

KATHRYN E. WILLIAMSON

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CORE PROFESSIONAL STRENGTHS:

Physics & Astronomy Teaching	Physics & Astronomy Educational Research
Inquiry-Based, Hands-On Learning	Undergraduate Mentoring & Training
Public Outreach Program Management	Classroom & Program Assessment
Program Development & Grant Writing	Collaboration Building & Diversity Initiatives
Climate Change Communication & Activism	Teacher Professional Development

POSITIONS:

2022-present **Earth and Space Science Consultant**, Kathryn Williamson Consulting

2016-present **Teaching Associate Professor** (promoted from Assistant to Associate in 2020)
Dept. of Physics and Astronomy, West Virginia University, Morgantown, WV.
Halftime as of 2022

2013-2015 **Public Education Specialist**
National Radio Astronomy Observatory, Green Bank, WV.

EDUCATION:

May 2013 **Ph.D., Physics**, Montana State University, Bozeman, MT
Development and Calibration of a Concept Inventory to Measure Introductory College Astronomy and Physics Students' Understanding of Newtonian Gravity
Committee: Dr. Shannon Willoughby, Dr. Gregory Francis, Dr. Edward Prather, Dr. Jeff Adams, Dr. Janelle Bailey

Dec 2012 **Certificate in College Teaching**, Montana State University, Bozeman, MT

Dec 2010 **M.S., Physics**, Montana State University, Bozeman, MT

August 2008 **B.S., Physics & Astronomy**, University of Georgia, Athens, GA
Summa Cum Laude, With Highest Honors and CURO Scholar Distinction

LEADERSHIP:

2021-present **Astronomers for Planet Earth**, Web Resources Task Force Co-Chair

2020-present **West Virginia Climate Change Professional Development Project**, Founder

2019-2020 **West Virginia Climate Action**, Co-Founder

2019-2020 **WVU Conference for Undergraduate Women in Physics (CUWiP)** Planning Committee Lead.

2019-2020 **Dept. Electricity & Magnetism Qualifier Exam Committee** Member, WVU.

2018-2021 **Dept. Diversity, Equity, & Inclusion Committee** Member, WVU.

2017-2021 **First2Network** Course Development Lead, Faculty-Student Engagement Working Group Co-Chair, Networked Improvement Community team member, WVU, GBO, FSU

2016-present **WVU Planetarium** Management, WVU.
Oversee graduate students in the coordination of public shows and field trips.
Planetarium curriculum development, maintenance, and advertising

2016-2022 **Physics Lecture Demonstration Oversight**, WVU.
Oversee graduate student in the coordination of lecture demonstrations requested by faculty. Advise on web content. Learn and share demonstration resources

2016-2022	Astronomy Club Advisor, WVU.
2016-2022	WVU SPOT Club Founder, Advisor, WVU.
Fall 2021	Physics & Astronomy Department Social Committee , Chair, WVU.
Spring 2021	Eberly College Faculty Evaluation Committee , member, WVU.
2019	Dept. Scholarships & Awards Committee Member, WVU.
2016-2019	Physics & Astronomy Department Assessment Committee , WVU.
2017-2018	Innovators Developing Accessible Tools for Astronomy (IDATA) Advisory Board Member, AUI/Yerkes Observatory.
2010-2011	Women in Science and Engineering (WISE) Graduate Student Organization Co-founder and Co-Leader, MSU.
2010-2011	Graduate Student Co-Representative , Physics Department, MSU.
2009-2010	Recruiting Committee Co-Leader , Physics Department, MSU.
2010	Mentors and Protégés Program , Co-founder, MSU.

