Alexa R. Anderson Last updated: August 2024 Contact Institute for Astronomy ⊠ E-mail:alexaand@hawaii.edu Information University of Hawai'i at Mānoa 2680 Woodlawn Drive, Honolulu, Hawai'i, 96822, USA Office B-101 **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 1. Anderson, A.R., Williams, J.P., van der Marel, N., et al. 2022 (938, 55, ApJ). Protostellar **PUBLICATIONS** and Protoplanetary Disk Masses in the Serpens Region 2. Williams, J.P., Painter, C., Anderson, A.R., Ribas, A., 2024 (subm., ApJ). Dust Drift Timescales in Protoplanetary Disks at the Cusp of Gravitational Instability Fellowships George Orton and Mona Marie Elmore ARCS Award in Astronomy & Awards 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 Protostars and Planets VII

April 2023 January 2023

(*INVITED) Joint ALMA Observatory Jets and Discs e-Study Meeting* 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

ESO Very Large Telescope - CRIRES+

ESO P113

Unraveling the molecular gas in the terrestrial planet forming zone of protoplanetary disks using (*PI) 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 Keck 2 (10 m) NIRSPEC+AO: 50+ 1/2 nights 2022 - Present EXPERIENCE 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 Col-The ALMA Disk-Exoplanet C/Onnection (DECO) + iDECO 2022 - Present PI: Ilse Cleeves; co-PIs: Yuri Aikawa, Viviana V. Guzmán, Anna Miotello, Dana Anderson LABORATIONS 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 Associate Director for Education and Research Search Committee 2023 - Present SERVICE 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 If A 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 2023 Campbell-Kapolei Stargazing Event Pearl Harbor Elementary School Science Night 2023 Maunakea Observatories AstroDay 2021, 2022, 2023 Hawaii Geek Meet 2022

MENTORSHIP	If A Research Experience for Undergraduates (REU) Co-Director	2023, 2024
(*Invited)	If A Mentoring in Lower Years Mentor	2022 - 2024
	If AREU 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