
CURRICULUM VITAE

EMILY MAHER

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EDUCATIONAL BACKGROUND

- 09/99 – 10/05 University of Minnesota, Minneapolis, MN
Ph.D., Department of Physics, emphasis on experimental particle physics
Thesis: “A Measurement of the Interaction Charged-Current Cross Section of the Tau Neutrino”
- 09/95 – 05/99 Hendrix College, Conway, AR
B.A. (with Departmental Honors), Department of Physics

TEACHING EXPERIENCE

- 07/21 - 06/22 Chair of the physics department, Massachusetts College of Liberal Arts (MCLA), North Adams, MA
- 09/17 – present Professor of Physics, MCLA
Course taught for non-majors: Concepts of Physics, Quarks to Quasars, The Physics of Superheroes, Energy and the Environment with Lab
Courses taught for majors: Introduction to Mechanics, Introduction to Electricity and Magnetism, Introduction to Waves, Optics, and Relativity, Classical Mechanics I & II, Methods of Experiential Physics I & II (electronics and modern physics experiments), Modern Physics I & II, Advanced Physics Laboratory I & II (semester-long group and individual research projects), Introduction to Particle Physics, Advanced Electricity and Magnetism, Quantum Mechanics, Computational Physics with Python, Mathematical Methods of Physics, General Relativity, and Physics Seminar
- 06/12 - 07/20 Chair of the physics department, MCLA
- 09/11 – 09/17 Associate Professor of Physics, MCLA
- 09/06 – 09/11 Assistant Professor of Physics, MCLA
- 08/05 – 09/06 Visiting Assistant Professor, College of the Holy Cross, Worcester, MA
General Physics 1 & 2, Mathematical Methods of Physics, Topics in Physics: Science in the News
- 01/05 – 05/05 Adjunct Professor, University of St. Thomas, St. Paul, MN
Modern Physics
- 09/03 – 12/03 Teaching Assistant, University of Minnesota, Minneapolis, MN
Methods of Experimental Physics I. Included digital and analog electronics and experimental methods

06/02 – 08/02	Co-taught course, University of Minnesota, Minneapolis, MN Introductory Physics for Science and Engineering I. Taught this course with Professor Jim Eckert (Harvey Mudd College). We devised homework assignments and exams together. We also shared the lectures.
09/00 – 12/00	Head Teaching Assistant Introductory College Physics I. Was responsible for organizing course information and meetings in addition to the normal TA responsibilities
09/99 – 05/01	Teaching Assistant Introductory Physics for Science and Engineering I & II

TEACHING ACTIVITIES

09/20 - 06/21	During sabbatical leave, created a course titled, “Computational and Mathematical Methods of Physics”, a sophomore level course which teaches students to program, covers the necessary mathematical methods required for the upper level physics courses, and introduces numerical methods implemented in the python programming language
06/21	Completed the MCLA Online Teaching Certification, which is an intensive 4-week fully-online course geared to prepare faculty to teach in fully-online environments
04/20 – 04/21	Attended multiple webinars given by The SEA (STEM Equity Achievement) Change Institute, hosted by the American Association of the Advancement of Sciences. These webinars are focused on how to help underrepresented groups in physics persist through the major and beyond
04/20 - 06/21	Attended several webinars on teaching remotely during the era of the coronavirus, including, but not limited to: How to flip your class online, hosted by Eric Mazur, Tips, Tricks, and Best Practices for Teaching Physics Online, hosted by the PICUP collaboration, Making Physics Inclusive and Equitable, hosted by the American Physical Society, and What the Coronavirus Means for College Admissions, hosted by The Chronicle
09/19 – 07/20	Participating in a Davis Advising Project, “Enriching Advising Culture for Integrative Learning,” at MCLA
07/19	Accepted to and attended the Partnership for the Integration of Computation in Undergraduate Physics (PICUP) NSF sponsored workshop where I worked with experts to develop a plan to include more computation in the MCLA physics major. I am currently implementing this plan.
09/13 – 09/19	Served on the advisory board for the STEM Pathways Program, which involved choosing grant candidates from the MCLA STEM majors who would receive \$5000 per semester for tuition, working with these students throughout their time at MCLA, and overseeing the STEM mentor program.
01/17	Served as an expert for two middle school physics-themed science projects at St. Agnes Academy in Dalton, MA
01/17 – 05/17	Supervised undergraduate Teaching Assistant in conjunction with my Introduction to Mechanics course. We planned problem-solving sessions and worked through laboratories for this course.
04/16	Berkshire Goes to College Day provides the opportunity for every sixth-grade student in the county to visit a local college campus in early April in an effort to raise awareness of college in Berkshire County residents at an early age. I contributed by holding sessions on physics for the students.

