Patrick Kamieneski

Exploration Postdoctoral Fellow

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Education

02/2023 **Ph.D. Astronomy**
University of Massachusetts, Amherst, MA, USA
Thesis: *Dissecting the Most Extreme Starburst Events in the Universe With Gravitational Lensing*
Advisor: Prof. Min S. Yun.

05/2015 **B.A. Physics, Mathematics**, *cum laude*,
Bowdoin College, Brunswick, ME, USA
Minor: French.

Employment

10/2022–present **School of Earth and Space Exploration Postdoctoral Fellow**, Arizona State University, Tempe, AZ, USA.

2015–2022 **Graduate Research Assistant and Teaching Assistant**, University of Massachusetts Amherst.

2014 **Undergraduate Research Assistant (NSF-REU)**, MIT Haystack Observatory, Westford, MA, USA.

2012-2015 **Undergraduate Teaching Assistant**, Department of Mathematics, Bowdoin College.

Awards, Grants & Fellowships

2024 **ALMA Ambassadors Program Grant, Cycle 11**, *$10000*.

2023 **Robert L. Brown Outstanding Doctoral Dissertation Award**.
Awarded annualy to a recent recipient of a doctoral degree that is substantially based on observational data obtained at an NRAO/AUI-operated facility

2022 **AAS Rodger Doxsey Travel Prize**, *$780*.
Travel prize to present dissertation talk at AAS Meeting 239 (deferred to AAS 240)

2020-2022 **NRAO Student Observing Support**, *$27,790*.
In support of ALMA program 2019.1.01197.S (PI: P. Kamieneski)

2022 **Mary Dailey Irvine Graduate Travel Award**, *5 awards, total $4130*.
2022: AAS Meeting 239 (canceled due to COVID-19, deferred to AAS 240), $1000
2018: EWASS Meeting 2018, $800
2017: CHANG-ES Meeting 2017, $600
2017: AAS Meeting 229, $630
2016: 15th Synthesis Imaging Workshop, $1100

2019 **AAS/NSF International Travel Grant**, *3 awards, $2659 total*.
2019: "Views on the Interstellar Medium in Galaxies in the ALMA Era" Conference 2019, $608
2018: "The Universe as a Telescope" Conference 2018, $1426
2018: EWASS Meeting 2018, $625

2016-2017 **Massachusetts Space Grant Consortium Summer Fellowship**, *$11,000 total*.

Publications at a glance (full list at end)

Summary: ***41 publications (refereed or under review): 3 first-author, 1009 citations, h-index: 17***.
Complete publications record from ADS

Observational Programs (as PI)

2022 **Atacama Large Millimeter/submillimeter Array (ALMA)**, *2022.1.01311.S*, Cycle 9 (**PI: P. Kamieneski**).
Star Formation Beyond the Eddington Limit? 100pc-scale Dust Continuum Imaging in Strongly-lensed Dusty Starbursts
Time awarded: 15.5 hrs

2021 **Atacama Large Millimeter/submillimeter Array (ALMA)**, *2021.1.00499.S*, Cycle 8 (**PI: P. Kamieneski**).
Probing Gas, Dust, Stars, and Star Formation Activity down to 100-pc Scales using Strong Gravitational Lensing
Time awarded: 18.3 hrs

2019 **Atacama Large Millimeter/submillimeter Array (ALMA)**, *2019.1.01197.S*, Cycle 7 (**PI: P. Kamieneski**).
Probing Gas, Dust, Stars, and Star Formation Activity down to 100-pc Scales using Strong Gravitational Lensing
Time awarded: 7.4 hrs

2018 **Large Millimeter Telescope (LMT)**, *2018-S1-MU-7* (**PI: P. Kamieneski**).
AzTEC Photometric Imaging of Planck-selected Dusty Star-Forming Galaxies
Time awarded: 1.5 hrs, *not observed*

2018 **Karl G. Jansky Very Large Array (JVLA)**, *18A-399* (**PI: P. Kamieneski**).
VLA Study of Hyperluminous SMGs Identified from Planck All-Sky Survey
Time awarded: 39 hrs

