

Kristen Garofali

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EMPLOYMENT

NASA POSTDOCTORAL PROGRAM FELLOW, NASA Goddard Space Flight Center | August 2020-present
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

RESEARCH INTERESTS

Effect of stellar population age and metallicity on evolution of extragalactic X-ray binary populations.
Effect of metallicity on X-ray spectral energy distributions of star-forming galaxies.

RESEARCH GRANTS AND PROPOSALS

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"

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

RESEARCH EXPERIENCE

GRADUATE RESEARCH ASSISTANT, University of Washington Dept. of Astronomy | 2013-2018
UNDERGRADUATE RESEARCH ASSISTANT, University of Toledo Dept. of Physics & Astronomy | 2011-2012
UNDERGRADUATE RESEARCH ASSISTANT, Michigan State University Dept. of Physics & Astronomy | 2010-2012

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

TEACHING ASSISTANT Astronomy 101, 150, University of Washington

OUTREACH EXPERIENCE

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

PLANETARIUM COORDINATOR, University of Washington Planetarium | 2015-2017

TALKS & PRESENTATIONS

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

MARAC, Contributed Talk | Atchison, KS, Spring 2019

AAS 233, Contributed Talk | Seattle, WA, Winter 2019

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

AAS 232 Dissertation Talk | National Harbor, MD, Winter 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

PUBLICATIONS

- **Garofali, K.**, Lehmer, B.D., Basu-Zych, A., et al., "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, submitted
- **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"
- Williams, B.F., Wold, B., Haberl, F., **Garofali, K.** et al., 2015, ApJS, 218, 9: "A Deep XMM-Newton Survey of M33: Point Source Catalog, Source Detection, and Characterization of Overlapping Fields"
- **Garofali, K.**, Coverse, 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"

CONFERENCE PROCEEDINGS

- **Garofali, K.**, Williams, B.F., 2017, IAU Symposium Vol. 329, The Lives and Death Throes of Massive Stars: "The Ages of High-Mass X-ray Binaries in M33"

PROFESSIONAL REFERENCES

Prof. Benjamin F. Williams
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Prof. Bret Lehmer
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