01/15 – 05/15	Served as a mentor for a high school student through an internship program at Berkshire Arts and Technology Charter Public School (BART). We designed a program related to the student’s career aspirations, which included developing skills useful for research, including programming in Python, and an exploration of careers in science.
09/13 – 08/14	During sabbatical leave, headed a curriculum reform for the MCLA physics department.
04/10	Berkshire County goes to College Day
09/09 – 05/10	Co-Domain Leader for Core Curriculum Science and Technology (CCST) domain, which involved selecting a CCST outcome and working with all faculty teaching CCST courses to assess this outcome
06/08	Workshop Leader at an Expanding Your Horizons conference, a career conference designed to nurture girls’ interest in science and mathematics, Berkshire Community College, Pittsfield, MA
05/07 – present	Judge for local and regional middle and high school science fairs
11/07	Attended AAPT/APS New Faculty Workshop for Physics Professors at the American Center for Physics, College Park, MD
11/04	Workshop Leader at an Eye to the the Future conference, a career conference for young women in math and science, Augsburg College, Minneapolis, MN
09/03 – 12/03	Completed a course in the Preparing Future Faculty program entitled, “Teaching in Higher Education.” The PFF program provides a teaching and learning forum for graduate students. Program participants discuss learning theory and strategies, develop teaching and assessment skills, and create classroom materials.
06/03 – 08/03	Supervised students during a Research Experience for Undergraduates (REU) summer program at the University of Minnesota
01/02 – 05/02	Supervised undergraduate student in neutrino research project at the University of Minnesota
09/97 – 05/03	Private Tutor Tutored students in physics at the college level

RESEARCH EXPERIENCE

6/21	Served on MINER ν A paper committee for “Measurement of inclusive charged-current ν_{μ} cross sections as a function of muon kinematics at $\langle E_{\nu} \rangle \sim 6$ GeV on hydrocarbon.”
06/12 – 6/20	Served as Calibration Coordinator for the MINER ν A experiment. Oversaw and participated in calibrating all of our Low Energy data. Currently working with my group to calibrate the Medium Energy data. Run bi-weekly meetings to discuss current progress on calibrations, issues which arise, and solutions to said issues.
09/07 – present	Collaborator in MINER ν A (Main INjector ExpeRiment for ν -A), Fermilab Experiment 938, Batavia, IL and North Adams, MA Initially developed analysis and calibration code and participated in the installation and commissioning of the detector. Served as a member of the production group, which oversaw batch processing of the MINER ν A data. Served on the MINER ν A Speakers Committee and coordinated practice talks. Currently serve as calibrations coordinator and on the MINER ν A Executive Committee and the Institutional Board.

Worked with three MCLA undergraduate students: Darsa Donelan (summer 2009), Max Eve (summer 2010), and Mike Testa (summer 2011). Each student spent at least one month at Fermilab, and each was involved in a project using both data and Monte Carlo simulations.

