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EMPLOYMENT

ASSOCIATE PROGRAM OFFICER, Space Studies Board, NASEM | October 2024 - present

Assistant Research Scientist, Johns Hopkins University | August 2023-October 2024

NASA Postdoctoral Program Fellow, NASA Goddard Space Flight Center | August 2020-July 2023

POSTDOCTORAL FELLOW, University of Arkansas | September 2018-August 2020

EDUCATION

PHD IN ASTRONOMY, University of Washington | 2018

BS IN ASTROPHYSICS, PHYSICS (SUMMA CUM LAUDE), Michigan State University | 2012

SELECT PUBLICATIONS

- Garofali, K., Basu-Zych, A., et al., 2024, ApJ, 960, 13: "Modeling the High-Energy Ionizing Output from Simple Stellar and X-ray Binary Populations"
- Lehmer, B.D., **Garofali, K.,** et al., 2023, Frontiers in Astronomy and Space Sciences, "The High Energy X-ray Probe: Resolved X-ray Populations in Extragalactic Environments"
- West, L.A., **Garofali, K.**, Lehmer, B.D., et al., 2023, ApJ, 952, 22: "The Large Deficit of HMXB Emission from Luminous Infrared Galaxies: the Case of the Circumnuclear Starburst Ring in NGC 7552"
- Binder, B.A., Anderson, A.K., **Garofali, K.**, Lazzarini, M., and Williams, B.F., 2023, MNRAS accepted: "The Spatial Correlation of High Mass X-ray Binaries and Young Star Clusters in Nearby Star-Forming Galaxies"
- Garofali, K., Lehmer, B.D., Basu-Zych, A., et al., 2020, ApJ, 903, 79: "On the X-ray Spectral Energy Distributions of Star-Forming Galaxies: the 0.3–30 keV Spectrum of the Low-Metallicity Starburst Galaxy VV 114"
- Garofali, K., Levesque, E.M., Massey, P, & Williams, B.F., 2019, ApJ, 880, 8: "The First Candidate Colliding-Wind Binary in M33"
- Garofali, K., Williams, B.F., Hillis, T., et al., 2018, MNRAS, 479, 3526: "Formation Timescales for High-Mass X-ray Binaries in M33"
- Garofali, K., Williams, B.F., Plucinsky, P.P., et al., 2017, MNRAS, 472, 308: "Supernova Remnants in M33: X-ray Properties as Observed by XMM-Newton"
- Garofali, K., Converse, J.M., Chandar, R., & Rangelov, B., 2012, ApJ 755, 49G: "On the Dynamical Formation of Very Young, X-Ray Emitting Black Hole Binaries in Dense Star Clusters"

INVITED & CONTRIBUTED TALKS

STScI Spring Symposium | Baltimore, MD, Contributed Talk, Spring 2024

21st HEAD Meeting | Horseshoe Bay, TX, Contributed Talk, Spring 2024

AXIS Seminar Series | Invited Talk, Fall 2023

X-ray Universe 2023 | Athens, Gr, Contributed Talk, Summer 2023

20th HEAD Meeting HEX-P Probe Special Session | Waikoloa, HI, Spring 2023

Rutgers University Astrophysics Seminar | New Brunswick, NJ, Spring 2022

Howard University Colloquium | Washington, DC, Fall 2020

20 Years of Chandra Symposium, Contributed Talk | Boston, MA, Winter 2019

NASA Goddard Space Flight Center Lunch Talk | Greenbelt, MD, Summer 2019

IAU Symposium 346: HMXBs, Contributed Talk | Vienna, Austria, Summer 2018

UC Santa Cruz FLASH Seminar | Santa Cruz, CA, Fall 2017

Northwestern CIERA Theory Group | Evanston, IL, Fall 2017

Harvard-Smithsonian CfA HEAD Seminar | Cambridge, MA, Fall 2017

McGill Space Institute Astrophysics Seminar, Invited Talk | Montreal, QC, Fall 2017

The Impact of Binaries on Stellar Evolution, Contributed Talk | ESO Garching, Summer 2017

SELECT PROPOSALS

PI: XMM-Newton Cycle 23 GO Proposal | 2023

"Probing Extreme Emission Line Galaxies Powered by Ultra-luminous X-ray Sources"

PI: NuSTAR Cycle 9 GO Proposal | 2023

"Supercritical Accretion or Intermediate Mass Black Hole? Using NuSTAR to Characterize the Hyper-Luminous Accretion State"

Co-I: SELECTED NASA ADAP | 2021

"The Nature of High Ionization Emission Line Galaxies Near and Far: A Reckoning of All the Energetic Processes from Stellar Populations to Shocks"

Co-I: SELECTED NASA ADAP | 2020

"A Framework Characterizing the Metallicity and Age Dependent Formation of X-ray Binaries in Galaxies Near and Far"

PI: Chandra Cycle 19 AR Proposal | 2017

"Using High-Mass X-ray Binaries to Probe Massive Binary Evolution"

Co-I: Hubble Space Telescope Cycle 23 AR Proposal | 2015

"Finding and Aging the Population of High-Mass X-ray Binaries in M33"

SERVICE & OUTREACH

Co-Lead, NASA-PEER Constellation Mentorship Program | 2023-2024

SCIENCE WORKING GROUP MEMBER FOR AXIS & HEX-P PROBE CONCEPTS | 2022-2024

NASA TAC PANEL MEMBER | 2019-2024

NRAO SCIENCE REVIEW PANEL MEMBER | 2021-2022

FOUNDER & CO-ORGANIZER, ASTRONOMY ON TAP SEATTLE | 2015-2018

PLANETARIUM COORDINATOR, University of Washington Planetarium | 2015-2017

AWARDS & FELLOWSHIPS

DATA SCIENCE FOR SOCIAL GOOD FELLOW, University of Washington eScience Institute | 2015

Nancy and Doug Norberg ARCS Fellow, Seattle ARCS Foundation | 2012-2015

THOMAS H. OSGOOD UNDERGRADUATE PHYSICS AWARD, Michigan State University | 2012

TEACHING EXPERIENCE

LECTURER upper-level undergraduate and graduate astrophysics, University of Arkansas | Fall 2019

INSTRUCTOR Astronomy 101, University of Washington | Summer 2017

INSTRUCTOR Robinson Center for Young Scholars, University of Washington | 2015-2016

INSTRUCTOR Pre-Major in Astronomy Program (Pre-MAP) Research Seminar, University of Washington | Fall 2015

Instructor University of Washington Math and Science Upward Bound | Summer 2016

PROFESSIONAL REFERENCES

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Prof. Benjamin F. Williams Department of Astronomy University of Washington Box 351580, U.W. Seattle, WA 98195-1580 benw1@uw.edu +1 (206) 543 9849