HONORS AND AWARDS:

- **2021 Wonder Woman** (out of 50), WV Living magazine, 2021.
- **AAAS Mani L. Bhaumik Award for Public Engagement with Science**, Nominee, 2021.
- **WVU Honors Faculty Fellow** 2019-2020
- **WVU Award for Outstanding Public Service** recipient, \$1,500, 2019.
- **Montana Space Grant Consortium Graduate Fellowship** recipient, \$7,500, 2013.
- **MSU President's Commission on the Status of University Women Award**, recipient, 2013.
- **International Space Education Board NASA Student Ambassador** (1 of 9 from the US), 2011. 62nd International Astronautical Congress, Cape Town, South Africa
- **Montana Space Grant Consortium Fellowship** recipient, \$7,500, 2010.
- **HOPE Scholarship** of the University System of Georgia recipient, 2004-2008.
- **Presidential Scholar** (8 semesters), UGA, 2004-2008.
- **Joy P. Williams Honors Science Award** Outstanding Female in the Sciences at UGA, 2008.
- **30th Linville L. Hendren Memorial Scholarship** Outstanding Proficiency in Physics, UGA, \$500, 2008.
- **23rd Physics and Astronomy Award** co-recipient, UGA, \$100, 2008.

FORMAL TEACHING EXPERIENCE & CURRICULUM DESIGN:

2016-2022	Descriptive Astronomy (Astronomy 106) Lead Instructor through 2021, support instructor 2022, WVU.
2017-2022	Introductory Astronomy Lab (Astronomy 107) Course Design, WVU.
Spring 2020	Ambassadors for Change , 3-credit Honor Special Topics Course, WVU.
Fall 2019	Climate Conversations 1-credit Honors Book Club, WVU.
2018, 2019	Overview of Astronomy , 4-session mini-course, Hazelton Federal Correction Center, Bruceton Mills, WV.

- 2018 **Earth & Space Science Passport** 2-week Professional Development for Teachers, Astronomy Instructor, Green Bank Observatory, Fairmont State University, WV.
- 2017-present **First2Network** STEM Skills and Leadership I & II Course Design
Guest Instructor on Mentoring, Problem-Solving, and Internships, WVU
- 2011, 2012 **Introductory College Physics Instructor**, Summer Session, MSU.
- 2008-2012 **Graduate Teaching Assistant**, MSU.
Undergraduate Intro. to Mechanics; Undergraduate Intro. to Electromagnetism;
Physics by Inquiry for Education majors.

INFORMAL TEACHING AND OUTREACH EXPERIENCE:

- **WVU Planetarium**, Director, 2016-present. Oversee two graduate student managers; Mission to serve the community in astronomy; reaching 3,000-5,000 people per year. Special projects include “Hidden Figures in the Stars” (collaboration with WVU Campus Read and Diversity Week) and “Indigenous Connections to the Night Sky” (collaboration with WVU Program for Native American Studies).
- **Climate Change Teacher Professional Development**, Lead Organizer, Spring 2020 (in person; 11 participants) and Fall 2020-Spring 2021 (virtual; 25 participants)
- **Seeding Your Future** STEM workshops for middle school girls; Session Leader, 2018 (Astronomical Image Processing), 2019 (StarLab), 2020 (How to Read a Star Chart)
- **NASA IV&V Kids Day in the Park**, Session Leader (Make Your Own Ice-Core Sample), 2020.
- **WVU Climate Education Day** Faculty and Student Field Trip to the WV State Capitol, Lead Organizer, 2020 (16 participants)
- **WVU “Hour of Code,”** WVU, Lead Organizer 2018 (~250 attendees), Activity Station Host 2019 (~100 attendees).
- **Large Synoptic Survey Telescope (LSST)** Educator Focus Group Member, 2019.
- **WV Science Public Outreach Team Activity Day**, Organizer, WVU, March 23, 2019. (~50 attendees)
- **Yuri’s Night**, Organizer, WVU, April 12, 2019. (~150 attendees)
- **Telescope Training Workshop**, Organizer, Presenter, WVU, 2017.
- **Bringing the Great American Solar Eclipse to West Virginia**, WVU, 2017. Worked with WVU Extension to deliver 31,000 eclipse glasses to WV K-12 schools, reaching ~50,000 ppl.
- **Solar Eclipse Teacher Professional Development**, WVU, 2017.
- **Celebrating Einstein** Art-Science Festival, Organizer, WVU, 2017.
- **West Virginia Science Public Outreach Team (WV SPOT)**, Founder, Program Developer, Advisor, Organizer, NRAO, WVU. 2013-present.
- **Pulsar Search Collaboratory**, program developer, edu. researcher, NRAO, WVU, 2013-pres
- **NASA Solar Educator Workshop**, Assistant, WVU.
Led by Jim O’Leary from the Maryland Science Center, 2016
- **Skynet Junior Scholars**, program developer, edu. researcher, NRAO, WVU. 2013-2016
- **Night Sky Observing**, WVU. Host as-requested star parties with backyard telescopes, including events for the WV Chapter of the National Hemophilia Foundation (Oct2016) and the Tech Connect Women & Technology Conference (Oct 2016)
- **Radio Astronomer for a Day**, Telescope Outreach Instructor, NRAO, 2013-2015

