

Isabelle Jasmine Jones

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EDUCATION

September 2024 - Present **University of California, Santa Cruz** | Santa Cruz, CA
Ph.D. in Astronomy and Astrophysics

July 2020 - May 2024 **University of Florida** | Gainesville, FL
B.S. in Astrophysics, Cum Laude
Elected to Phi Beta Kappa

RESEARCH EXPERIENCE

September 2024 - Present **Graduate Student** | UCSC Astronomy and Astrophysics Department, Santa Cruz, CA |
Advisors: Dr. Ruth Murray-Clay & Dr. Stephanie Salum
Creating hydrodynamical simulations of protoplanetary disks using FARGO3D to replicate perturbations detected in observations.

May 2024 - Present **NSBP-Simons Scholar** | Center for Computational Astrophysics, New York, NY |
Advisors: Dr. Jared Goldberg & Dr. Aleksandra Kuznetsova
Utilizing MESA to model one dimensional low mass star formation with variable accretion rates and later applying these results to a radiative disk transfer model to understand how variable accretion rates impact both star and planet formation.

October 2023 - May 2024 **Undergraduate Researcher** | UF Astronomy Department, Gainesville, FL |
Advisor: Dr. Jaehan Bae
Combined new and archival ALMA images of Elias 2-27, GW Orion, and SU Aurigae using CASA on the University of Florida's supercomputer for later analysis of the kinematics of streamers, filaments that feed material from the surrounding environment onto protoplanetary disks.

June 2023 - August 2023 **Summer Intern** | Pisgah Astronomical Research Institute, Rosman, NC |
Advisor: Lamar Owen
Developed a unit conversion equation from decibels relative to full scale, a radio engineering unit of power, to Watts using measurements of Cassiopeia A at 2.2 GHz.

SKILLS

Programming Python, Fortran, Java, MATLAB

Software Git, CASA, MESA

Instrumentation Reflecting telescopes with and without GPS, CCD

RELEVANT EXPERIENCES

- November 2024 **Poster Presentation:** *Jones, I. J. Variable Accretion in Low Mass Star Formation*
Presented at: National Society of Black Physicists and National Society of Hispanic Physicists Join Conference; 2024 November 14; Houston, TX
- October 2023 **Oral presentation:** *Jones, I. J. My Summer Experience at PARI*
Presented at: University of Florida's P.U.L.S.A.R. Summer Research Presentations; 2023 October 23; Gainesville, FL
- September 2023 - May 2024 **UF Astronomy Department** | *Undergraduate Teaching Assistant*
Operate telescopes, educate the general public about astronomy, and assist with observing labs at the on-campus observatory. Grade assignments for professors of various courses when needed.
- August 2023 - May 2024 **Women in Astrophysics & Astronomy Mentorship Program** | *Mentor*
Mentor to a 3rd year undergraduate astrophysics student at UF. Give advice and guidance on finding research interests and opportunities, and future graduate school applications.
- January 2023 - May 2023 **UF Astronomy Department** | *Undergraduate Volunteer*
Operated telescopes at the on-campus observatory for outreach events for middle schoolers and public observing nights. Led space education activities for elementary school aged children.

LEADERSHIP EXPERIENCES

- January 2024 - May 2024 **The Society of Women in Physics** | *Secretary*
Organize the club proceedings by taking notes during officer meetings, scheduling events, and reserving spaces for all club events and meetings.
- January 2024 - May 2024 **The Gator Chapter of the National Society of Black Physicists** | *President*
Manage the officer team and organize the structure of the club. Communicate with other student organizations and University of Florida departments to plan collaborative outreach events that educate the public on physics.
- January 2023 - December 2023 **The Gator Chapter of the National Society of Black Physicists** | *Project Director*
Organize social and informational events for members that provide guidance on how to succeed in physics as well as to build a supportive community of Black students in physics and related fields.
- June 2023 - August 2023 **Pisgah Astronomical Research Institute** | *Lead Counselor*
Supervised camper medicine distribution, managed health concerns, and coordinated initial disciplinary action. Created counselor work schedules. Assisted campers with projects and educated the general public about astronomy and Greek mythology.
- January 2021 - May 2022 **Ancient Mythology Association** | *Vice President*
Collaborated with officers to plan general body meetings. Communicated and interacted with club members frequently. Researched ancient mythologies to create club materials.

AWARDS AND MEMBERSHIPS

September 2024	Eugene Cota-Robles Fellowship Merit based fellowship awarded to incoming graduate students who have overcome significant challenges to achieve a college education. Awarded by the University of California Santa Cruz.
January 2024 - Present	American Physical Society Undergraduate member of the national organization
September 2023 - Present	National Society of Black Physicists Student member of the national organization.
August 2023 - Present	Society of Physics Students Student member of the national organization
August 2023	TEAM-UP Together Scholar Awarded by the TEAM-UP Together Scholarship Program, a program dedicated to financially supporting African American undergraduates in physics and astronomy.
2020 - 2024	Florida Academic Scholar A merit-based scholarship awarded by the Florida Bright Futures Scholarship Program.
2020 - 2024	Dean's List Awarded by the Dean of the College of Liberal Arts and Science for Fall 2020, Spring 2021, Fall 2021, Fall 2022, and Fall 2023. Awarded to students who earn at least a 3.75/4.0 GPA with 12 or more credit hours a semester.
June 2020	International Baccalaureate Diploma Awarded by the International Baccalaureate Organization for successful completion of the International Baccalaureate Diploma Program