional Science Olympiad, Menomonie High School, 2007

Event Supervisor, Regional Science Olympiad, Menomonie High School, 2006

Event Supervisor (Fermi Questions) for Regional Science Olympiad at Menomonie, 2004 and 2005

Road Marshal Volunteer, Professional Bicycle Race in Menomonie, 2011, 2012, 2013, 2014, 2015

Faculty Search Committee, Physics Department, 2013-14, 2014-15

Developed New Course, Statics, PHYS-291, Fall 2013

STEM College Full Professor Promotion Committee, Chair, 2013

Developed New Course, Physics For Future Presidents, Fall 2012

Honor's Program Group Facilitator, 2010, 2011, 2012, 2013, 2014

Faculty Search Committee, Physics Department, Fall 2011

Developed New Course, Physics Modeling for Game Programmers, PHYS-360, Spring 2010

Event Supervisor – Shock Value, Science Olympiad, Division B, April 2, 2011

Demonstration, STEM Tours, April 16, 2010

Demonstration, DeLong Middle School Tour, Spring 2010

Faculty Search Committee, Physics Department, Spring 2010 (2 searches in same semester)

Chair of Faculty Search Committee, Physics Department, Spring 2010

Chair of the STEM College Promotion Committee, Fall 2010

Professional Development Week Presenter, Spring 2010, Video Projects in the Classroom

UW-System grant proposal review committee for the ESEA Wisconsin Improving Teacher

Quality (WITQ) grant program, Green Lake, WI, October 22nd & 23rd, 2009

Cars on Mars, University Honors Program presentation, September 15, 2009

Faculty Senate, 2006-07

Applied Science Program Committee, 2006-present

College of Arts and Sciences, Promotion Committee, Fall 2006

Honor's Program Presentation, *A Briefer History of Time by Stephen Hawking*, November 3, 2006

Faculty Search Committee, Physics Department, 2004-05

Faculty Senate, Physics Department Representative, Fall 2005

Faculty Senate, Physics Department Representative, Fall 2004

Applied Science Program Director (Temporary), Summer 2004

Applied Science Committee Member, UW-Stout, 1999-2005

Physics Department liaison to Construction Program 1997-2008; Member of the construction program advisory board.

Supervised Two Honor's Program Student Projects, Spring 2004

Panel Member, Newman Club discussion of Science and Religion, March 18, 2004

Group Facilitator, Honor's Program on Godel's Proof, Fall, 2003

UW-Stout representative to the ESEA (Teacher Professional Development) Grant Review Committee, State of Wisconsin, 2003 and 2004

UW-Stout Ethics Seminar, Ethics and Marketing Placebos, February 21, 2003

Special Presentation, (A. Scott, C. Barnhart, S. Schultz, F. Schultz), *Biotechnology Across The Curriculum*,

Wisconsin and Family Consumer Education, 2001 Annual Conference, UW-Stout

Reviewed a Faculty Research Initiative proposal for Research Services at UW-Stout, April 21, 2002

UW-Stout Professional Development Session, Presentation on PK-16 Collaborations, January 17, 2002

UW-Stout Professional Development Session, Presentation on Critical Thinking, January 17, 2001

UW-Stout, College of Arts and Science, Promotion Committee Member, Fall 2002

UW-Stout, College of Arts and Science, Promotion Committee Member, Fall 2000

Developed New Course, Introduction to Geology, PHYS-258

Community Activities

- A. Scott, 2024, *Staffed Beverage Center*, St. Joseph Church, Community Festival, September 15
- A. Scott, 2024, Staffed GROWW booth at Menomonie Community Cookout, Promoting Election Reform, September 12
- A. Scott, Matt Kuchta, Melissa Kneeland; 2023, *Rocket Rendezvous*, Rassbach Historical Museum, 9am-3pm, Youth ages 8-14 gathered to build and learn about rockets, Displayed Neil Armstrong Moonwalking Spacesuit facsimile, October 7
- A. Scott, 2023, Volunteer at GROWW Booth, Menomonie Community Cookout, (Election Reform, Ranked Choice Voting), September 14
- A. Scott, 2023, Get It Dunn Run, Road Marshal Volunteer, June 10
- A. Scott, 2023, Volunteer Gate Staff, Dunn County Fair, July 29
- A. Scott, Spring 2023, *Sustainability Scouting Merit Badge Counseling*, engaged with 16 local Scouts learning about Sustainability, 6 hours of classroom activities and field trips
- A. Scott, 2022, *Space Exploration Merit Badge Counselor*, Scouts, April 12th, 19th, May 10th, and May 14th, Online Presentations and In-Person Rocket Launch
- A. Scott, *Gathered Invertebrates in Gilbert Creek*, Assisted Menomonie Middle School Science Teacher, September 18, 2022; September 19, 2022
- A. Scott, 2021, *Nuclear Science Merit Badge Counselor*, Scouts, November 10th, 17th, and December 1st, Online and Synchronous

Community Festival, Volunteer Train Driver, Sept. 16, 2018

Sustainability Merit Badge Counselor, Boy Scouts of America, Oct. 10th, 24th, and Nov. 7th, 2017 Volunteered at community church fall festival, 2012-2017

Volunteered at Dunn County Fair, Staff an Entrance with Gate Fee, July, 2017

Used TARDIS to promote STEMM careers at UW-Stout, Dunn County Fair display, July 2015 Hosted Community Block Party, *Summer Solstice Sundaes*, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017 (Each year on the summer solstice.)