- **Physicists Inspiring the Next Generation**, Co-organizer and educator, NRAO, 2014, 2015
- **Green Bank Science Center**, education and outreach operations Assistance, NRAO, 2013-15
- **Pocahontas County Science Fair**, Organizer, NRAO, 2014, 2015
- **Cosmic Chemistry Exhibit**, Co-Evaluator, NRAO, 2014
- **West Virginia Governor's School for Math and Science Teacher**, NRAO, 2013
- **Night Sky Observing Consultant**, Korman Marketing Group, 2010-2013
- **Space Public Outreach Team (SPOT)**, Co-Manager, MSU, 2008-2012
- **Astronomy Day Co-Organizer**, *Museum of the Rockies*, Bozeman, MT, 2010-2012
- **Nerdpsyched Radio Hour** *Invited Interviewee*, KGLT Radio Station, Bozeman, MT, 2012
- **NASA Education Activities Training Specialist**, MSGC, 2011-2012
- **NASA in the Northwest Project**, Graduate Student Liaison, Extended University, MSU, 2010-2011
- **Tribal College Research Project**, Educational Website Development, MSGC. Developed a comprehensive website <http://spacegrant.montana.edu/msiproject/>, 2010.
- **Peaks & Potentials Camp Instructor**, MSU, 2009-2010
- **International Space Education Board**, NASA Student Ambassador, Cape Town, South Africa, 2011
- **Expanding Your Horizons Workshop Presenter**, MSU, 2009-2011
- **Careers in Physics and Astronomy Seminar**, *Townsend Schools Career Day*, Townsend, MT, 2010-2011

PROFFESIONAL DEVELOPMENT:

- 2022-present **NASA CONNECTS** community member.
- 2022-present **Earth & Sky** community member, NASA, NPS, USFWS.
- 2021-present **NASA Museum & Informal Education Alliance**, community member.
- 2020-2021 **STEM Learning Community** member, WVU.
- 2019-2021 **Teaching Large Classes Focus Group** member, WVU
- Mar 2021 **Recovery Ally Training**, attendee, WVU.
- Spring 2021 **Change Agent Course: Developing a Liberatory Consciousness**, Participant, ADVANCE Center, WVU.
- Jan 2021 **Anti-Racist & Gender-Inclusivity Training**, LGBTQ+ Center, WVU.
- Dec 2020 **Creating Accessible Documents & Presentations**, WVU.
- Oct 2020 **Social Justice Summit**, WVU.
- Sept 2020 **Indigenous Perspective of Earth and Sky**, Indigenous Education Institute.
- Sept 2020 **Get the Facts Out**, NSF Teaching Careers
- Aug 2020 **DEI Committees: The Good, The Bad, the Ugly**, Association of Southwestern Research Libraries
- Aug 2020 **COVID-19 Awareness & Prevention**, WVU.
- July 2020 **Live Interactive Planetarium Symposium**, attendee
- Oct 2019 **WVU UR/EM Ambassadors workshop** attendee, WVU
- Oct 2019 **Effective Mentoring of Graduate Students** workshops attendee, Theater Delta
- Sept 2019 **Teach Students How to Learn** workshop attendee, WVU Chemistry Dept.
- Mar. 2018 **Self-Guided Mentorship Retreat** with Michelle Larson, CEO Adler Planetarium, Washington, D.C.