06/20 - 07/20	Attended the XXIX International Conference on Neutrino Physics and Astrophysics online.
11/14, 11/19	Worked with student researchers who presented at the Council of Public Liberal Arts Colleges (COPLAC) student research conferences
04/19	Oversaw a student research project that was presented at the MASSURC conference in Amherst, MA
09/13 – 08/14	During my sabbatical leave, served as Medium Energy Data Quality Coordinator for the MINERvA experiment. Arranged Medium Energy low-level data analysis, regular physics distribution production, and calibration procedure upgrades from the Low Energy run as needed.
03/12	Oversaw Max Eve’s research presentation for the American Physical Society Meeting held in Boston. Max received an award for outstanding presentation of undergraduate research at this conference
04/11	Reviewer for Proceedings of the National Conference on Undergraduate Research
01/01 – 09/05	Research Assistant, DONuT (Direct Observation of Nu Tau), Fermilab Experiment 872, Minneapolis, MN Refined event location analysis software in an emulsion detector for the purposes of discovering the first interactions of the tau neutrino. Refined probability analysis for tau neutrino events. Measured the first interaction cross section of the tau neutrino.
06/01 – 08/02	Research Assistant, MINOS (Main Injector Neutrino Oscillation Search), Fermilab Experiment 875, Minneapolis, MN and Soudan, MN Constructed parts of the far detector for the MINOS experiment which is looking for neutrino oscillations. Installed and debugged electronics for data acquisition
06/99 – 08/99	Research Assistant, Fermilab Experiment 872, Minneapolis, MN Located neutrino events in emulsion data using software algorithms
05/98 – 03/99	Research Assistant, Hendrix College, Conway AR Developed methods to detect metallic ions in the plume of rockets. Contributed to the development of a ring laser gyroscope to measure variations in Earth’s rate of rotation.

GRANTS AND AWARDS

2019	With Dr. Kebra Ward, applied and received a Title III grant from the U.S. Department of Education for Physics Community Outreach
2019	Received a grant to cover travel funds to attend a PICUP conference from the MCLA Faculty Professional Development and Retraining Committee
2016	Received MCLA Faculty Incentive Award for Senior Faculty
2013 - 2019	Awarded a five-year NSF grant (Award No. DUE-1356726) to MCLA under the direction of five MCLA faculty members. This project, entitled the STEM Pathways Program allows us to select a group of students interested in a STEM major and provide both financial and moral support to these students as they progress through their majors at MCLA.

2013	Awarded Guest and Visitors Funds from Fermilab to fund a series of trips which allowed me to spend five months of my sabbatical leave at Fermilab. These funds also provided salary support.
2011	Received Guest and Visitor Funds from Fermilab to fund a six week trip to Fermilab with an MCLA student to collaborate on the MINERvA experiment
2008	Awarded a Cottrell College Science Award from the Research Corporation, a foundation for the advancement of science. Grant total: \$33,286
2008	Awarded a Faculty Incentive Award for Research Projects from MCLA
2007	Received Title 3 Project Grant for academic technology advancement from MCLA
2004	President's Student Leadership and Service Award, University of Minnesota
2001	Outstanding TA Award, University of Minnesota
1999	Graduated with highest distinction, Hendrix College

