Kalina V. Nedkova

Location: Pasadena, CA, USA
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Staff Scientist at Caltech/IPAC

Research interests include the formation and evolution of galaxies; slitless spectroscopy; multi-wavelength imaging; galaxy modeling and statistics; galaxy scaling relations; the evolution of chemical abundances in galaxies; galaxy clustering; cosmology; galaxy simulations; galaxy morphology including decomposition into bulge and disk components; dust

Research & Technical Experience

Staff Scientist at Caltech/IPAC March 2026 – present
Supervisor: Lee Armus

- 2D Slitless Spectroscopy for the Nancy Grace Roman Telescope

Postdoctoral Scholar Research Associate in Astronomy at Caltech/IPAC September 2025 – March 2026
Supervisor: Yun Wang

- Slitless Spectroscopy for Roman and Euclid Space Telescopes
  - investigated roll angles for Roman to minimize spectral overlap and maximize science returns
- Co-lead for the Euclid Key Project DR1-KP-GC-2: Euclid galaxy clustering validation tests and systematic errors
- PI of one *awarded* JWST archival proposal

Postdoctoral Researcher at Johns Hopkins University September 2022 – September 2025
Supervisor: Marc Rafelski

- Adapted and developed software suite to measure emission lines from JWST grism spectroscopy [GitHub Repository]
- PI of one *awarded* HST Snapshot proposal (124 orbits) to obtain ACS/F814W imaging to constrain the SEDs and morphologies of galaxies in fields with JWST spectroscopy
- PI of two *awarded* NASA Keck proposals to obtain 4-band LRIS imaging to constrain dust attenuation curves
- Measured the size evolution of disk galaxies using a consistent multi-wavelength approach revealing that massive galaxies tend to be significantly larger in the rest-frame UV than rest-frame optical at $0 \leq z \leq 3$
- Studied spatial dust distributions within simulated star-forming galaxies to explore the effects of centrally concentrated dust attenuation on galaxy light profiles and sizes at different wavelengths
- Determined the gas-phase metallicities of galaxies from PASSAGE, a Cycle 1 JWST Program (PID: 1571; PI: M. Malkan)
- Awarded HST Director's Discretionary Research Fund (DDRF) in Spring 2023 to study the role of galaxy morphology in the mass–metallicity–star-formation rate relation

Research Assistant at Tufts University September 2016 – August 2022
Advisor: Danilo Marchesini

- Decomposed galaxies into components to measure the mass – size relation of disks and bulges individually
- Measured the mass – size relation of galaxies in the Hubble Frontier Fields, extending this relation to lower mass galaxies than previous possible at high redshift
- Measured the luminosity function of galaxies using deep surveys
- Reprocessed all G104 and G141 HST-WFC3 grism data on the archive at the time with the GRIZLI software and created quality flags associated with the grism redshifts extracted by GRIZLI
- Co-supervised a third-year undergraduate student (2017)

Extended Scientific Visitor at ESO, Chile May – June 2018 and January – August 2019
Advisor: Boris Häußler

- Learned to use GALAPAGOS-2 and GALFITM codes to measure galaxy morphological properties and to decompose galaxies into their main components.

Undergraduate Research Assistant for the Laser Interferometer Gravitational Wave Observatory (LIGO) 2013-2016
Advisor: Laura Cadonati

- Contributions to efforts in detector seismic noise characterization and detector calibration
- Measured the thermal conductivity of monolithic sapphire fibers for KAGRA, a second generation gravitational wave detector

Education

Tufts University 2017 – 2022
Doctor of Philosophy in Physics *Awarded August 2022*
Thesis: *The Evolution of the Stellar Mass–Size Relations of Galaxies and Their Main Components*
Advisor: Danilo Marchesini

Tufts University 2015 – 2017
Master of Science in Physics *Awarded May 2017*

University of Massachusetts, Amherst 2011 – 2015
Bachelor of Science in Physics, Cum Laude and Honors, Minors in Mathematics and Computer Science *Awarded May 2015*

Publications

55 published papers, with an H-index of 33. A full publication list can be found on ADS.