Sept 2018	First2 Network Improvement Community Workshop , SRI Education, Roanoke, WV.
Dec 2016	AAPT New Faculty Workshop , Baltimore, MD
June 2016	Spitz Summer Institute for SciDome Planetarium Owners, Philadelphia, PA
April 2016	Kognito Interactive Training , LGBTQ, At-Risk Students, Veterans, WVU.
Jan 2014	AAS Astronomy Ambassador , Astronomical Society of the Pacific American Astronomical Society 223rd meeting, Washington, DC
Jan 2012	Collaboration of Astronomy Teaching Scholars Program Tier I Workshop Participant , Center for Astronomy Education American Astronomical Society 219 th meeting, Austin, TX
June 2012	Collaboration of Astronomy Teaching Scholars Program Tier II Workshop Participant , Center for Astronomy Education American Astronomical Society 220 th meeting, Anchorage, AK
June 2012	Strategies to Help Women Succeed in Physics-Related Professions Workshop Participant , Chandralekha Singh American Association of Physics Teachers meeting, Portland, OR

GRANTS:

1. *Empowering Teacher Leaders for Climate Change Education*, Source: West Virginia Space Grant Consortium, Location: WVU, Award Period 06/01/22-05/30/23, \$18,813. Funded.
2. *CAREER: Self-Consistent Density Estimates from Accelerometers for Improved Understanding, Modeling, and Forecasting of Upper Atmosphere Variability*, Senior Personnel, Source: NSF; Location: WVU, PI Piyush Mehta, \$640,665. Award Period 2022-2026. Funded.
3. *Climate PSA Competitions*, Source: Appalachian Stewardship Foundation, Location: WVU, Award Period 06/01/21-05/30/22, \$6,100. Funded.
4. *Formalizing WV Climate Change PD for Teachers through Networking Opportunities and Continuing Education Units*, Source: West Virginia Space Grant Consortium, Location: WVU, Award Period 06/01/21-05/30/22, \$10,000. Funded.
5. *Empowering Educator-Leaders for Community-Based Climate Engagement*, Source: WVU Internal Grants for Community Engagement, Location: WVU, Submitted 02/2021, \$9,920. Not Funded.
6. *Expanding Climate Change Education in West Virginia*, Source: West Virginia Space Grant Consortium, Location: WVU, Award Period 06/01/20-05/30/21, \$5,000. Funded.
7. *A Campus Conversation on First-Gen Student Experiences*, Source: WVU Office of the Provost "Transform This!" Initiative, Award Period 02/20-12/20, \$1,500. Funded.
8. *WVU Climate Science Field Trips and Teacher Professional Development*, Source: West Virginia Space Grant Consortium, Location: WVU, Award Period 06/01/19-05/30/20, \$5,000. Funded.
9. *Expanding the First 2 Network*, Senior Personnel, Source: NSF INCLUDES Alliance, Location: Green Bank Observatory, Fairmont State University, WVU, High Rocks, Award Period 09/18-09/23, Funded.
10. *WVU "Hour of Code,"* Principal Investigator, Source: WVU Internal Grants for Community Engagement, Location: WVU, Award Period 07/18-06/19, \$7,500, Funded.
11. *Understanding the Ionized Gas of our Galaxy*, Source: NSF GDIGS; Location: WVU, PI

