

# 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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University of Washington  
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