Alexa R. Anderson **Last updated: August 2024**

CONTACT INFORMATION

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EDUCATION

Institute for Astronomy, University of Hawai'i at Mānoa 2020 – Present
Honolulu, HI, USA
M.S. in Astronomy Fall 2022
Ph.D. in Astronomy expected May 2026

Yale University 2016–2020
New Haven, CT, USA
B.S. in Astrophysics
Thesis: Using Dark Molecular Clouds to Understand Distant Galaxies Advisor: Hector Arce

RESEARCH POSITIONS

Graduate Researcher, Institute for Astronomy August 2020 – Present
Advisor: Jonathan Williams, Eric Gaidos (2021 - 2022)
NSF REU Researcher, Haystack Observatory, MIT May 2019 – August 2019
Advisor: Jens Kauffmann
STARS II Fellow, Undergraduate Researcher, Yale University Oct 2018 - May 2020
Advisors: Marla Geha & Hector Arce
Undergraduate Researcher, Yale University May 2018 – Aug 2018
Advisor: Hector Arce
STARS Summer Fellow, Undergraduate Researcher, Yale University May 2017 – Aug 2017
Advisor: Marla Geha

REFEREED PUBLICATIONS

1. **Anderson, A.R.**, Williams, J.P., Blake, G.A., et al. 2024 (*subm.*). *Gone with the Molecular Wind: Photoevaporation in the Compact Dust Disk around CX Tau*
2. Williams, J.P., Painter, C., **Anderson, A.R.**, et al. 2024 (*subm.*). *Dust Drift Timescales in Protoplanetary Disks at the Cusp of Gravitational Instability*
3. **Anderson, A.R.**, Williams, J.P., van der Marel, N., et al. 2022 (*938, 55, ApJ*). *Protostellar and Protoplanetary Disk Masses in the Serpens Region*

FELLOWSHIPS & AWARDS

George Orton and Mona Marie Elmore ARCS Award in Astronomy
ARCS Foundation, Honolulu Chapter, 2023
Graduate Student Organization International Travel Award University of Hawai'i at Mānoa, 2023
Best Second-Year Project Institute for Astronomy, 2022
Best First-Year Project Institute for Astronomy, 2021
Director's Research Excellence Award Institute for Astronomy, 2020
George Beckwith Prize for Outstanding Graduating Senior in Astronomy Yale University, 2020
Research Experience for Undergraduates (REU) Fellowship at MIT NSF, 2019
Science, Technology, and Research Scholars II Fellow Yale University, 2018 – 2020
Science, Technology, and Research Scholar Summer Fellow Yale University, 2017

PRESENTATIONS (*INVITED)

Protostars and Planets VII April 2023
Joint ALMA Observatory Jets and Discs e-Study Meeting* January 2023
235th Meeting of the American Astronomical Society January 2020
Science, Technology, and Research Scholars at Yale II Program Symposium November 2019
Columbia Undergraduate Science Journal Symposium April 2019
Science, Technology, and Research Scholars at Yale II Program Symposium April 2019
Science, Technology, and Research Scholars at Yale Program Summer Symposium July 2017

TELESCOPE PROPOSALS (*PI)

ESO Very Large Telescope – CRIRES+ ESO P113
Unraveling the molecular gas in the terrestrial planet forming zone of protoplanetary disks using CRIRES+
Time awarded: 35 hours (Rank B; Co-I)
PI: Karina Mauco. Co-Is: Carlo Manara, Sierra Grant, Andrea Banzatti, Miguel Vioque, Charles

Law, Jonathan Williams, Giovanni Rosotti

***Keck Observatory** – NIRSPEC+AO — UH 2023A, UH2023B, UH2024A
Resolving protoplanetary disk kinematics to interpret JWST spectra
Time awarded: 15 half-nights over three semesters **(PI)**
Co-Is: Jonathan P. Williams, Adwin Boogert, Clara Ross (UH 2023A-UH2023B)