- Loren Anderson, \$528,408. Funded.
12. *Solar Eclipse Teacher Professional Development*, Principal Investigator, Source: NASA West Virginia Space Grant Consortium K-12 Professional and Curriculum Development Program 2017-2018, Location: WVU, Award Period 05/17-05/18, \$4,920. Funded.
 13. *Bringing the Great American Solar Eclipse to West Virginia*, Principal Investigator, Source: WVU Internal Grants for Community Engagement, Location: WVU, Award Period 07/17-06/18, \$6,000. Funded.
 14. *Collaborative Research: Project RADIAL: Radio Astronomy-Direction Investigations for Active Learning*, Co-Principal Investigator, Source: NSF IUSE January 2017, Location: University of North Carolina – Chapel Hill, \$433,366, Not funded.
 15. *Celebrating Einstein*, Principal Investigator, Source: NASA West Virginia Space Grant Consortium Extension and Public Outreach Program 2016-2017, Location: WVU, Award Period 05/16-05/17, \$10,266. Funded.
 16. *STEM-ID: Developing STEM self-efficacy and science identities through participation in authentic astrophysics research in online and face-to-face environments*, Source: NSF AISL, Location of Project: NRAO and WVU. Award Period: 9/15-8/18, \$727,496. Funded.
 17. *Project RADIAL: Radio Astronomy-Directed Investigations for Active Learning*, Co-Principal Investigator, Source: NSF IUSE January 2016, Location: Associated Universities Inc., \$1,993,742. Not Funded.
 18. *FIRST TWO: Improving STEM persistence in the first two years of college*, Source: NSF INCLUDES, Location: Green Bank Observatory, PI Sue Ann Heatherly. \$299,705, Funded.
 19. *Fast Detection of Fast Radio Bursts with Arecibo and the GBT*, Senior Personnel, Award Period 9/16-9/19, Location: WVU, PI Duncan Lorimer, \$372,315. Funded.
 20. *NRAO Space Science Education and Outreach Internship*, Principal Investigator, Source: NASA West Virginia Space Grant Consortium Extension and Public Outreach Program 2015-2016, Location: NRAO, Award Period 05/15-05/16 \$10,080. Funded.
 21. *Skynet Junior Scholars: Engaging Youth in Authentic Science using Research Grade Robotic Telescopes*, Educational Researcher, Summer 2.0 Months, Source: NSF AISL, Award Period 10/12-9/16, \$369,759, Location: NRAO, PI Sue Ann Heatherly, Funded.

PEER-REVEIWED PUBLICATIONS:

1. *Who Speaks for Earth? Impacts of an Anti-Racist and Gender-Inclusive Training on college astronomy students' attitudes towards diversity, equity, and inclusion in science and human space exploration.* **Williamson, K.**, Rodrigues, E., Cunningham, C., Gallego, D., Beaver, U., & Henry, I. Journal of College Science Teaching (in review).
2. *Space Public Outreach Team: Successful STEM Engagement on Complex Technical Topics*, Des Jardins, A., Key, J. S., **Williamson, K.**, Kimbrell, S., De Saint-Georges, S., Littenberg, T., Page, J., Dolch, T. Journal of Computers in Mathematics and Science Teaching, 2020, 39(4), 339-359.
3. *The Pulsar Search Collaboratory: Current Status and future prospects*, Blumer, H., McLaughlin, M., Stewart, J., Williamson, K., Lorimer, D., Heatherly, S. A., Swiggum, J.K., Lynch, R.S., Zabriskie, C., Lewandowska, C., Roy, A., Au, S. American Journal of Physics, 88, 31, 2019.