Selected Co-I Observational Programs

ALMA (Atacama Large Millimeter/submillimeter Array) **9 programs**.
2024.1.01396.S (PI: K. Harrington), 2024, *Resolving gassy variations in the low-to-high J CO lines in lensed starbursts at cosmic noon*
2023.1.00299.S (PI: N. Foo), 2023, *Resolved Multi-J CO/[CI] study of a strongly lensed, Planck-selected $z = 2.66$ dusty protocluster of at least 9 DSFGs*
2023.1.00251.S (PI: B. Alcalde Pampliega), 2023, *Unveiling a hidden gem: an extraordinarily bright strongly lensed galaxy behind Milky Way dust clouds*
2022.1.01282.S (PI: K. Harrington), 2022, *ACA mosaic search for dusty sources in and around the critical curves of Planck-selected strong lensing clusters* (138 hrs)
2021.1.00447.S (PI: M. Yun), 2021, *The Origin of [C II] and [N II] Emission in High-z Dusty Starbursts (Cycle8)*
2021.2.00888.S (PI: K. Harrington), 2021, *ACA B7 and B8 Mosaic of a Planck-selected cluster-lensed dusty protocluster at $z = 2.7$*
2021.1.00353.S (PI: K. Harrington), 2021, *Probing gas excitation variations in lensed starbursts at cosmic noon via sub-kpc imaging of [CI] and the CO ladder*
2019.1.01636.S (PI: M. Yun), 2019, *The Origin of [C II] and [N II] Emission in High-z Dusty Starbursts*
2017.1.01214.S (PI: M. Yun), 2017, *ALMA Study of the Hyperluminous SMGs Identified from Planck All-Sky Survey*

JWST (*James Webb* Space Telescope) **4 programs**.
GO-8799 (PI: S. Suyu), 2025, *SN Requiem and its Encore: Leveraging the first strongly lensed SN-Ia siblings for precision cosmology*
GO-6353 (PI: M. Pascale), 2024, *Confirming Secondary Star Formation Conditions in Nitrogen-Enriched Super Star Clusters at Cosmic Noon*
GO-4744 (PI: B. Frye), 2024, *SN H0pe: Doubling the Time Delay Precision of a $z = 1.78$ Multiply-imaged Type Ia Supernova*
DD-4446 (PI: B. Frye), 2023, *SN H0pe: Independent Measurement of H_0 by the Time Delay of a Multiply-imaged Supernova*

HST (*Hubble* Space Telescope) **4 programs**.
GO-18069 (Multi-cycle; Joint HST-JWST) (PI: J. Pierel), 2026, *Requiem's Return: Precision cosmology from a decade-delayed, strongly-lensed supernova and its new sibling*
GO-18017 (Joint HST-VLA) (PI: A. Noble), 2026, *Investigating AGN Feedback in a $z = 0.8$ Brightest Cluster Galaxy with a Remarkable 30 Kiloparsec Extended Dust Tail*
GO-17924 (PI: B. Smith), 2025, *TREASURETROVE: Tracing the Growth of SMBHs and Spheroids through Variability and Transients in the JWST NEP Time Domain Field*
GO-17439 (PI: A. Noble), 2023, *Skeletons in the Cluster: Unveiling the Stellar Mass Backbone of $z = 1.6$ Galaxies*

LMT (Large Millimeter Telescope) **7 programs**.
2024-S1-00335 (PI: B. Alcalde Pampliega), 2024, *Unveiling a hidden gem: an extraordinarily bright strongly lensed galaxy behind Milky Way dust clouds*
2024-S1-00385 (PI: C. Garcia Diaz), 2024, *High Resolution SZE Map of a Possibly Disturbed Galaxy Cluster*
2024-S1-00321 (PI: N. Foo), 2024, *Exploration of a Lensed $z = 2.66$ Protocluster Discovered by Planck + LMT + ALMA*
2023-S1-US-25 (PI: N. Foo), 2023, *Exploration of a Lensed $z = 2.66$ Protocluster Discovered by Planck + LMT + ALMA*
2023-S1-MX-19 (PI: E. Jimenez-Andrade), 2023, *TolTEC observations of the JWST/GTO Cluster PLCK G165.7+67.0*
2023-S1-UM-10 (PI: M. Yun), 2023, *LMT Study of Planck-selected Luminous Star Forming Galaxies*
2018-S1-MU-78 (PI: M. Yun), 2018, *LMT Study of Extremely Luminous Galaxies Identified using Planck and WISE*

