Kristen Garofali

kgarofali.github.io
garofali@uark.edu
Github:// kgarofali
Twitter:// @kgarofali

EDUCATION

PhD in Astronomy , University of Washington | 2018
Thesis: *X-ray Insights into Massive Star Evolution: the X-ray Source Population of M33 as seen by XMM-Newton, Chandra, and the Hubble Space Telescope*

BS in Astrophysics, Physics (Summa cum laude) , Michigan State University | 2012

RESEARCH INTERESTS

Massive star and binary evolution through studies of X-ray binary populations in nearby galaxies.
Age and metallicity evolution of X-ray binary populations using resolved and unresolved stellar populations.

RESEARCH POSITIONS

Postdoctoral Fellow, University of Arkansas Dept. of Physics | September 2018-present

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

RESEARCH GRANTS AND PROPOSALS

Co-I: Selected NASA ADAP | to begin 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

TEACHING

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

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

Teaching Assistant Astronomy 101, 150, University of Washington

OUTREACH

Outreach talks to 8th grade visitors to the University of Arkansas | Fall 2018

Founder & Co-Organizer, Astronomy on Tap Seattle | 2015-2018

Planetarium Coordinator, University of Washington Planetarium | 2015-2017

TECHNICAL SKILLS

Programming: Python • IDL • C
Analysis: IRAF/PyRAF • XSPEC • CIAO • SAS • DS9

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.**, 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
Department of Astronomy
University of Washington
Box 351580, U.W.
Seattle, WA 98195-1580
ben@astro.washington.edu
+1 (206) 543 9849

Prof. Emily Levesque
Department of Astronomy
University of Washington
Box 351580, U.W.
Seattle, WA 98195-1580
emsque@uw.edu
+1 (720) 432 4054

Prof. Bret Lehmer
Department of Physics
University of Arkansas
825 West Dickson St
Fayetteville, AR 72701
lehmer@uark.edu
+1 (479) 575 5928