4. *Facilitating Scientific Engagement through an Artistic-Scientific Festival*, Grimberg, B. I., **Williamson, K.**, Key, J.S., International Journal of Science Education, 2019.
5. *Community Based Solar Eclipse Outreach in Rural Appalachia*, Keesee, A. M., **Williamson, K.**, Robertson-Honecker, J., in “Celebrating the 2017 Great American Eclipse: Lessons Learned from the Path of Totality,” Astronomical Society of the Pacific, 2019.
6. *Mapping the Milky Way: A radio astronomy-directed investigation for large-enrollment Astro 101 college courses*, **Williamson, K.**, Reichart, D., Wallace, C., Prather, E., Hornstein, S. Robotic Telescopes, Student Research and Education Conference Proceedings, 2018, 1(1).
7. *Skynet Junior Scholars: Authentic Astronomy for All, Including Deaf and Hard of Hearing Students*, Gartner, C., Meredith, K., **Williamson, K.**, Science Scope, March 2017, 40(7), 57-63.
8. *Skynet Junior Scholars: Professional Development to Support STEM Exploration in a Variety of Settings*, **Williamson, K.**, Heatherly, S.A., Hoette, V., Toth, E. E., Beer, D. Connected Science Learning, December 2016.
9. *Applicability of the Newtonian Gravity Concept Inventory to College Physics*, **Williamson, K.**, Prather, E. E., and Willoughby, S., American Journal of Physics Special Topics - Physics Education Research, 2016, 84(6), 458-466.
10. *Touching the Stars: Making Astronomy Accessible for Students with Visual Impairments*, Childers, G., Jones, G., **Williamson, K.**, Science Scope, Summer 2015, 38(9), 20-26.
11. *The Space Public Outreach Team: Adapting a Successful Outreach Programme to a New Region*, **Williamson, K.**, Des Jardins, A., Grimberg, I., Larson, S. L., Key, J., Larson, M.B., Heatherly, S.A., McKenzie, D., Littenberg, T.B., Communicating Astronomy with the Public, Issue 16, December 2014.
12. *Development of the Newtonian Gravity Concept Inventory*, **Williamson, K.**, Willoughby, S., and Prather, E. E., Astronomy Education Review, 2013, DOI: 10.3847/AER2012045.
13. *Student Understanding of Gravity in Introductory College Astronomy*, **Williamson, K.** and Willoughby, S., Astronomy Education Review, 2012, DOI: 10.3847/AER2011025.

INVITED WRITINGS, PANELS AND PRESENTATIONS:

1. *How Can Space Exploration Solve Climate Change?*, Guest Speaker, NASA HUNCH Challenge (virtual), October 2021.
2. *Community Engagement* e-book chapter in *Climate Change for Astronomers*, Editor: Travis Rector, IOP Publishing (in press).
3. “Picture A Scientist” Film Discussion, Panelist, WVU Research, April 2021.
4. *Gamifying Your Astronomy Class* Panel Discussion, Panel Chair and Presenter, Astronomical Society of the Pacific Conference (virtual), December 2020.
5. *NANOGrav Professional Development Career Panel*, Panelist, September 2020.
6. *Ideas for embedding climate change engagement in astronomy research and education through a Networked Improvement Community (NIC) approach*, **Williamson, K.**, European Astronomical Society Annual Conference (virtual), June 2020.
7. *Why You Should Outreach*, **Williamson, K.**, Conference for Undergraduate Women in Astronomy, Morgantown, WV, November 2019.
8. *You Can Map the Milky Way*, Williamson, K. Ruckman Lecture, Regional American Association of Physics Teachers – Nebraska Meeting, Lincoln, NE, October 2019.

9. *Innovating Astronomy Education with Robotic Telescopes*, **Williamson, K.**, American Association of Physics Teachers Summer Meeting, Washington, D.C., July 2018.
10. *Making a Career Cheat Sheet*, **Williamson, K.** University of Georgia Undergraduate Award Day, Athens, GA, April 2016.
11. *Astronomy Education and Public Outreach*, **Williamson, K.**, Pennsylvania Center for the Physics of the Cosmos, Carnegie Mellon University, Pittsburgh, PA, June 2016.
12. *Student Understanding of Gravity*, **Williamson, K.** University of Texas-Brownsville, Colloquium, Brownsville, TX., April 2014.
13. *The Invisible Universe*, **Williamson, K.** University of Texas-Pan American, Women in Physics Colloquium Series, Edinburg, TX, April 2014.

