HANNAH BISH

(732) 718–3220 $\ hvbish@uw.edu$ University of Washington, Department of Astronomy $3910\ 15{\rm th}$ Ave NE B323, Seattle WA 98195-0002

EDUCATION

Ph.D. Astronomy (expected), University of Washington Advisor: Prof. Jessica Werk Ph.D. Thesis: CGM Gas Flows in the Milky Way	Spring 2021
M.S. Astronomy, University of Washington	2016
B.S. Astrophysics, Rutgers University	2014
Advisor: Prof. Eric Gawiser	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Senior Thesis: Ly - α $Emission$ in $High$ - $Redshift$ $Galaxies$	
APPOINTMENTS	
Graduate Research Assistant, University of Washington	2016-present
Research: Kinematics & Structure of Gas Flows in the Galactic Halo Advisor: Prof. Jessica Werk	
Teaching Assistant, University of Washington	2014-2016
Courses Taught: Intro Astronomy (ASTR 101), The Planets (ASTR 150)	
Research Assistant, Rutgers University	2012-2014
Research: Ly- α Emission Strength in Star-Forming Galaxies Advisor: Prof. Eric Gawiser	
REU Student, American Museum of Natural History	2010
Research: High Proper Motion Stars in the SUPERBLINK Survey Advisor: Prof. Sebastien Lepine	
HONORS AND AWARDS	
Graduate Student Prize for Research Excellence, University of Washington	2019
Best Graduate Student Presentation, Wolfe Symposium in Astrophysics	2018
Co-I on successful HST Proposal (HST-GO-15154)	201'
ARCS Graduate Fellowship	2014-2017
Magna cum laude, Rutgers University	2012
Honors thesis in Astrophysics, Rutgers University	2012
Aresty Research Center Grant	2018
Richard J. Plano Summer Research Internship Award	2018
Rutgers University Academic Excellence Award	2012

TEACHING, MENTORING, AND OUTREACH

Mentor, Pre-Major in Astronomy Program (Pre-MAP), University of Washington	$2016 ext{-}present$
Supervised research of four undergraduate students	
Speaker, Everett Astronomical Society, Everett WA	2019
Speaker, Astronomy on Tap, Seattle WA	2019
Volunteer, Meany Middle School Astronomy Outreach, Seattle WA	2019
Organizer, EquiTea, University of Washington	2017-2019
Volunteer, ARCS educational astronomy day for children & parents, Seattle WA	2017
Volunteer, Planetarium presenter for visiting groups, University of Washington	2016
Lecturer, Astronomy course for middle school girls, University of Washington	2016
Teaching Assistant, University of Washington	2014-2016
ASTR 101: Intro Astronomy, four terms	
ASTR 150: The Planets, two terms	

PUBLICATIONS

- 1. **Bish, H.V.**, Werk, J.K., Peek, J.E.G., Putman, M.E., Zheng, Y. "QuaStar: Measuring the Milky Way's Obscured Low-Velocity Circumgalactic Medium" 2020, in prep.
- 2. **Bish, H.V.**, Werk, J.K., Prochaska, J.X.; Rubin, K.H.R.; Zheng, Y.; O'Meara, J.M.; Deason, A.J. "Galactic Gas Flows from Halo to Disk: Tomography and Kinematics at the Milky Way's Disk-Halo Interface" 2019, ApJ, 882, 76
- 3. Werk, J.K., Rubin, K.H.R., **Bish, H.V.**; Prochaska, J.X.; Zheng, Y.; O'Meara, J.M.; Lenz, D.; Hummels, C.; Deason, A.J. "The Nature of Ionized Gas in the Milky Way Galactic Fountain" 2019, ApJ, 887, 89
- 4. Vargas, C.J., **Bish, H.V.**, Acquaviva, V., Gawiser, E.J., Finkelstein, S.L., Ciardullo, R., Ashby, M., Feldmeier, J., Ferguson, H., Gronwall, C., Guaita, L., Hagen, A., Koekemoer, A., Kurczynski, P., Newman, J., & Padilla, N. "To Stack or Not to Stack: Spectral Energy Distribution Properties of Ly-Emitting Galaxies at z=2.1". 2013, ApJ, 783, 26.

PRESENTATIONS

Talks: AAS #236 205.03 - QuaStar: A First Look at the Milky Way's Hidden CGM 2020Wolfe Symposium in Astrophysics - Milky Way Gas Kinematics at the Disk-Halo Interface 2018 MUSYC LAE Meeting - SED Properties of z~2-3 LAEs 2013 Rutgers University - MCMC SED Fitting in CANDELS 2013 Tri-State Astronomy Conference - "Physical Properties of LAEs at z=2.12013 CANDELS Team Meeting - To Stack or Not to Stack: SED Properties of z=2.1 LAEs 2013 MUSYC LAE Meeting - SpeedyMC Results for z=2.1 LAEs with CANDELS SEDs 2012 Posters: AAS #225 143.55 - What Determines the Strength of Lyα Emission in Star-Forming Galaxies? 2015

2014

2013

AAS #223 145.05 - To Stack or Not to Stack: Physical Properties of LAEs at z=2.1

AAS #221 147.32 - Physical Properties of Lyman Alpha Emitters in CANDELS