Gemini **5 programs**.
GN-2022B-FT-107 (PI: C. Garcia Diaz), 2022, *Spectroscopic determination of the relationship between a luminous X-ray AGN and a strongly lensed HyLIRG at $z = 3.55$*
GN-2022A-FT-209 (PI: O. Cooper), 2022, *Spectroscopic determination of the relationship between a luminous X-ray AGN and a strongly lensed HyLIRG at $z = 3.55$*
GS-2021B-FT-102 (PI: O. Cooper), 2021, *Comprehensive Lens Characterization for a Hyperluminous DSFG at $z = 2$*
GS-2018B-Q-123 (PI: J. Lowenthal), 2018, *Gravitational Lens Models for the Brightest Planck SMGs at $1 < z < 4$*
GS-2018A-Q-216 (PI: J. Lowenthal), 2018, *Gravitational Lens Models for the Brightest Planck SMGs at $1 < z < 4$*

XMM-Newton **4 programs**.
AO-24-096125 (PI: Q. D. Wang), 2024, *X-ray HyLIRGs via strong lensing*
AO-22-092283 (PI: C. Garcia Diaz), 2022, *Understanding the role of AGN in HyLIRGs: study of a strongly lensed sample*
AO-21-090266 (PI: B. Frye), 2021, *Observations of the JWST/GTO Binary Cluster PLCK G165.7+67.0*
AO-20-088272 (PI: Q. D. Wang), 2021, *X-raying hyperluminous sub-millimeter galaxies via strong gravitational lenses* (544 ksec Large Program)

JVLA (Jansky Very Large Array) **3 programs**.
25A-310 (Joint VLA-JWST) (PI: N. Foo), 2024, *Resolving fuel and products of SF in a lensed dusty protocluster core at $z = 2.7$*
24B-259 (PI: T. Bakx), 2024, *A pilot for an alternative magnetic field tracer towards the early Universe*
18B-275 (PI: K. Harrington), 2018, *Resolved Imaging of Cold Gas Reservoirs in Strongly Lensed Planck Galaxies*

ESO VLT (Very Large Telescope) **4 programs**.
115.27TF Enhanced Resolution Imaging Spectrograph (ERIS) (PI: B. Alcalde Pampliega), 2025, *Peering into the Most Massive Strongly Lensed SFGs: a deep ERIS view of PJ0116-24*
114.27Q3 Enhanced Resolution Imaging Spectrograph (ERIS) (PI: B. Alcalde Pampliega), 2024, *Peering into the Most Massive Strongly Lensed SFGs: a deep ERIS view of PJ0116-24*
113.26L1 Enhanced Resolution Imaging Spectrograph (ERIS) (PI: K. Harrington), 2023, *A dusty ERIS survey of six of the most gas-rich, massive, magnified starbursts*
SV 110.258S ERIS (PI: D. Liu), 2022, *Dissecting the Most Massive Strongly Lensed SFGs (Pilot)*

SMA (Submillimeter Array) **2 programs**.
2020A-S014 (PI: K. Harrington), 2020, *Rest-frame 775 - 1730 GHz ISM Diagnostics of the Most IR Luminous, Lensed Planck Starburst at $z = 3$*
2016B-S062 (PI: M. Yun), 2016, *Probing Dense Gas Powering SF/AGN Activities in High-z SMGs using Lensing*