CONTRIBUTED PAPERS AND PRESENTATIONS:

1. *“Who Speaks for Earth?” Cultivating Students’ Identities as Earthlings*, **Williamson, K.** and Rodrigues, E. Astronomical Society of the Pacific Conference (virtual), December 2021.
2. *Developing a Climate Change PD Community*, Revels, J., and **Williamson, K.**, Astronomical Society of the Pacific Conference (virtual), December 2021.
3. *WV Climate Change Professional Development*, **Williamson, K.**, Shinn, J., Revels, J., Hemler, D., Westfall, T., Himmele, G., & Fallon, S., West Virginia Science Teachers Association Meeting, October 2021.
4. *Community Based Solar Eclipse Outreach in Rural Appalachia*, Keesee, A., **Williamson, K.**, Robertson-Honecker, J. American Geophysical Union Meeting 2021. Poster
5. *First2 Network: Improving STEM Persistence Through NICs Within a NIC*, Heatherly, S. Al, Burt-Kinderman, J., **Williamson, K.**, Means, J., Carnegie Foundation Summit (virtual), April 2021.
6. *Climate Change Engagement in ASTR 101*, **Williamson, K.**, Astronomical Society of the Pacific Conference (virtual), December 2020.
7. *Climate Change Professional Development Share-A-Thon*, **Williamson, K.**, Revels, J., Skorlinski, E. West Virginia Science Teachers Association Meeting, October 2020.
8. *First2 Network: National Science Foundation INCLUDES Alliance*, Harvey, E., Smith, C., Podkul, T., Williamson, K., Smith, A., Global MindED Conference, virtual, May 2020.
9. *The “SPOT” Model for Training Outreach Ambassadors*, American Association of Physics Teachers, Orlando, FL, January 2020.
10. *Getting Started with the Pulsar Search Collaboratory*, Regional American Association of Physics Teachers, Lincoln, Nebraska, October 2019. Workshop.
11. *Embedding Climate Change Engagement in Astronomy Education and Research*, Williamson, K., Rector, T. A., Lowenthal, J., Astro 2020 Astronomy and Astrophysics Decadal Survey, July 2019, White Paper.
12. *Training Ambassadors for High Impact Outreach*, GR22/Amaldi13, Valencia, Spain, July 2019.
13. *A New Gravitational-Wave Lecture-Tutorial for “Astro 101,”* GR22/Amaldi13, Valencia, Spain, July 2019. Poster
14. *The Pulsar Search Collaboratory*, GR22/Amaldi13, Valencia, Spain, July 2019.
15. *The Pulsar Search Collaboratory: A Decade of STEM Education and Discovery*, McLaughlin, M. A., Heatherly, S. A., Blumer, H., Lorimer, D. R., Williamson, K.,

