

# J. Sebastian Monzon

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New Haven, CT

## EDUCATION

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- Yale University** September 2021 - Expected [2026]  
PhD Astronomy  
Advisor: Frank van den Bosch
- University of California, Santa Cruz** September 2015 - June 2019  
B.S. Physics (Astrophysics)  
Advisor: J. Xavier Prochaska

## RESEARCH

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- PhD Thesis** July 2022 - present  
Advisor: Frank van den Bosch  
*The Impact of halo-to-halo variance on constraints of the Stellar to Halo Mass Relation*
- 1st Year Graduate Project** August 2021 - July 2022  
Advisor: Prof. Marla Geha  
*Measuring Metallicities in Milky Way Satellites using Keck/DEIMOS*
- Research Intern, NASA Ames** February 2020 - May 2021  
PIs: Dr. Naseem Rangwala, Dr. Sarah Nickerson  
*Astrochemical Observations of Hot Molecular Cores with SOFIA*
- Gemini/HST Cluster Project Intern, Gemini N. Observatory** May 2020 - September 2020  
PIs: Dr. Inger Jorgensen, Dr. Kristin Chiboucas  
*HST Cluster Project*
- USRA Research Assistant, NASA Ames** June 2019 - February 2020  
PI: Dr. Randolph Klein  
*Modeling the SEDs of Early Massive Clumps*
- Undergraduate Researcher / Lamat REU, UC Santa Cruz** June 2017 - June 2019  
Advisor: Prof. J. Xavier Prochaska  
*The Effective Opacity of the Intergalactic Medium from Galaxy Spectra Analysis*

## PUBLICATIONS

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- Monzon J., Prochaska J.X., Lee K.G., Chisholm J.** doi:10.3847/1538-3881/ab94c2  
*"Effective Opacity of the Intergalactic Medium from Galaxy Spectra Analysis"*
- Monzon J. et al.** in prep.  
*"High Resolution Emission Line Spectra with SOFIA/EXES Toward Orion IRc2"*
- Nickerson S., et al.** doi:10.48550/arXiv.2211.15707  
*"The mid-infrared molecular inventory towards Orion IRc2"*

## PRESENTATIONS

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- Galactic Frontiers: Dwarf Galaxies in the Local Volume and Beyond** Summer 2023  
*Presented work on halo-to-halo variance at the Center for Computational Astrophysics. (New York, New York)*
- 241st AAS Conference** Winter 2023  
*Presented a poster on halo-to-halo variance and dark matter substructure. (Seattle, Washington)*
- SACNAS STEM Diversity Conference** Fall 2022  
*Presented work on metallicity measurements of globular clusters and satellite galaxies. (San Juan, Puerto Rico)*
- 235th AAS Conference** Winter 2020  
*Presented a poster on Lyman Break Galaxies and the effective opacity of the IGM. Helped create presentation slides for talk on preliminary results of proto-stellar SEDs. (Honolulu, Hawaii)*
- Revealing Cosmology and Reionization History with the IGM** Summer 2018  
*Gave a short talk followed by a poster presentation on IGM research at the Kavli Institute. (Tokyo, Japan)*

## LEADERSHIP AND TEACHING

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- Graduate Student Assembly** Fall 2023 - present  
*Advising and reporting on issues concerning graduate student wages, health and well being. Participating in assembly as the elected Astronomy department delegate.*
- Yale Astronomy Climate and Diversity Committee** Fall 2022 - present  
*Overseeing organizational tasks to keep the committee active and efficient. Developing undergraduate workshops to maximise effectual access to research. Advising faculty about equitable practices concerning qualifying exams.*
- Yale Astronomy Student Council** Fall 2022 - present  
*Acting as channel of communication between the faculty and the graduate student body.*
- Yale AstroSibs** Fall 2021 - present  
*Mentoring Yale astronomy undergrads on handling demanding classes, best practices for research projects and submitting graduate applications*
- Yale Teaching Fellow** Fall 2021 - present  
*Teaching assistant for ASTR 110, 160, 170, 180. Lead office hours and discussion sections to help students with introductory series of astronomy.*

## AWARDS AND RECOGNITION

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- Gruber Science Fellow 2021, 2022  
Senior Thesis Honors 2019  
Lamat REU Fellowship 2017, 2018  
UCSC Dean's Honors 2015, 2017, 2019