First & Second Author Publications:

2026 M. S. Huberty, K. V. Nedkova, Z. Sattari, V. Mehta, C. Scarlata, M. Rafelski, M. J. Hayes, P. J. Watson, A. Acharyya, J. Levine, B. Vulcani, et al., *The NIRISS PASSAGE Spectroscopic Redshift Catalog in COSMOS*, Submitted to ApJ

2024 K. V. Nedkova, B. Häußler, D. Marchesini, et al., *Bulge+disc decomposition of HFF and CANDELS galaxies: UVJ diagrams and stellar mass–size relations of galaxy components at 0.2 $\leq$ z $\leq$ 1.5*, MNRAS, 532, 3747

K. V. Nedkova, M. Rafelski, H. I. Teplitz, V. Mehta, L. DeGroot, S. Ravindranath, A. Alavi, A. Beckett, N. A. Grogin, et al., *UVCANDELS: The Role of Dust on the Stellar Mass–Size Relation of Disk Galaxies at 0.5$\leq z \leq$3.0*, ApJ, 970, 188

2021 K. V. Nedkova, B. Häußler, D. Marchesini, P. Dimauro, G. Brammer, P. Eigenthaler, et al., *Extending the evolution of the stellar mass-size relation at $z \leq 2$ to low stellar mass galaxies from HFF and CANDELS*, MNRAS, 506, 928

Publications with Significant Contribution:

2025 A. Acharyya, P. J. Watson, B. Vulcani, T. Treu, K. V. Nedkova, A. J. Bunker, V. Mehta, H. Atek, A. J. Battisti, F. Hasan, M. J. Hayes, et al., *Spatially resolved gas-phase metallicity at z∼2-3 with JWST/NIRISS*, submitted to A&A

2024 K. Jegatheesan, E. J. Johnston, B. Häußler, K. V. Nedkova, *BUDDI-MaNGA III: The mass-assembly histories of bulges and discs of spiral galaxies*, A&A, 684, 32

A. van der Wel, M. Martorano, B. Häußler, K. V. Nedkova, T. B. Miller, G. B. Brammer, G. van de Ven, J. Leja, et al., *Stellar Half-Mass Radii of 0.5 $<$ z $<$ 2.3 Galaxies: Comparison with JWST/NIRCam Half-light Radii*, ApJ, 960, 53

Contributing Author Publications:

2025 F. Hasan, H. Zhang, V. Pandya, M. Rafelski, J. N. Burchett, D. Hellinger, K. V. Nedkova, I. Goovaerts, N. Mandelker, D. Nagai, et al., *Impact of Cosmic Filaments on Galaxy Morphological Evolution and Predictions of Early Cosmic Web Structure for Roman*, submitted to ApJ

M. A. Malkan, V. Mehta, A. Acharyya, H. B. Akins, A. Alavi, H. Atek, et al. including K. V. Nedkova, *Parallel Application of Slitless Spectroscopy to Analyze Galaxy Evolution (PASSAGE): Survey Overview*, ApJ, 993, 152

A. Runnholm, M. J. Hayes, V. Mehta, M. A. Malkan, C. Scarlata, K. V. Nedkova, M. Rafelski, B. Vulcani, M. Huberty, E. C. Herenz, A. Hutter, et al., *The JWST/PASSAGE Survey: Testing Reionization Histories with JWST's First Unbiased Survey for Lyman alpha Emitters at Redshifts 7.5-9.5*, ApJ, 984, 95

M. J. Rutkowski, B. Zabelle, T. Hagen, S. Cohen, C. Conselice, N. A. Grogin, Y. Guo, M. J. Hayes, S. Kaviraj, et al. including K. V. Nedkova, *Recent star formation in $0.5 < z < 1.5$ quiescent galaxies*, ApJL, 983, 32

A. Morales, S. Finkelstein, M. Bagley, A. Alavi, N. Grogin, N. Hathi, A. Koekemoer, K. V. Nedkova, L. Prichard, M. Rafelski, B. Sunnquist, et al., *Galaxy Rest-Frame UV Colors at z ∼ 2–4 with HST UVCANDELS*, ApJ, 985, 174