- Swiggum, J., Stewart, J., and Lewandowska, N., American Astronomical Society, Seattle, WA, January 2019. Virtual Poster
16. *Bringing the Great American Eclipse to West Virginia*, **Williamson, K.**, Keesee, A., Robertson-Honecker, J., West Virginia Science Teachers Association Meeting, Wheeling, WV, October 2017. Poster
 17. *Analysis of Student Engagement with the Pulsar Search Collaboratory*, Zabriskie, C., **Williamson, K.**, and Stewart, J. American Association of Physics Teachers Conference, Cincinnati, OH, July 2017. Poster
 18. *Mapping the Milky Way: A radio astronomy-directed investigation for large-enrollment Astro 101 college courses*, **Williamson, K.**, Reichart, D., Wallace, C., Prather, E., Hornstein, S. Robotic Telescopes, Student Research and Education Conference, San Diego, CA, June 2016.
 19. *The Science Public Outreach Team: Integrating Outreach Across Your State*, **Williamson, K.**, Saken, J., Rowe, A. Mid-Atlantic Regional Space Grant Meeting, Baltimore, MD, September 2016.
 20. *Inclusion of Blind/Low-Vision and Deaf/Hard-of-Hearing youth Has Implications for Development of Out-of-School-Time Program*, Kron, R., Gurton, S., Heatherly, S.A., Reichart, D., Williamson, K. Center for Advancement of Informal Science Education (CAISE) PI Meeting, 2016. Poster
 21. *A Case Study of a Middle School Astronomy Club Leader*, **Williamson, K.**, Toth, E. E., Mid-Atlantic Association of Science Teacher Education meeting, Lore City, OH, October 2015.
 22. *Science Identity Expression in an Informal Astronomy Program*, **Williamson, K.**, Toth, E. E., Heatherly, S. A., Eastern Educational Research Association, Hilton Head, SC, February 2016. Poster
 23. *The Space Public Outreach Team*, **Williamson, K.** 223rd American Astronomical Society meeting, Washington, DC, January 2014.
 24. *Characterization and Measurement of Introductory College Astronomy and Physics Student Understanding of Newtonian Gravity*, **Williamson, K.** 223rd American Astronomical Society meeting, Washington, DC, January 2014.
 25. *Skynet Junior Scholars: Sharing the Universe with Youth*, Heatherly, S.A., **Williamson, K.**, Hoette, V.L., Gurton, S., Kron, R.G.; Meredith, K.; Haislip, J.; Reichart, D., 223rd American Astronomical Society meeting, Washington, DC, January 2014. Poster
 26. *Skynet Junior Scholars - Sharing the Universe with Blind/Low Vision Youth*, Hoette, V.L., Kron, R.G., Meredith, K., Heatherly, S., **Williamson, K.**, Gurton, S., Reichart, D., Haislip, J., 223rd American Astronomical Society meeting, Washington, DC, January 2014. Poster
 27. *Education Activity Training (NEAT): Professional Development for Montana K-12 Teachers*, **Williamson, K.**, McKenzie, D. M., Des Jardins, A., Key, J., Kanode, C., Willoughby, S., 220th American Astronomical Society meeting, Anchorage, AK, June 2012.
 28. *Education Activity Training (NEAT): Professional Development for Montana K-12 Teachers*, **Williamson, K.**, McKenzie, D. M., Des Jardins, A., Key, J., Kanode, C., Willoughby, S. (2012) NASA, Montana Space Grant Consortium Student Research Symposium, 20 April. Poster

29. *Montana's Space Education and Public Outreach Initiatives*, **Williamson, K.**, Montana State University Physics Colloquium, Bozeman, Montana, January 2012.
30. *Successfully targeting a variety of populations and cultures in Montana with space education and outreach*, **Williamson, K.**, 62nd International Astronautical Congress, Cape Town, South Africa, October 2011.
31. *Student understanding of gravity in introductory college astronomy*, **Williamson, K. & Willoughby, S.**, Connecting People to Science, Baltimore, Maryland, August 2011. Poster
32. *Introductory College Astronomy Student Understanding of Gravity*, **Williamson, K.**, Montana Space Grant Consortium Student Research Symposium, Bozeman, Montana, April 2011.
33. *Montana State University Recruiting Poster*, **Williamson, K. & Sampson, L.**, Women in Astronomy Conference, College Park, Maryland, 2009. Poster

COMMUNITY SERVICE:

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| 2018-present | Citizens Climate Lobby member |
| 2020 | Ursa Gaia Community Art Project Organizer, Morgantown, WV. |
| 2020 | West Virginia Center on Climate Change , Board Member |
| 2017-2019 | Appalachian Prison Book Project matching & wrapping, Morgantown, WV. |
| 2016-2017 | Ronald McDonald House Charities House Warmer, Morgantown, WV |
| 2016 | Relay for Life fundraising and team member, WVU. |
| 2013-2015 | Space Race Rumpus Family Cycling Weekend event planning, ride leader
Green Bank, WV |