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#### **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**

Studying massive star and binary evolution using X-ray binary populations in nearby galaxies. Studying the time evolution of X-ray binary 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

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**

**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**

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

### **TECHNICAL SKILLS**

Programming: Python • IDL • C

Analysis: IRAF/PyRAF • XSPEC • CIAO • SAS • DS9

## **TALKS & PRESENTATIONS**

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, accepted: "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 Department of Physics University of Arkansas 825 West Dickson St Fayetteville, AR 72701 lehmer@uark.edu +1 (479) 575 5928 Prof. Emily Levesque Department of Astronomy University of Washington Box 351580, U.W. Seattle, WA 98195-1580 emsque@uw.edu +1 (720) 432 405