IRAM 30m (Institut de radioastronomie millimétrique) **2 programs**.
201-18 (PI: K. Harrington), 2018, *Dense Gas in Strongly Lensed High-z Starbursts Selected by Planck: A continuation* (62 hrs)
170-17 (PI: M. Yun), 2018, *Probing Physical Diagnostics of SF via CO SLEDs Out to the Highest-J Transitions in Strongly Lensed $z > 1$ HyLIRGs* (86 hrs)

EVN (European VLBI Network) **1 program**.
E25B002 (PI: H. Stacey), 2025, *A search for unambiguous AGN activity in hyperluminous star-forming galaxies*

APEX (Atacama Pathfinder Experiment) **1 program**.
0101.F-9503(A) (PI: K. Harrington), 2018, *Probing the Dense Star-forming ISM of Lensed $z \sim 2-3$ HyLIRGS via Low-J H_2O and High-J CO Emission Lines*

GBT (Green Bank Telescope) **1 program**.
17B-305 (PI: K. Harrington), 2017, *CO(1-0) Probe of SF Supply for the Brightest Planck-LMT, High-z Galaxies*

Colloquia & Invited Talks

02/2025 **Arizona State University, School of Earth and Space Exploration**, Tempe, AZ.
Invited Colloquium: *Supernova Factories: How the most luminous galaxies in the Universe can help us solve open questions in cosmology and galaxy evolution*

12/2024 **Arizona Lensing Day at ASU**, Tempe, AZ.
Invited Talk: *Cosmography With Lensed Starburst and Massive Galaxies*

02/2024 **NOIRLab FLASH Talk**, Tucson, AZ.
Lunch Seminar: *Resolving the Universe's most extreme star formation events with JWST, ALMA, and gravitational lensing*

09/2023 **Arizona State University, School of Earth and Space Exploration**, Tempe, AZ.
Invited Colloquium: *Monster Galaxies in the Early Universe, and How Gravitational Lensing Reveals Their Secrets*

03/2023 **National Radio Astronomy Observatory / University of Virginia**, Charlottesville, VA.
Invited Colloquium: *Robert Brown Thesis Award: Dissecting Extreme Starburst Events at Cosmic Noon with Gravitational Lensing*

06/2022 **Parsec Institute, Université de Montréal**, Montreal, QC, Canada (virtual).
Invited Talk: *Dissecting the Most Extreme Starburst Events in the Universe with Gravitational Lensing*

05/2022 **Cornell University Galaxy Lunch**, Ithaca, NY (virtual).
Invited Talk: *Dissecting the Most Extreme Starburst Events in the Universe with Gravitational Lensing*

Conferences, Meetings & Contributed Talks

06/2025 **European Astronomical Society (EAS) Meeting 2025**, Cork, Ireland.
Contributed Talk: *Capturing feedback at 100pc scales during Cosmic Noon with lensing* (Special Session SS30: "A Multi-scale Perspective on Stellar Feedback in the Context of Galaxy Evolution")
Contributed Talk & ePoster: *Facilitating Rapid Star Formation at Cosmic Noon and Cosmic Dawn* (Special Session SS16: "A new picture of galaxy evolution from Cosmic Dawn to Cosmic Noon")
ePoster: *Supernova Factories: Searching for Strongly Lensed SNe in Extreme Starbursts* (Symposium S10: "Science with gravitational lensing in the multi space-telescope era: new prospects and opportunities")

06/2025 **IAUS 396: Massive Galaxies Across the Universe**, Naples, Italy.
Poster: *The role of internal vs. external quenching mechanisms at Cosmic Noon vs. Cosmic Dawn*

05/2025 **Science with strong lensing, ALMA, and next generation radio interferometry**, Charlottesville, VA.
Contributed Talk: *Lensed DSFGs as a Laboratory: What big questions in galaxy evolution/cosmology can be addressed next with PASSAGES?*

01/2025 **245th American Astronomical Society (AAS) Meeting**, National Harbor, MD.
Contributed Talk: *Capturing the Widespread Assembly of Stellar Mass in Dusty Starburst Galaxies with JWST*