2024 V. Mehta, M. Rafelski, B. Sunnquist, H. I. Teplitz, C. Scarlata, X. Wang, A. Fontana, et al. including K. V. Nedkova, *UVCANDELS: Catalogs of photometric redshifts and galaxy physical properties*, ApJS, 275, 17

A. Beckett, M. Rafelski, M. Revalski, M. Fumagalli, M. Fossati, K. V. Nedkova, et al., *The MUSE Ultra Deep Field (MUDF). VI. The relationship between galaxy properties and metals in the circumgalactic medium*, ApJ, 974, 256

L. Sun, X. Wang, H. I. Teplitz, V. Mehta, M. Rafelski, R. A. Windhorst, C. Scarlata, J. P. Gardner, B. M. Smith, B. Sunnquist, et al. including K. V. Nedkova, *The UV luminosity function at $0.6 < z < 1$ from UVCANDELS*, ApJ, 972, 8

M. Revalski, M. Rafelski, A. Henry, M. Fossati, M. Fumagalli, et al. including K. V. Nedkova, *The MUSE Ultra Deep Field (MUDF). V. Characterizing the Mass-Metallicity Relation for Low Mass Galaxies at $z \sim 1-2$*, ApJ, 966, 228

X. Wang, H. I. Teplitz, L. Sun, M. Rafelski, N. Grogin, L. Prichard, B. Sunnquist, A. Alavi, R. A. Windhorst, et al. including K. V. Nedkova, *Ultraviolet and Blue Optical Imaging of UVCANDELS*, RNAAS, 8, 26

2023 A. Martin, Y. Guo, X. Wang, A. M. Koekemoer, M. Rafelski, H. I. Teplitz, R. A. Windhorst, et al. including K. V. Nedkova, *UV-bright Star-forming Clumps and Their Host Galaxies in UVCANDELS at 0.5* $\leq z \leq$ *1*, ApJ, 955, 106

M. Revalski, M. Rafelski, M. Fumagalli, M. Fossati, N. Pirzkal, B. Sunnquist, et al. including K. V. Nedkova, *The MUSE Ultra Deep Field (MUDF). III. Hubble Space Telescope WFC3 Grism Spectroscopy and Imaging*, ApJS, 265, 40

2022 V. Y. Y. Tan, A. Muzzin, Z. C. Marsan, V. Sok, et al. including K. V. Nedkova, *Resolved Stellar Mass Maps of Galaxies in the Hubble Frontier Fields: Evidence for Mass Dependency in Environmental Quenching*, ApJ, 933, 30

2018 R. E. Hviding, G. B. Brammer, I. B. Momcheva, B. F. Lundgren, D. Marchesini, N. Pirzkal, R. E. Ryan et al. including K. V. Nedkova, *Spatially Extended Low-ionization Emission Regions (LIERs) at* $z \sim 0.9$, ApJ, 868, 16

H. V. Shipley, D. Lange-Vagle, D. Marchesini, G. B. Brammer, L. Ferrarese, M. Stefanon, E. Kado-Fong, K. E. Whitaker, P. A. Oesch, et al. including K. V. Nedkova, *HFF-DeepSpace Photometric Catalogs of the 12 Hubble Frontier Fields, Clusters, and Parallels: Photometry, Photometric Redshifts, and Stellar Masses*, ApJS, 235, 14

2017 B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, K. Ackley, et al. including K. V. Nedkova, *Search for continuous gravitational waves from neutron stars in globular cluster NGC 6544*, Phys. Rev. D 95, 082005

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, K. Ackley, et al. including K. V. Nedkova, *Calibration of the Advanced LIGO detectors for the discovery of the binary black-hole merger GW150914*, Phys. Rev. D 94, 062003

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, K. Ackley, et al. including K. V. Nedkova, *Exploring the sensitivity of next generation gravitational wave detectors*, Classical and Quantum Gravity 34, 044001

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, et al. including K. V. Nedkova, *The basic physics of the binary black hole merger GW150914*, Annalen der Physik 529, 1600209

2016 B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, et al. including K. V. Nedkova, *The Rate of Binary Black Hole Mergers Inferred from Advanced LIGO Observations Surrounding GW150914*, ApJL 833, 1

