Caldon T. Whyte

EDUCATION

Florida Institute of Technology

Ph.D. - Space Sciences; GPA: 3.77

Melbourne, FL, US

August 2023 - Present

Phone: (706) 540-7552

Florida Institute of Technology

B.S. - Astrobiology; GPA: 3.81; Summa Cum Laude

Melbourne, FL, US August 2021 - May 2023

Lincoln Memorial University

B.S. - Pre-Med Biology; GPA: 3.65; Magna Cum Laude

Harrogate, TN, US August 2017 - May 2021

SOFTWARE EXPERIENCE

• Python

• LaTeX

• SAOImageDS9

Email: cwhyte2021@my.fit.edu

• Fortran

MATLAB

• ADSQL

AstroimageJ

Publications

Potential for Life to Exist and be Detected on Earth-like Planets Orbiting White Dwarfs Corresponding Author, Published December 12, 2024 in The Astrophysical Journal Letters

Presentations

Florida Tech GSS Seminar

Melbourne, FL, US

Presentation: White Dwarf Exoplanet Habitability

October 2024

Exoplanets 5 Conference

Poster: Potential for an Earth-like planet orbiting a white dwarf to host life

Leiden, NL June 2024

UCL MSSL Astrophysics Seminar

Presentation: Potential for an Earth-like planet orbiting a white dwarf to host life

Dorking, London, UK

June 2024

Research

Habitability and detection of white dwarf exoplanets

Advisor: Dr. Luis Henry Quiroga-Nuñez

August 2023 - Present

o Overview: Modelling the habitable zone of a temperate planet around a white dwarf, and predicting the presence of conditions that could accommodate abiogenesis or photosynthesis. Also evaluating observation targets and the time required to detect signs of life using JWST.

Energetic approach to habitability of Europa

May 2022 - May 2023

Advisor: Dr. Manasvi Lingam

o Overview: Using a bioenergetic model (NutMEG) to predict the amount of biomass and presence of biosignatures in the subsurface ocean of Europa. Based on a computational model developed to track the energy consumption of basic lifeforms in subsurface oceans.

EMPLOYMENT

Ortega Observatory

Observatory Assistant

Melbourne, FL, US

August 2024 - Present

o Experience: Oversee daily observatory operations, projects, and outreach events. Currently leading mobile observatory educational outreach partnership with NASA KSCVC.

Florida Institute of Technology

Graduate Teaching Assistant

Melbourne, FL, US

December 2023 - Present

o Experience: Instructor of Physics 1 lab (Spring 2024) and Observational Astronomy (Current). Responsibilities include lesson planning, leading instruction, designing and grading assignments, etc.

Awards and Certificates

- NASA DARES RFI Workshop ECR Travel Award - 2025
- NCAR/CISL Exploratory Allocation 2025
- Graduate Outstanding Student of the Year 2025
- Teaching Assistant Certification 2023
- Graduated Summa Cum Laude 2023
- Dean's List 2018-2023
- Employee of the Semester 2022

- Graduated Magna Cum Laude 2021
- D2 Athletics Director's Associative Academic Achievement Award - 2021
- Chi Alpha Sigma Honor Roll 2020-2021
- SAC Commissioners Honor Roll 2018-2021
- AD All-Academic Team 2018-2021
- Trustee's Scholarship 2017-2021