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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 2012, Summer 2013

- 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-present

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

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., Plucinsky, P.P et al. (2017), MNRAS, accepted 2017 July: "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: "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"