B. P. Abbott, R. Abbott, T. D. Abbott, et al. including K. V. Nedkova, *Upper Limits on the Rates of Binary Neutron Star and Neutron Star-Black Hole Mergers from Advanced LIGO's First Observing Run*, ApJL 832, 21

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, K. Ackley, et al. including K. V. Nedkova, *Results of the deepest all-sky survey for continuous gravitational waves on LIGO S6 data running on the Einstein@Home volunteer distributed computing project*, Phys. Rev. D 94, 102002

B. P. Abbott, et al. including K. V. Nedkova, *First targeted search for gravitational-wave bursts from core-collapse supernovae in data of first-generation laser interferometer detectors*, Phys. Rev. D 94, 102001

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, et al. including K. V. Nedkova, *Binary Black Hole Mergers in the First Advanced LIGO Observing Run*, Phys. Rev. X 6, 041015

B. P. Abbott, R. Abbott, T. D. Abbott, et al. including K. V. Nedkova , *Directly comparing GW150914 with numerical solutions of Einstein's equations for binary black hole coalescence*, Phys. Rev. D 94, 064035

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, K. Ackley, et al. including K. V. Nedkova, *Observing gravitational-wave transient GW150914 with minimal assumptions*, Phys. Rev. D 93, 122004

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, et al. including K. V. Nedkova, *Comprehensive all-sky search for periodic gravitational waves in the sixth science run LIGO data*, Phys. Rev. D 94, 042002

B. P. Abbott, R. Abbott, T. D. Abbott, et al. including K. V. Nedkova, *Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914*, Classical and Quantum Gravity 33, 134001

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, et al. including K. V. Nedkova, *Supplement: "Localization and Broadband Follow-up of the Gravitational-wave Transient GW150914" (2016, ApJL, 826, L13)*, ApJS 225, 8

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, et al. including K. V. Nedkova, *Localization and Broadband Follow-up of the Gravitational-wave Transient GW150914*, ApJL 826, 13

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, et al. including K. V. Nedkova, *GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence*, Phys. Rev. Lett. 116, 241103

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, K. Ackley, C. Adams, et al. including K. V. Nedkova, *Properties of the Binary Black Hole Merger GW150914*, Phys. Rev. Lett. 116, 241102

S. Adrián-Martínez, A. Albert, M. André, M. Anghinolfi, et al. including K. V. Nedkova, *High-energy neutrino follow-up search of gravitational wave event GW150914 with ANTARES and IceCube*, Phys. Rev. D 93, 122010

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, et al. including K. V. Nedkova, *Search for transient gravitational waves in coincidence with short-duration radio transients during 2007-2013*, Phys. Rev. D 93, 122008

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, et al. including K. V. Nedkova, *GW150914: First results from the search for binary black hole coalescence with Advanced LIGO*, Phys. Rev. D 93, 122003

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, K. Ackley, C. Adams, T. Adams, et al. including K. V. Nedkova, *Tests of General Relativity with GW150914*, Phys. Rev. Lett. 116, 221101

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, F. Acernese, K. Ackley, et al. including K. V. Nedkova, *GW150914: The Advanced LIGO Detectors in the Era of First Discoveries*, Phys. Rev. Lett. 116, 131103

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, et al. including K. V. Nedkova, *GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes*, Phys. Rev. Lett. 116, 131102

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, et al. including K. V. Nedkova, *Observation of Gravitational Waves from a Binary Black Hole Merger*, Phys. Rev. Lett. 116, 061102

J. Aasi, B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, K. Ackley, et al. including K. V. Nedkova, *First low frequency all-sky search for continuous gravitational wave signals*, Phys. Rev. D, 93, 042007

B. P. Abbott, R. Abbott, et al. including K. V. Nedkova, *Search of the Orion spur for continuous gravitational waves using a loosely coherent algorithm on data from LIGO interferometers*, Phys. Rev. D, 93, 042006

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, et al. including K. V. Nedkova, *All-sky search for long-duration gravitational wave transients with initial LIGO*, Phys. Rev. D, 93, 042005

B. P. Abbott, R. Abbott, T. D. Abbott, et al. including K. V. Nedkova, *Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo*, Living Reviews in Relativity, 19, 1