11/2024 **40th Annual New Mexico Symposium**, Socorro, NM.
Contributed Talk: *Monsters under the Magnifying Glass: Star Formation in Gravitationally Lensed Dusty Starbursts*

09/2024 **Views on the multi-phase interstellar medium in galaxies (ALMABO 2024)**, Bologna, Italy.
Contributed Talk: *Blowing dusty bubbles into the CGM: the contribution of dust-enshrouded starbursts to the baryon cycle*

09/2024 **AGN Feedback and Star Formation Across Cosmic Scales and Time**, Sirolo, Italy.
Contributed Talk: *The role of dust-enshrouded star formation in quenching galaxies*

04/2024 **Extreme Galaxies in their extreme environments at extremely early epochs**, Reykjavík, Iceland.
Poster: *Why don't monstrously star-forming dusty galaxies blow themselves apart?*

03/2024 **The Physics and Impact of Astrophysical Dust: from Star Formation through Cosmology**, Aspen, CO.
Contributed Talk: *Deciphering the role of stellar feedback in dusty starbursts through gravitational lensing*

07/2023 **The James Webb Space Telescope Turns One: The Birth and Growth of Galaxies**, Sesto, Italy.
Contributed Talk: *Inside-out galaxy growth or dust attenuation gradients? Examining the UV/optical/IR distribution of a lensed $z = 2.3$ dusty starburst at sub-kpc resolution*

06/2023 **IAUS 381: Strong gravitational lensing in the era of Big Data**, Otranto, Italy.
Contributed Talk: *Where are the Eddington-limited starbursts? A sub-kpc view of star formation in lensed hyper-luminous dusty star-forming galaxies*

06/2023 **242nd American Astronomical Society (AAS) Meeting**, Albuquerque, NM.
Contributed Talk: *JWST/NIRCam color gradients reveal signs of inside-out quenching in the lensed dusty star-forming galaxy El Anzuelo* ($z = 2.3$) [ADS]

02/2023 **Oases in the Cosmic Desert: Understanding the Structure of the Circumgalactic Medium**, Tempe, AZ.
Poster: *Using gravitational lensing to resolve massive rotating molecular disks around dusty starbursts at Cosmic Noon*

02/2023 **IAUS 377: Early Disk-Galaxy Formation From JWST to the Milky Way**, Kuala Lumpur, Malaysia.
Poster (presented remotely): *Using Gravitational Lensing to Resolve the Rotating Molecular Disks of Dusty Starbursts at Cosmic Noon*

06/2022 **240th American Astronomical Society (AAS) Meeting**, Pasadena, CA.
Dissertation Talk: *Resolving Cosmic Noon: Planck-selected extremely-luminous dusty starbursts magnified by strong gravitational lensing* [ADS]

09/2019 **Views on the Interstellar Medium in Galaxies in the ALMA Era**, Bologna, Italy.
Contributed Talk: *Gas and star formation at sub-100 pc scales in lensed hyper-luminous SMGs at Cosmic Noon*

01/2019 **233rd American Astronomical Society (AAS) Meeting**, Seattle, WA.
Contributed Talk: *Multi-wavelength source reconstruction of gravitationally-lensed Planck-selected sub-mm galaxies* [ADS]

09/2018 **The Universe as a telescope: probing the cosmos at all scales with strong lensing**, Milan, Italy.
Contributed Talk: *Lensed Hyper-luminous SMGs Selected by Planck*

04/2018 **European Week of Astronomy and Space Science (EWASS)**, Liverpool, UK, Symposium: "Weak and strong-lensing techniques to unveil mysteries of the Universe".
Contributed Talk: *Lensed Hyper-luminous SMGs Selected by Planck*

06/2017 **CHANG-ES Meeting 2017: The Impact of CHANG-ES**, Bochum, Germany.
Contributed Talk: *Bayesian Methods for Measuring Faraday Rotation*

01/2017 **229th American Astronomical Society (AAS) Meeting**, Grapevine, TX.
Poster: *Faraday rotation measure synthesis of UGC 10288* [ADS]

