KIMBERLY PARAGAS

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California Institute of Technology, M/C 150-21, Pasadena, CA 91125, USA

RESEARCH INTERESTS

- The formation and evolution of close-in exoplanets.
- Characterizing the atmospheres and surfaces of hot, rocky exoplanets with *JWST*.
- Impact of stellar activity on radial velocity measurements.

EDUCATION

California Institute of Technology, Pasadena, CA *2021 - Present*
Doctor of Philosophy in Planetary Science. Advisor: H. Knutson

Wesleyan University, Middletown, CT *2018 - 2021*
Bachelor of Arts in Astronomy & Physics
Thesis: *The Atmospheric Escape of Gas Giant Exoplanets (High Honors). Advisor: S. Redfield*

RESEARCH APPOINTMENTS

Graduate Researcher, Caltech *2021 - Present*

Undergraduate Researcher, Wesleyan University *2020-2021*

Summer Undergraduate Research Fellow (SURF), Caltech *2020*

PUBLICATIONS

1. **K. Paragas**, H. A. Knutson, R. Hu, et al. "A Framework for Simultaneously Retrieving Atmosphere and Surface Properties of Hot, Rocky Exoplanets" (in preparation)
2. S.Vissapragada et al. (including **K. Paragas**) 2022, "The Upper Edge of the Neptune Desert Is Stable Against Photoevaporation," *AJ*, in press
3. **K. Paragas**, S. Vissapragada, H. A. Knutson, et al. 2021, "Metastable Helium Reveals an Extended Atmosphere for the Gas Giant HAT-P-18b," *ApJL*, 909, L10

PRESENTATIONS

Posters:

K. Paragas, H. A. Knutson, R. Hu, et al., *"A Framework for Simultaneously Retrieving Atmosphere and Surface Properties of Hot, Rocky Exoplanets"* ExoClimes, Exeter, UK 2023

K. Paragas, H. A. Knutson, R. Hu, et al., *"A Framework for Simultaneously Retrieving Atmosphere and Surface Properties of Hot, Rocky Exoplanets"* STScI Spring Symposium: Planetary Systems and the Origins of Life in the Era of *JWST*, Baltimore, MD 2023

K. Paragas, S. Vissapragada, H. A. Knutson, et al., *"Metastable Helium Reveals an Extended Atmosphere for the Gas Giant HAT-P-18b"* 237th Meeting of the American Astronomical Society (AAS), Virtually Anywhere 2021

K. Paragas, S. Vissapragada, H. A. Knutson, et al., *"Detection of Metastable Helium Reveals Ongoing Mass Loss for the Hot Jupiter HAT-P-18b"* Keck Northeast Astronomy Consortium (KNAC), Fall Symposium, Williamstown, MA 2020

K. Paragas, S. Vissapragada, H. A. Knutson, et al., *"Detection of Metastable Helium Reveals Ongoing Mass Loss for the Hot Jupiter HAT-P-18b"* Caltech SURF Seminar Day, Pasadena, CA 2020

AWARDS AND HONORS

STScI Spring Symposium Workshop for ECRs *2023*
Selected Participant

National Science Foundation Graduate Research Fellowship Program (NSFGRFP) *2023*
Honorable Mention

NASA Connecticut Space Grant Consortium *2020 - 2021*
Undergraduate Research Grant

FUTURE of Physics, California Institute of Technology *2020*
Nominated Participant

TEACHING EXPERIENCE

Caltech Planetary Sciences, Pasadena, CA *Spring 2023*
Teaching Assistant (Introduction to Earth and Planetary Sciences: Planetary Sciences)

Wesleyan Physics Department, Middletown, CT *Spring 2021*
Teaching Assistant (General Physics Laboratory II)

Wesleyan Astronomy Department, Middletown, CT *Spring 2021*
Teaching Assistant (The Planets)

Wesleyan Physics Department, Middletown, CT *Spring 2020*
Course Assistant (General Physics II - Electricity & Magnetism)

Wesleyan Math Department, Middletown, CT *Fall 2019*
Course Assistant (Elements of Calculus)

OUTREACH

Rise Program for Middle and High School Students *2022 - 2023*
Math tutor

Letters to a Pre-Scientist *2022 - 2023*
STEM pen pal

Wesleyan Astronomy & Space Club *2020 - 2021*
Vice President

YouthHack Connecticut *2020 - 2021*
Project Lead

Wesleyan Astronomy Outreach *2018 - 2021*
Kids' Night Volunteer, Space Night Volunteer

WORK EXPERIENCE

Wesleyan Admissions Office, Middletown, CT *2020 - 2021*
Tour Guide

Wesleyan Physics Department, Middletown, CT *2019 - 2020*
Demonstrations Assistant

Wesleyan Astronomy Department, Middletown, CT *2019 - 2020*
24" Perkin Telescope Operator