PUBLICATIONS

2021	"Exploring Neutrino-Nucleus Interactions in the GeV Regime using MINERvA" arXiv: 2017.02064, submitted for publication
2021	"Constraining the NuMI neutrino flux using inverse muon decay reactions in MINERvA" arXiv: 2107.01059, submitted for publication
2021	"Measurements of Inclusive Charged-Current ν_μ Cross Sections as a Function of Muon Kinematics at ~ 6 GeV on Hydrocarbon", arXiv:2106.16210, submitted for publication
2021	"Use of Neutrino Scattering Events with Low Hadronic Recoil to Inform Neutrino Flux and Detector Energy Scale" arXiv: 2104.05769, submitted for publication
2021	"Neutral Pion Reconstruction using Machine Learning in the MINERvA experiment at $\langle E_\nu \rangle \sim 6$ GeV", arXiv: 2103.06992, accepted for publication in JINST
2020	"Double-Differential Inclusive Charged-Current ν_μ Cross Sections on Hydrocarbon in MINERvA at $\langle E_\nu \rangle \approx 3.5$ GeV" Phys. Rev. D 101, 11.
2020	"Probing Nuclear Effects with Neutrino-induced Charged-Current Neutral Pion Production" arXiv:2002.05812, accepted for publication in PRD.
2020	"High-statistics measurement of neutrino quasielastic-like scattering at ~ 6 GeV on a hydrocarbon target" Phys. Rev. Lett. 124, 121801
2020	"Nuclear binding energy and transverse momentum imbalance in neutrino-nucleus reaction" Phys.Rev. D 101, 092001.
2019	"Constraint of the MINERvA Medium Energy Neutrino Flux using Neutrino-Electron Elastic Scattering" arXiv:1906.00111, Phys.Rev. D 100, 9.
2019	"Measurement of $\bar{\nu}_\mu$ charged-current single π^- production on hydrocarbon in the few-GeV region using MINERvA" Phys. Rev. D 100, 5.
2019	"Tuning the GENIE Pion Production Model with MINERvA Data" arXiv:1903.01558, Phys.Rev. D 100, 7.
2019	"Neutron measurements from anti-neutrino hydrocarbon reactions," MINERvA Collaboration. Phys. Rev. D 100, 052002.

- 2019 “Measurement of Quasielastic-Like Neutrino Scattering at $\langle E_\nu \rangle \sim 3.5$ GeV on a Hydrocarbon Target,” MINERvA Collaboration. Phys. Rev. D 99, 012004.
- 2018 “Reducing model bias in a deep learning classifier using domain adversarial neural networks in the MINERvA experiment,” MINERvA Collaboration. Journal of Instrumentation, Vol. 13.
- 2018 “Measurement of final-state correlations in neutrino muon-proton mesonless production on hydrocarbon at $\langle E_\nu \rangle = 3$ GeV,” MINERvA Collaboration. Phys. Rev. Lett. 121, 022504.
- 2018 “Antineutrino charged Current charged-current reactions on scintillator with low momentum transfer.” MINERvA Collaboration. Phys. Rev. Lett. 120, 221805.
- 2018 “Measurement of the muon anti-neutrino double-differential cross section for quasi-elastic scattering on hydrocarbon at $\langle E_\nu \rangle \sim 3.5$ GeV,” MINERvA Collaboration. Phys. Rev. D 97, 052002.
- 2018 “Measurement of Total and Differential Cross Sections of Neutrino and Antineutrino Coherent π^\pm Production on Carbon,” MINERvA Collaboration. Phys. Rev. D 97, 032014.
- 2017 “Measurement of ν_μ charged-current single π^0 production on hydrocarbon in the few-GeV region using MINERvA,” MINERvA Collaboration. Phys. Rev. D 96, 072003
- 2017 “Direct Measurement of Nuclear Dependence of Charged Current Quasielastic-like Neutrino Interactions using MINERvA,” MINERvA Collaboration. Phys. Rev. Lett. 119, 082001.
- 2017 “Measurement of the antineutrino to neutrino charged-current interaction cross section ratio on carbon,” MINERvA Collaboration. Phys. Rev. D 95, 072009.
- 2017 “Measurement of the Neutral-current K⁺ Production by Neutrinos Using MINERvA,” MINERvA Collaboration. Phys. Rev. Lett. 199, 011802.
- 2016 “Measurement of the Inclusive Neutrino and Antineutrino Charged Current Cross Sections in MINERvA Using the Low-nu Flux Method,” MINERvA Collaboration. Phys. Rev. D 94, 112007.
- 2016 “Neutrino Flux Predictions for the NuMI Beam,” MINERvA Collaboration. Phys. Rev. D 94, 092005
- 2016 “Evidence for Neutral-Current Diffractive Neutral Pion Production from Hydrogen in Neutrino Interactions on Hydrocarbon,” MINERvA Collaboration. Accepted for publication by Phys. Rev. Lett.
- 2016 “Measurement of K⁺ Production in Charged-Current ν_μ Interactions,” MINERvA Collaboration. Phys. Rev. Lett. 117, 061802
- 2016 “First Evidence of Coherent K⁺ Meson Production in Neutrino-Nucleus Scattering,” MINERvA Collaboration. Phys. Rev. Lett. 117, 061802
- 2016 “Cross Sections for Neutrino and Antineutrino Induced Pion Production on Hydrocarbon in the Few-GeV region using MINERvA,” MINERvA collaboration. Phys. Rev. D 94, 052005.
- 2016 “Measurement of the NuMI Flux Using Neutrino-Electron Elastic Scattering,” MINERvA Collaboration, accepted by Phys. Rev. D.
- 2016 “Measurement of Partonic Nuclear Effects in Deep-Inelastic Neutrino Scattering using MINERvA,” MINERvA Collaboration, Phys. Rev. D 93, 071101.

