

Meredith Durbin

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Education

- **University of Washington** **Seattle, WA**
Ph.D. Astronomy *2016–2022 (expected)*
- **Pomona College** **Claremont, CA**
B.A. Physics with Astrophysics Concentration *2010–2014*
- **Santa Rosa Junior College** **Santa Rosa, CA**
A.S. Natural Sciences, concurrent with high school *2007–2010*

Research Experience

- **University of Washington** **Seattle, WA**
Graduate Research Assistant *2016–present*
 - Identifying and characterizing emission-line stars in M31, such as Be stars and symbiotics, with HST data to constrain population statistics
 - Quantifying accuracies of measured star formation histories of nearby stellar populations over a range of ages and metallicities using different potential WFIRST filter combinations
- **Space Telescope Science Institute** **Baltimore, MD**
Research and Instrument Analyst *2014–2016*
 - Responsible for several HST/WFC3-IR detector characterization projects, including studying effects of “blob” artifacts on point-source photometry and investigating time evolution and photometric properties of transient “snowball” events
 - Performed completeness testing, photometric redshift characterization, and angular correlation function code development for CANDELS research collaboration
 - Lead web developer for WFC3 “Quicklook” project, WFC3 & Frontier Fields web content manager
- **Carnegie Observatories** **Pasadena, CA**
Research Assistant *2013–2014*
 - Investigated evidence for metallicity effects in RR Lyrae period-luminosity relations in 3.6 and 4.5 μm Spitzer/IRAC bandpasses using ω Centauri photometry
- **Pomona College** **Claremont, CA**
Research Assistant *2012*
 - Operated 1-meter telescope at Table Mountain Observatory to obtain polarimetry data on quiescent blazars and polarized standard stars; analyzed data to characterize polarimeter and determine polarization of blazars

Publications

- **M. J. Durbin**, P. R. McCullough. “The Impact of Blobs on WFC3/IR Stellar Photometry”. HST/WFC3 Instrument Science Report 2015-06. 28 April 2015
- **M. J. Durbin**, M. Bourque, S. Baggett. “IR ‘Snowballs’: Long-Term Characterization”. HST/WFC3 Instrument Science Report 2015-01. 10 March 2015

Teaching Experience

- **University of Washington** **Seattle, WA**
Graduate Teaching Assistant *2016–present*
 - Quiz section teacher for introductory non-major astronomy and planetary science courses
- **Space Telescope Science Institute** **Baltimore, MD**
Research and Instrument Analyst Trainer *2015–2016*
 - Revised existing Matplotlib training module and assisted new hires with Python training exercises
- **Pomona College** **Claremont, CA**
Undergraduate Teaching Assistant *2013–2014*
 - Assisted introductory physics and astronomy students with homework sets and laboratory work

Service & Outreach

- HST Time Allocation Committee Support Staff, 2015 & 2016
- #popscope public astronomy nights volunteer, Baltimore chapter, 2015–2016
- Co-founder, ALPhA (“Awesome Ladies in Physics and Astronomy”), Pomona College, 2013