B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, K. Ackley, C. Adams, T. Adams, et al. including K. V. Nedkova, *Astrophysical Implications of the Binary Black-hole Merger GW150914*, ApJL, 818, 22

2015 J. Aasi, B. P. Abbott, R. Abbott, T. D. Abbott, M. R. Abernathy, et al. including K. V. Nedkova, *Searches for Continuous Gravitational Waves from Nine Young Supernova Remnants*, ApJ, 813, 39

LIGO Scientific Collaboration including K. V. Nedkova, *Advanced LIGO*, Classical and Quantum Gravity, 32, 074001

J. Aasi, B. P. Abbott, R. Abbott, T. Abbott, M. R. Abernathy, et al. including K. V. Nedkova, *Directed search for gravitational waves from Scorpius X-1 with initial LIGO data*, Phys. Rev. D, 91, 062008

J. Aasi, B. P. Abbott, R. Abbott, T. Abbott, M. R. Abernathy, et al. including K. V. Nedkova, *Narrow-band search of continuous gravitational-wave signals from Crab and Vela pulsars in Virgo VSR4 data*, Phys. Rev. D, 91, 022004

Successful Observing Proposals — $287,370 USD as PI

JWST Cycle 5 : CLEARER: Characterizing Light Extinction And Reddening using Emission-line Ratios (**PI: K. V. Nedkova, Co-PIs:** M. Rafelski & A. J. Battisti; $140,000)

JWST Analysis of Gas and Galaxies at the End of Reionization (**54.5 hours, PIs:** R. Dutta & M. Rafelski, including **Co-I K. V. Nedkova**)

Calibrating 3.3 micron PAH feature as a star-formation indicator at cosmic noon (**43.1 hours, PI:** V. Mehta, including **Co-I K. V. Nedkova**)

JWST–Roman–Euclid Purity Project: Calibrating Slitless Redshifts for Cosmology (**PI:** C. Scarlata, including **Co-I K. V. Nedkova**)

Constraining the Star Forming Main Sequence Relation in the Early Universe through Archival Pure Parallel Observations (**PIs:** A. Kumar & J. Kartaltepe, including **Co-I K. V. Nedkova**)

HST Cycle 33 : Unlocking the full potential of JWST spectroscopic fields with SHIP^3: Snapshot HST Imaging of Pure-Parallel Programs (**PI: K. V. Nedkova, Co-PIs:** M. Rafelski & A. J. Battisti; $101,170)

NASA Keck 2025B & 2026A : READ JWST+Keck: Revealing the Evolution of Attenuation from Dust with JWST and Keck (**PI: K. V. Nedkova, awarded 2 nights on Keck/LRIS**; $27,550 USD)

NASA Keck 2025A : Follow-up LRIS Imaging of Parallel Surveys with JWST (FLIPS-JWST): Revealing How Dust Attenuation Evolves (**PI: K. V. Nedkova, awarded 1.5 nights on Keck/LRIS**; $18,650 USD)

JWST Cycle 3 : POPPIES: The Public Observation Pure Parallel Infrared Emission-Line Survey (**PIs**: J. Kartaltepe & M. Rafelski, including **Co-I K. V. Nedkova, major contribution**)

HST Cycle 32 : DISCS: Direct Imaging Survey of Circumgalactic Structure (**PI**: A. Beckett, including **Co-I K. V. Nedkova**)

HST Cycle 31 : Unlocking the rich potential of JWST slitless spectroscopy with the help of HST: an optical follow-up campaign (**PI**: V. Mehta, including **Co-I K. V. Nedkova, major contribution**)

ESO VLT/FORS2 Period 114 : Lifting the Veil: Uncovering the Evolution of Dust Attenuation by Combining VLT/FORS2 and JWST/NIRISS (**PI**: A. Battisti, **dPI**: M. Hayes, including **Co-I K. V. Nedkova, major contribution)**

Ground-Based Observing Experience

W. M. Keck Observatory Total: 3.5 nights
- LRIS: Low Resolution Imaging Spectrometer 2.5 nights + 1 *scheduled*
- KCWI/KCRM: Keck Cosmic Web Imager and Cosmic Reionization Mapper 1 night