***NASA Infrared Telescope Facility** – iSHELL — UH2023B
COnnecting the inner and outer regions of protoplanetary disks
Time awarded: 4 half-nights **(PI)**
Co-Is: Jonathan P. Williams, Adwin Boogert

NASA Infrared Telescope Facility – iSHELL — UH2023B
Disk winds from embedded protostars
Time awarded: 3 half-nights (Co-I)
PI: Jonathan P. Williams; Co-I: Adwin Boogert

Keck Observatory – NIRSPEC+AO — UH 2023B
Disk winds from embedded protostars
Time awarded: 4 half-nights (Co-I)
PI: Jonathan P. Williams; Co-I: Adwin Boogert

NASA Infrared Telescope Facility – iSHELL — UH 2023A
COnnecting the inner and outer regions of protoplanetary disks
Time awarded: 4 half-nights (Co-I)
PI: Jonathan P. Williams; Co-I: Adwin Boogert

Keck Observatory – NIRSPEC+AO — UH 2023A
COnnecting the inner and outer regions of protoplanetary disks
Time awarded: 5 half-nights (Co-I)
PI: Jonathan P. Williams

NASA Infrared Telescope Facility – SpeX — UH 2022B
Running Out of Gas Near the End of Planet Formation
Time awarded: 6 hours (Co-I)
PI: Eric Gaidos; Co-I: Rena A. Lee

Keck Observatory – NIRSPEC+AO — UH 2022B
Resolving protoplanetary disk kinematics to interpret JWST spectra
Time awarded: 6 half-nights (Co-I)
PI: Jonathan P. Williams; Co-I: Adwin Boogert

Observing Experience

Keck 2 (10 m) NIRSPEC+AO: 50+ 1/2 nights	2022 - Present
IRTF (3 m) iSHELL: 10 1/2 nights	2022 - Present
IRTF (3 m) SpeX: 1/2 night	2020
IRAM Telescope (30 m): 3 nights	2020

Major Collaborations

The ALMA Disk-Exoplanet C/Onnection (DECO) + iDECO — 2022 - Present
PI: Ilse Cleeves; co-PIs: Yuri Aikawa, Viviana V. Guzmán, Anna Miotello, Dana Anderson
ALMA Cycle 8 Large Program and JWST Cycle 2 Program to survey the chemistry of 80 disks across 4 star-forming regions. JWST-MIRI and Keck-NIRSPAO reduction lead.

The JWST Disk Infrared Spectral Chemistry Survey (JDISCS) — 2024 - Present
PIs: Andrea Banzatti, Ilse Cleeves, Feng Long, Klaus Pontoppidan, Colette Salyk, Ke Zhang
Several combined JWST programs contributing and using MIRI data of protoplanetary disks reduced in a uniform, consistent process.

Department Service

Associate Director for Education and Research Search Committee	2023 - Present
UH Time Allocation Committee Member	2024
Graduate Representative	2023 - 2024
Equi-Tea (Queer Grad Support Group) Member	2023
Office Space Representative	2022 - 2023
Faculty Mentor Working Group	2022
IfA Graduate Admissions Representative	2021 - 2022

Outreach

Maunakea Scholars Program	2022 - Present
‘Ohana Kilo Hoku Stargazing Night	2024
Institute for Astronomy Open House (and Invited Talk*)	2022*, 2023*, 2024
Leeward Community College Discovery Day	2023
Campbell-Kapolei Stargazing Event	2023
Pearl Harbor Elementary School Science Night	2023
Maunakea Observatories AstroDay	2021, 2022, 2023

	Hawaii Geek Meet	2022

Mentorship (*Invited)	IfA Research Experience for Undergraduates (REU) Co-Director	2023, 2024
	IfA Mentoring in Lower Years Mentor	2022 - 2024
	IfA REU Coffee Chat Mentor	2021 - 2022
	STARS Summer: Applying to Graduate School Panelist*	2020
	Yale Engineering and Science Weekend Panelist*	2020
	STARS II Senior Mentor	2019 - 2020