07/2016 **CHANG-ES Meeting 2016: Radio Halos of Galaxies**, Madison, WI.
Contributed Talk: *Faraday Rotation Measure Synthesis of UGC 10288, NGC 4845, NGC 3044*

06/2016 **15th Synthesis Imaging Workshop**, Socorro, NM.
Workshop: *JVLA/NRAO*

01/2015 **225th American Astronomical Society Meeting**, Seattle, WA.
Poster: *Using JVLA Observations of SiO Masers to Probe the Extended Atmosphere of an AGB Star: W Hydrae* [ADS]

Teaching

2024 **ALMA Ambassador**, Cycle 11.
Led and organized a day-long ALMA Proposal Preparation workshop (March 2024) and a two-day ALMA Data Reduction workshop (October 2024) at ASU to help support both novice and experienced users of ALMA and other NRAO facilities

2023–2024 **Guest Lecturer**, Arizona State University School of Earth and Space Exploration.
Delivered guest lectures on the topics of Stellar Remnants and Telescopes for AST 112: Introduction to Stars, Galaxies, and Cosmology (Spring 2023 & Spring 2024 semesters; Prof. Allison Noble)

2019–2020 **Primary Instructor of Record**, University of Massachusetts Dept. of Astronomy.
Astronomy 100 and 101: Exploring the Universe Lab Section (Spring 2019, Fall 2019, Spring 2020, Fall 2020).
Designed course content and prepared necessary lab materials for lab sections serving ∼500 students; supervised other graduate TAs in teaching the course; migrated course content to virtual format in Spring/Fall 2020 during COVID-19 pandemic.

2018–2019 **Summer Pre-college Program Course Coordinator**, University of Massachusetts Dept. of Astronomy.
Directed an intensive two-week pre-college program covering Modern Astronomy; supervised graduate student teachers in offering traditional lectures, hands-on lab activities, observing nights, optical data reduction and analysis with Jupyter notebooks; maintained course website for students to access material.

2016–2021 **Summer Program Lecturer**, University of Massachusetts Dept. of Astronomy.
Modern Astronomy: *Delivered lectures and introductory Python labs as part of a 2 to 3-week pre-college program.*

2015–2021 **Lab/Lecture Teaching Assistant**, University of Massachusetts Amherst Dept. of Astronomy.
Astronomy 100: Exploring the Universe, *9 semesters total.*

2017 **Guest Lecturer**, St. Paul's School Advanced Studies Program, Concord, NH.
Delivered guest lecture for high school students on the topic of gravitational lensing.

2015 **Guest Lecturer**, UMass-Amherst Dept. of Astronomy.
Delivered guest lecture on the topic of Stellar Evolution for Astronomy 100: Exploring the Universe (Fall 2015 semester; Prof. Ron Snell)

2013 **Teaching Intern**, St. Paul's School Advanced Studies Program, Concord, NH.
Assisted Dr. Leslie Chamberlain in teaching an Introductory Astronomy summer course for high school seniors.

09/2012-05/2015 **Undergraduate Teaching Assistant and Study Group Tutor**, Department of Mathematics, Bowdoin College.

Research Mentorship

09/2023–present **Research Advisor**, Arizona State University School of Earth and Space Exploration.
Primary advisor for 1 undergraduate student (Tyler Hinrichs) and 1 graduate student (Xingyun Yang); co-advisor for 1 graduate student (Nick Foo) and 1 undergraduate student (Sarah Saavedra)

06/2021–05/2022 **Undergraduate Research Advisor**, Smith College Dept. of Astronomy.
Co-advised undergraduate student (Lilah Mercadante '22) for honor's undergraduate thesis project alongside Prof. James Lowenthal.

09/2015–05/2022 **Research Mentor**, University of Massachusetts Department of Astronomy.
Mentored 7 undergraduate students in research groups of Prof. Min Yun (N. Shah '18, S. Delgado Andrade '19, S. Clyne '19, A. Englert '21), Prof James Lowenthal (Lilah Mercadante '22), and Prof. Daniel Wang (D. Paré '17, K. Sullivan '18).

