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#### **EDUCATION**

PhD in Astronomy, University of Washington | Expected Summer 2018

Advisor: Professor Benjamin Williams

BS IN ASTROPHYSICS, PHYSICS (SUMMA CUM LAUDE), MICHIGAN STATE UNIVERSITY | MAY 2012

Advisor: Professor Nicholas Sterling

#### RESEARCH EXPERIENCE

RESEARCH ASSISTANT, University of Washington Dept. of Astronomy | Summer 2013-present

- Area of Research: probing massive star and binary evolution via X-ray source populations (supernova remnants and high-mass X-ray binaries)
- Advisor: Professor Benjamin Williams

RESEARCH ASSISTANT, University of Toledo Dept. of Physics & Astronomy | Summer 2011, Summer 2012

- Area of Research: N-body simulations of X-ray binaries in star clusters
- Advisors: Professor Rupali Chandar and Dr. Joseph Converse

RESEARCH ASSISTANT, Michigan State University Dept. of Physics & Astronomy | Fall 2010-Summer 2012

- Area of Research: high-resolution spectroscopy of planetary nebulae
- Advisor: Professor Nicholas Sterling

# **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 | Fall 2015-Fall 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 | Winter 2015-present

PLANETARIUM COORDINATOR, University of Washington Planetarium | Fall 2015-Fall 2017

AMERICAN ASTRONOMICAL SOCIETY ASTRONOMY AMBASSADORS PROGRAM

University of Washington Mobile Planetarium Presenter

### **TECHNICAL SKILLS**

Programming: Python • R • IDL • C

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

### **TALKS & PRESENTATIONS**

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., Williams, B.F., Hillis, T., et al., 2018, MNRAS, submitted: "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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