- 2016 “Identification of Nuclear Effects in Neutrino-Carbon Interactions at Low Three-Momentum Transfer,” MINERvA Collaboration, Phys. Rev. Lett. 116, 071802.
- 2016 “Measurement of Electron Neutrino Quasielastic and Quasielastic-like Scattering on Hydrocarbon at Average E_ν of 3.6 GeV,” MINERvA Collaboration, Phys. Rev. Lett. 116, 081802.
- 2015 “Single Neutral Pion Production by Charged Anti- ν_μ Interactions on Hydrocarbon at E_ν of 3.6 GeV,” MINERvA Collaboration, Phys. Lett. B 749 130-136.
- 2015 “Measurement of Muon Plus Proton Final States in ν_μ Interactions on Hydrocarbon at Average E_ν of 4.2 GeV,” MINERvA Collaboration, Phys. Rev. D 91, 071301
- 2015 “MINERvA Neutrino Detector Response Measured with Test Beam Data,” MINERvA Collaboration, Nucl. Inst. Meth. A 789, pp 28-42.
- 2015 “Charged Pion Production in Muon Neutrino Interactions on Hydrocarbon,” MINERvA Collaboration, Phys. Rev. D 92, 092008.
- 2014 “Measurement of Coherent Production of π^\pm in Neutrino and Anti-Neutrino Beams on Carbon from E_ν of 1.5 to 20 GeV,” MINERvA Collaboration, Phys. Rev. Lett. 113, 261802.
- 2014 “MINERvA Searches for Wisdom Among Neutrinos,” E. Maher, D. Harris, and K. McFarland, CERN Courier, April, 2014, 26-29.
- 2014 “Measurement of Ratios of Muon Neutrino Charged-Current Cross Sections on C, Fe, and Pb to CH at Neutrino Energies 2-20 GeV,” MINERvA Collaboration, Phys. Rev. Lett. 112, 231801.
- 2014 “Design, Calibration, and Performance of the MINERvA Detector,” MINERvA Collaboration, Nuclear Instruments and Methods, A 743 (2014) 130.
- 2013 “Measurements of Muon Neutrino Quasi-Elastic Scattering on a Hydrocarbon Target at E_ν of 3.5 GeV,” MINERvA Collaboration, Phys. Rev. Lett. 111, 022502.
- 2013 “Measurement of Muon Anti-Neutrino Quasi-Elastic Scattering on a Hydrocarbon Target at E_ν of 3.5 GeV” MINERvA Collaboration, Phys. Rev. Lett. 111, 022501.
- 2012 “Demonstration of Communication Using Neutrinos,” MINERvA Collaboration, Modern Phys. Lett. A 27, 1250077.
- 2012 “The MINERvA Data Acquisition System and Infrastructure,” MINERvA Collaboration, Nuclear Instruments and Methods A: Volume 694, 179.
- 2012 “Arachne - A Web-Based Event Viewer for MINERvA,” MINERvA Collaboration, Nuclear Instruments and Methods, v. 676, 44.
- 2008 “A First Measurement of the Interaction Cross Section of the Tau Neutrino,” DONuT Collaboration, Phys. Rev. D78.
- 2006 “Observation of Muon Neutrino Appearance with the MINOS Detectors in the NuMI Neutrino Beam,” MINOS Collaboration, Phys. Rev. Lett. 97, 191801.
- 2006 “First Observation of Separated Atmospheric Muon Neutrino and Muon Anti-Neutrino Events in the MINOS Detector,” MINOS Collaboration, Phys. Rev. Lett. 97, 191801.
- 2003 “Users Guide to the FarDet DAQ System”, NuMI-Note-900, E. Maher, J. Hartnell and A. Rahman
- 2001 “Muon Containment in the Near Detector”, NuMI-Note-702, E. Maher and J. Nelson