Press Activities

10/2024 **Press Release**, *Webb Researchers Discover Lensed Supernova, Confirm Hubble Tension*, NASA/STScI.
ASU News: Webb scientists confirm Hubble tension through lensed supernova discovery

08/2024 **Blog Post - Science Communication**, Nature Behind the Paper.
by Patrick Kamieneski, Olivia Cooper, Daizhong Liu: Tracing the motions of ionized and molecular gas in the gravitationally lensed, hyperluminous starburst galaxy PJ0116-24

07/2024 **Press Release**, *Zooming in on a surprising ring*, ESO.
ASU News: Telescopes in Atacama Desert capture extreme starburst galaxy warped into fiery ring (text by P. Kamieneski)

09/2023 **TV Interview**, *NASA telescope captures image of El Gordo galaxy cluster*, Arizona PBS (KAET), *Arizona Horizon with Ted Simons*.

08/2023 **Press Release**, *Webb Spotlights Gravitational Arcs in 'El Gordo' Galaxy Cluster*, NASA/STScI.
ASU News: Webb Telescope's gravitational lens reveals distant objects behind 'El Gordo' galaxy cluster
ASU News: Einstein connects ASU professor, Holocaust survivor

06/2023 **Press Conference**, *Illuminating Star Formation in the Warped, Dusty Galaxy "El Anzuelo" with JWST*, AAS 242, "Discoveries in Distant Galaxies", Albuquerque, NM.

Outreach

03/2025 **Saguaro Astronomy Club, Invited Public Outreach Talk**, *"Uncovering the secrets of the Universe's most luminous galaxies,"* Phoenix, AZ.

02/2025 **"Science on Tap" Invited Public Outreach Talk**, *"Need Space? Science with the James Webb Space Telescope,"* Tempe, AZ.

05/2024 **Data Reduction Tutorial Assistant**, 20th Synthesis Imaging Summer School.
Helped facilitate data reduction tutorials for the 2024 NRAO Synthesis Imaging Workshop in Socorro

11/2022 & 02/2025 **Panel Member, Earth and Space Exploration Open House**, Arizona State University School of Earth and Space Exploration.

03 & 12/2018 **Meet-an-Astronomer Day**, Springfield Prep Charter School, Longmeadow, MA.
Visited the 1st grade students at Springfield Prep and answered their questions about astronomy and the life of an astronomer.

Professional Service

2024 **Chair of Local/Scientific Organizing Committee, 2024 SESE Symposium**, Arizona State University School of Earth and Space Exploration.

2025 **Member of Scientific Organizing Committee**, *"Science with strong lensing, ALMA, and next generation radio interferometry,"* Charlottesville, VA, NAASC-supported workshop, anticipated in May 2025.

01/2025 **Session Chair**, AAS Meeting 245.

2024–present **Journal Referee**, *The Astrophysical Journal; Astronomy & Astrophysics*.

2021–present **Telescope Panel Reviews**, *including JWST Cycle 4 External (2024); Large Millimeter Telescope (2023); ALMA (Distributed Peer Review for Cycles 8, 9, 10, 11).*

2024–present **Funding Panel Reviews**, *including NASA Postdoctoral Program (2025); ALMA Student Observing Support (2024).*

2023–present **Colloquium Committee, Beus Center for Cosmic Foundations**, Arizona State University School of Earth and Space Exploration.

2023–2025 **Local/Scientific Organizing Committee, Annual SESE Symposium**, Arizona State University School of Earth and Space Exploration.

2019–2025 **Chambliss Judge**, Student Poster Competition, AAS Meetings 233, 240, 242 & 245.

2018–2022 **UMass Grad Student Senator**, University of Massachusetts Amherst.
Academic Years 2018-2019, 2019-2020, 2020-2021, 2021-2022
Represented the Astronomy department as a voting member in the university-wide Graduate Student Senate.
Member of GSS Elections Committee, 2021.