Part of Cast for *The Crucible* Theatrical Production, Menomonie Theater Guild, October 2016 Nuclear Science Merit Badge Counselor, Boy Scouts of America, half-day long event, Elk Mound High School, January 28, 2017

Nuclear Science Merit Badge Counselor, Boy Scouts of America, Merit Badge Clinic, January 31, 2015

Master of Ceremonies, *Doctor Who Day*, Menomonie Public Library, June 28, 2014
Part of Cast for the *Pirates of Penzance* Theatrical Production, Menomonie Theater Guild, March 2013

Nuclear Science Merit Badge Counselor, Boy Scouts of America, February 2012

Guest Presenter, *Science and Religion*, local high school religious education group, Science and Religion, September 21, 2011

Merit Badge Councilor, Space Exploration, Boy Scouts of America, Spring 2010 (37 Scouts) Presentation on Lasers, 4th Grade, St. Joseph Elementary School, May 2006

Presentation on Science and Citizenship, 2nd Grade, St. Joseph Elementary School, May 2006 Substitute Taught Kindergarten class at St. Joseph elementary school (as a volunteer), January 9, 2006

Co-Chair, Church Festival, 2005 (Raises more than \$25,000 in funds.)

Assistant Coach, Girls Fast-Pitch Softball (U10, Menomonie), Weidner Clinic team, Summer 2005

Presentation on Space Probes: Past, Present, and Future, Talented and Gifted program, St.

Joseph's Elementary School, Dec. 9, 2004

Assistant Cub Scout Den Leader, Pack 47, Menomonie, WI, 2004 and 2005

Assistant Soccer Coach, Red Cedar Soccer League (U8), Fall 2004

Head Coach, Menomonie Recreation Program, Cedar Corporation T-ball Team, Summer 2004 Assistant Soccer Coach, Red Cedar Soccer League (U8), Menomonie, WI, Spring 2004 Destination Imagination Coach, grades K-2, St. Joseph School, Menomonie, WI, Spring 2004 Presentation on Minerals and Asteroid Impacts, 3rd Grade, Downsville Elementary, WI, April 22, 2004

Presentation on Planets, Kindergarten Class, St. Joseph School, Menomonie, WI, March 24, 2004

Presentation on Mars, Kindergarten Class, St. Joseph School, Menomonie, WI, Feb. 4, 2004 Presentation on Astronomy, 2nd Grade Class, St. Joseph School, Menomonie, WI, Dec. 3, 2003 Presentation on Fossils, 2nd Grade Class, St. Joseph School, Menomonie, WI, Oct. 17, 2003 Assistant Soccer Coach, Red Cedar Soccer League (U8), Menomonie, WI, Fall 2003 Destination Imagination Coach, grades K-2, St. Joseph School, Menomonie, WI, Spring 2003 Helped build an Earthquake Seismometer educational display for Crystal Cave (Spring Valley, WI) during the summer of 2002. (Cooperative activity with Blaze Cunningham, owner of Crystal Cave.)

Knights of Columbus member (community service organization - inducted winter of 2000) Volunteer Firefighter, Washington Township Fire Department, Tontogany, OH, 1981-1988 (Full certification training in 1984.)

Awards and Professional Organizations

- A. Scott, 2024, Participated in Historical Marker Dedication Ceremony, August 10
 Marker contains my name in its text. It is an honor granted me for being an officer in the local
 FFA chapter and being a volunteer firefighter in 1982. The marker acknowledges the first
 public grain rescue tube construction and demonstration in the United States. It was a Building
 Our American Community (BOAC) grant which funded the project.
- A. Scott, 2024, Grand Marshal for Parade, Tontogany, OH, Festival Parade, August 10
- A. Scott, 2020-2021 Outstanding Senior Researcher, University of Wisconsin-Stout, STEMM College
- A. Scott (Spokesperson), 2019, *Neil and Jeep: Two Ohio Greats*, Botkins Carousel parade float, Co-Sponsored by Brown Industrial and the Department of Chemistry and Physics, UW-Stout; Botkins, OH, June 9; *Was awarded 1st place float in the parade*.

Wisconsin Science Olympiad, 2019 Service Award, Presented to Alan Scott for Excellence in Service to the Students and Coaches of Science Olympiad

A. Scott, 2018, Solo Accelerated Freefall Skydive, Certificate of Achievement, SKYDIVE TWIN CITIES, July 14

Solve ME/CFS Initiative member (formerly CFIDS Association of America)

American Physics Society member (APS), 1996-2019

American Association of Physics Teachers member (AAPT)

Union of Concerned Scientists

National MS Society member

Wisconsin Society of Science Teachers member, 2001-2002

"Man of the Year" (2001) by the Knights of Columbus, Menomonie Chapter

Honorary Member of Sigma Lambda Chi (Honor Society For Leaders in Construction), 1999-

present Eagle Scout