CONFERENCES, WORKSHOPS, AND SELECTED PRESENTATIONS

- 04/20 Panelist for the MCLA Face to Face with Faculty webinar
- 01/19 “Careers in Education”, served on a panel at the Conference for Undergraduate Women in Physics (CUWiP) at the University of Massachusetts, Amherst, MA
- 10/18 Delivered opening remarks and introduced President Birge at the first annual Engineering Expo at MCLA.
- 04/15 “Seeing the Invisible: Neutrinos, Fermilab, and the MINERvA Experiment”, presented at the MCLA Brown Bag Lecture Series
- 02/15 “Recent Results from the MINERvA Experiment”, presented at the Lake Louise Winter Institute 2015 at Chateau Lake Louise in Alberta, Canada
- 04/14 “Neutrinos and the MINERvA Experiment”, presented at the Physics and Astronomy Colloquium Series at Union College, Schenectady, NY
- 04/14 “Deriving the Calibration Constants”, presented at the MINERvA Data Management Review, Fermilab, Batavia, IL
- 03/13 “Neutrinos and the MINERvA Experiment”, presented at the MCLA Brown Bag Lecture Series
- 11/12 Attended New England Section Fall 2012 APS Joint Meeting, Williamstown, MA
- 10/12 “Anti-Neutrino Quasi-Elastic Scattering at MINERvA”, presented at the American Society of Physics Division of Nuclear Physics annual meeting, Newport Beach, CA
- 07/12 Attended NUFACT 2012 (International Workshop on Neutrino Factories, Superbeams, and Beta Beams), College of William and Mary, Williamsburg VA and Jefferson National Lab, Newport News, VA
- 02/11 “Neutrinos and the MINERvA Experiment”, presented at the Physics Colloquium at Bates College, Lewiston, ME
- 04/10 “Absolute Calibration of the MINERvA Detector”, presented at American Physical Society April Meeting 2010, Washington DC
- 11/08 “Final Tau-Neutrino Results from the DONuT Experiment”, presented at the Physics Colloquium at Williams College, Williamstown, MA
- 10/08 Attended MINERvA Tracking Prototype Workshop, University of Rochester, NY
- 08/08 Attended the SENCER (Science Education for New Civic Engagement) Summer Institute, Santa Clara, CA
- 10/08 Hosted MCLA Workshop on Hardware and Calibration Databases for MINERvA, North Adams, MA
- 12/07 - 09/20 Numerous presentations at MINERvA internal collaboration meetings
- 09/07 “Massachusetts College of Liberal Arts Application to Join MINERvA”, presented at a MINERvA collaboration meeting at Fermilab, Batavia, IL
- 07/07 Attended American Association of Physics Teachers Conference, Greensboro, NC
- 07/07 Attended Workshops: “Learning Physics While Practicing Science”, “Physics by Inquiry”, and “Advanced and Intermediate Instructional Laboratories”, Greensboro, NC

