HANNAH BISH

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University of Washington, Department of Astronomy
3910 15th Ave NE B323, Seattle WA 98195-0002

Education

Ph.D. Astronomy (expected), University of Washington — expected 2022

M.S. Astronomy, University of Washington — 2016

B.S. Astrophysics, Rutgers University — 2014

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

Teaching, Mentoring, and Outreach

Mentor, Pre-Major in Astronomy Program (Pre-MAP), University of Washington — 2016 - 2020
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 for children & parents, Seattle WA — 2017

Volunteer, Planetarium presenter for visiting groups, University of Washington — 2016 - 2017

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

Honors and Awards

Co-I on successful HST Proposal (HST-GO-16679), 71 orbits	2021
Graduate Student Prize for Research Excellence, University of Washington	2019
Graduate Student Presentation Award, Wolfe Symposium in Astrophysics	2018
Co-I on successful HST Proposal (HST-GO-15154), 17 orbits	2017
ARCS Graduate Fellowship	2014 - 2017
Magna cum laude, Rutgers University	2014
Honors thesis in Astrophysics, Rutgers University	2014
Aresty Research Center Grant	2013
Richard J. Plano Summer Research Internship Award	2013
Rutgers University Academic Excellence Award	2013

Publications

1. **Bish, H.V.**, Werk, J.K., Di Teodoro, E.M., Peek, J.E.G., Putman, M.E., Zheng, Y. "*The Sandwich Model: Kinematics of a Warm Extended Disk in the Milky Way's Circumgalactic Medium*" (in prep.)
2. Werk, J.K., Tchernyshyov, K., **Bish, H.V.** "*Discovery of a Sample of Quasars Behind the Galactic Plane*" (in prep.)
3. **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*" 2021, ApJ, 912, 8
4. **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
5. 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
6. 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

Oral:

AAS #236 205.03 - *QuaStar: A First Look at the Milky Way's Hidden CGM*	2020
Wolfe 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 = 2.1*	2013
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
AAS #223 145.05 - *To Stack or Not to Stack: Physical Properties of LAEs at z = 2.1*	2014
AAS #221 147.32 - *Physical Properties of Lyman Alpha Emitters in CANDELS*	2013