2020–2021 **Member of Diversity, Equity, and Inclusion in Admissions & Recruitment Committee**, University of Massachusetts Amherst.
Grad student-led committee formed to offer suggested guidelines to promote DEI in the admissions process, including the instatement of grad student-conducted interviews in 2021.

2018 **Local Organizing Committee**, University of Massachusetts Amherst.
Past, Current and Future Galaxy Surveys: CANDELS Meeting and TolTEC Workshop

Professional Development

01/2025 **Workshop: "Strategies for Mentoring Undergraduate Researchers"**, AAS 245.
Attended 1-day course on research mentoring at undergraduate institutions

11/2024 **Facilitating Learning Online MicroCourse**, "Strengthening Our Teaching Through Reciprocal Peer Observations".
Attended 1-week course through BCcampus on improving teaching skills through feedback from peers

06/2023 **Peer Review Workshop**, AAS 242.
Attended 1-day course on principles of journal peer review

Collaboration & Professional Memberships

2022–present **Member of JWST PEARLS Collaboration**, *Prime Extragalactic Areas for Reionization and Lensing Science*.

2016–present **Co-Founder of PASSAGES Collaboration**, *Planck All-Sky Survey to Analyze Gravitationally-lensed Extreme Starbursts*.
Scientific Working Group Leader: Strong Gravitational Lensing

2024–present **Member of International Astronomical Union**.

2014–present **Member of American Astronomical Society**.

Selected Technical Skills

Software Experience	Python, Radio and optical/IR data reduction (CASA, IRAF / PyRAF, Astropy, DrizzlePac), Gravitational lens modeling (LENSTOOL, PyAutoLens), Source extraction, photometry, and morphological analysis (photutils, SExtractor, GALFIT, BLOBCAT, pyBDSF), SED fitting and redshift estimation (EAZY, BAGPIPES, Prospector, piXedfit), Image and data visualization (SAOImage ds9, CARTA, glue-viz), LaTeX Basic Experience: HTML, MIRIAD, AIPS, Mathematica,
Observation / Reduction Experience	**Radio/submm**: ALMA, JVLA, SMA **Optical/near-IR**: JWST, HST
Languages	English (native), French (professional)

Publications

41.) 2025 **The complicated nature of the X-ray emission from the field of the strongly lensed hyperluminous infrared galaxy PJ1053+60 at $z = 3.549$**, *submitted to journal* [ADS pending].
Carlos Garcia Diaz, Q. D. Wang, K. C. Harrington, J. D. Lowenthal, **P. S. Kamieneski**, E. F. Jimenez-Andrade, N. Foo, M. S. Yun, B. L. Frye, D. Zhou, A. Vishwas, I. Yoon, B. Alcalde Pampliega, D. Liu, M. Pascale

40.) 2025 **Hiding behind a curtain of dust: Gas and dust properties of an ultra-luminous strongly-lensed $z = 3.75$ galaxy behind the Milky Way disk**, *submitted to journal* [ADS].
Belén Alcalde Pampliega, K. C. Harrington, A. Amvrosiadis, et al.

39.) 2025 **Hidden in Plain Sight: Searching for Globular Clusters Within JWST Observations of the PLCK G165.7+67.0 Galaxy Cluster**, *submitted to journal* [ADS pending].
Tyler R. Hinrichs, **P. S. Kamieneski**, R. A. Windhorst, S. H. Cohen, B. L. Frye, T. Carleton, M. Pascale, J. M. Diego, R. A. Jansen, J. Berkheimer, N. J. Adams, C. J. Conselice, S. P. Driver, N. Foo, N. Garuda, et al.

38.) 2025 **JWSTs PEARLS: NIRCam imaging and NIRISS spectroscopy of a $z = 3.6$ star-forming galaxy lensed into a near-Einstein Ring by a $z = 1.258$ massive elliptical galaxy**, *submitted to journal* [ADS].
Nathan J. Adams, G. Ferrami, L. Westcott, et al.

37.) 2025 **A stellar dynamical mass measure of an inactive black hole in the distant universe**, *submitted to journal* [ADS].
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