05/07	Attended Fifth International Workshop on Neutrino-Nucleon Interactions in the Few-GeV Region, Fermilab, Batavia, IL
05/07	Attended Main INjector ExpeRiment for ν -A (MINER ν A) collaboration meeting, Fermilab, Batavia, IL
10/05	“Measuring the Tau Neutrino Charged-Current Cross Section”, presented at the High Energy Physics Seminar at the University of Minnesota, Minneapolis, MN
05/05	“Results of Parameter Analysis of Tau Neutrino and Charm Candidates”, presented at Nagoya University, Nagoya, Japan
04/05	“Searching for the Tau Neutrino”, presented at a physics seminar at the College of the Holy Cross, Worcester, MA
03/05	“The First Measurement of the CC Cross Section of the Tau Neutrino”, presented at the High Energy Physics seminar at the University of Pennsylvania, University Park, PA
02/05	“Searching for the Tau Neutrino”, presented at the physics seminar at University of Pennsylvania, Altoona, PA
01/05	“DONUTs and Tau Neutrinos”, presented at the physics seminar, Guilford College, Greensboro, NC
08/04	“Creating a Mentoring Program for New Graduate Students”, presented at the American Association of Physics Teachers meeting, Sacramento, CA
08/04	“New Results from the DONuT Experiment”, presented at the physics seminar at the University of Hawaii, Honolulu, HI
11/03	Attended 2003 CIRTL (Center for the Integration of Research, Teaching, and Learning) Forum, Madison WI
07/03	“Status Report from the DONuT Experiment”, presented at the Department of Energy Review, University of Minnesota, Minneapolis, MN
04/03	“New Nu’s from the DONuT Experiment”, presented at the High Energy Physics seminar at the University of Minnesota, Minneapolis, MN
05/02	“Further Results from the DONuT Collaboration”, presented at American Physics Society Division of Particles and Fields meeting, Williamsburg, VA
04/99	“Monitoring Metallic Compounds in Rocket Plumes”, National Conference on Undergraduate Research, Rochester, NY
03/99	“Monitoring Metallic Compounds in Rocket Plumes”, presented at the the American Physics Society, Atlanta, GA
01/01 - 09/08	Numerous presentations at DONuT internal collaboration meetings

OTHER ACTIVITIES

07/19 – present	Member of the Partnership for the Integration of Computation in Undergraduate Physics (PICUP)
09/19 – 07/20	Faculty Advisor of MCLA Cosplay Coalition
01/20	Served on the MCLA Academic Appeals Committee
2017 – 2018	Served on the MCLA Budget Advisory Group

2017	Served on selection committee for MCLA faculty awards
2016	Served on planning committee and session moderator for the NES-APS (New England Section of the American Physical Society Fall 2016 Meeting held at MCLA.
2016 – 2019	Served on Core Curriculum Reform Committee
2015 – 2016	Served as vice-chair of the MCLA All College Committee
2014 - 2017	Serving on the MINERvA Executive Committee
2014 – present	Serving as MCLA physics department webmaster
2012 – 2013	Served on MCLA Academic Policies Committee
2011 – 2012	Served on MCLA Committee on Promotions
2011 – 2016	Served as advisor of the Sigma Pi Sigma Physics Honors Society MCLA Chapter
2010 – 2016	Served as advisor of Society of Physics Students (SPS) MCLA chapter
2010 – 2014	Served on the MINERvA Speakers Committee, a committee designed to organize and oversee all public talks given by MINERvA collaborations
2008 – 2011	Serving on MINERvA Institutional Board
2007 – 2011	Served on MCLA Curriculum Committee
2006 – 2008	Participated in the CASTL (Center for Advanced Study of Teaching and Learning) Roundtable program at MCLA
2003	Created and served as an officer for a mentoring program for first year graduate students in the physics department at the University of Minnesota
2003	Served as an officer for WIPA (Women In Physics and Astronomy) group, University of Minnesota
2002	Lobbied for increased funding to the US Department of Energy Office of Science during the 2002 Congressional session, Washington, District of Columbia

PROFESSIONAL AND ACADEMIC AFFILIATIONS

2004 – present	American Association of Physics Teachers
1999 – present	Sigma Pi Sigma: The National Physics Honor Society
1998 – present	American Physical Society

REFERENCES

References provided upon request.