Technical Skills

Languages : Python, IDL

Astronomy Tools : GALAPAGOS and GalfitM – Multi-wavelength galaxy light profile fitting software
GRIZLI – a Grism redshift and line analysis software for space-based slitless spectroscopy
Source Extractor – a software that identifies objects from an astronomical image and builds catalogs
FAST – a code that fits stellar population synthesis templates
EAZY – a photometric redshift code
Dense Basis – a spectral energy distribution fitting code with nonparametric star formation histories

Teaching Experience at Tufts University

Instructor (2020) : Astronomy 16: Special Topics - Astrophysics Lab, a computational course to explore and solve astrophysical problems

Teaching Asst. (2015-2022) : Classical Mechanics Lab, E&M Lab, Lead for 'Teaching for TAs', Electricity and Magnetism Recitations, Introduction to Astronomy, Galactic and Extragalactic Astrophysics

Talks and Seminars

2026
- Lunch Seminar, Carnegie Observatories, CA, *scheduled for March*, **invited**

2025
- STScI HotSci Series, Baltimore, MD, Youtube link
- Towards the Habitable Worlds Observatory: Visionary Science & Transformational Technology, Washington, DC
- Cosmic Cartography with Roman: Advances in Galaxy Structures, Distributions, Dark Matter, and Dark Energy, Baltimore, MD
- AAS Winter Conference in National Harbor, MD

2024
- Astrophysics seminar, University of Missouri, **invited**
- Astrophysics seminar, Center for Particle Cosmology at the University of Pennsylvania, **invited**
- STScI HotSci Series, Baltimore, MD
- Science with Hubble and James Webb Space Telescopes VII: Stars, Gas & Dust in the Universe, Portugal
- Space Telescope Science Institute Spring Symposium: "Recipes to Regulate Star Formation at All Scales: From the Nearby Universe to the First Galaxies", STScI (poster)
- AAS Winter Conference in New Orleans, LA

2023
- First Year of JWST Science Conference, STScI, Baltimore, MD
- EAS Annual Meeting in Krakow, Poland
- AAS Winter Conference in Seattle, WA

2022
- Wine and Cheese Seminar Series at Johns Hopkins University
- Earth & Space Reports YouTube Series
- "What Physicists Do." Public Lecture Series at Sonoma State University
- Galaxy Cluster Group Meeting, CfA

2021
- Boston University Graduate Student Seminar
- Astronomy seminar, Tufts University

2019
- Thirty Minute Talk Series, ESO, Santiago, Chile
- The Life and Death of Star-Forming Galaxies, ICRAR

2018
- Thirty Minute Talk Series, ESO, Santiago, Chile

Outreach and Service

2023-present	Referee for Scientific Journals: - *Astrophysical Journal (ApJ)* - *Astrophysical Journal Letters (ApJL)* - *Monthly Notices of the Royal Astronomical Society (MNRAS)* - *Astronomy and Astrophysics (A&A)*
2024 – 2025	Organizer for Johns Hopkins University/Space Telescope Science Institute Galaxy & AGN Journal Club
2024	Served on the Postdoctoral Hiring Committee for the Circumgalactic Medium and Galaxies group at STScI
	Served on the Local Organizing Committee for the 2024 STScI Spring Symposium
	Served on the Gender Diversity and DEI in Physics Panel at Tufts University
2019 – 2021	Served on the Natural Sciences & Engineering Committee for the Graduate Student Research Competition at Tufts University
2018 – 2023	Gave talks at Somerville, Lynn, and Winchester, MA high schools on pursuing STEM degrees
2018	Helped High School students in Somerville, MA choose and develop science fair projects

Awards, Honors, and Fellowships

2021 – 2022	John F. Burlingame Graduate Fellowship in Physics, Tufts University (1/2 year of funding)
Summer 2021	Graduate Research Excellence At Tufts (GREAT) Fellowship, Tufts University
2020 – 2021	Katherine A. McCarthy Graduate Fellowship in Physics, Tufts University (1 year of funding)
2018	Graduate Student Research Competition Award, Tufts University
2016	Special Breakthrough Prize in Fundamental Physics, for contributing to the first detection of gravitational waves