Dana Clarice Yaptangco

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Education

Imperial College London,

2024-2028

2020-2024

Doctor of Philosophy in Astrophysics

University of Florida, Bachelor of Science in Astrophysics, Minor in Science Education

Summa Cum Laude

Research Experience

Graduate Researcher, *Imperial College London (Advisor - Dr. Yvonne Unruh)*

Oct 2024 present

"Disentangling Stellar and Planetary Signals in Exoplanet Transits"

Graduate Researcher, Pontificia Universidad Católica de Chile (Advisor - Dr. Gijs Mulders)

Dec 2025

"Characterizing Exoplanet Around Small Stars"

Undergraduate Researcher, University of California, Berkeley (Advisor - Dr. Ann Marie Cody)

Jun 2023 -

"Detectability of Megastructures in TESS Data Archive"

Aug 2023

- Utilized unsupervised machine learning anomaly detection to compute anomaly scores for lightcurves

- Estimated the probability of overlooked technosignatures embedded within NASA's TESS data archive

Undergraduate Researcher, *University of Michigan (Advisor - Dr. Marcelle Soares-Santos)*

Jun 2022 -

"Upgrading Post Processing of the DESGW Pipeline"

Apr 2023

- Automated image processing pipeline for the Dark Energy Survey to match gravitational waves with optical counterparts

- Conducted mock observing runs & debugged pipeline to prepare for next LIGO observing run

Undergraduate Researcher, *University of Florida (Advisor - Dr. Sarah Ballard)*

May 2021 present

"The Effect of Stellar Activity on Transit Detection in M dwarfs"

- Lead a study on detectability of exoplanets around active versus inactive M dwarf stars

- Construct an injection-and-recovery Python pipeline to analyze lightcurves from NASA's TESS Mission

Publications

First Author, Yaptangco D, Ballard S, Dittmann J. Quantifying the Effect of Short-timescale Stellar Activity Upon Transit Detection in M Dwarfs. Submitted Jan 2024. https://arxiv.org/abs/2402.00115

Co-Author, Cody A. et al. A Search for Anomalous Fading Variability in the TESS Prime Mission I. Single Occulters. (In prep).

Conference Abstract,

Yaptangco D, Cody A, Giles D. Signal Injection into TESS Light Curves for Technosignature Detection 🗷

Conference Abstract, Giles D, Cody A, Yaptangco D, Tong Y, Croft S. Anomaly Detection with TESS: A Search for Megastructures and Non-Spherical Occulters □

Awards & Recognitions

Fulbright Research Grant, 2024-25

- Awarded scholarship to undertake a research project in Santiago, Chile (9 months support)

NSF-GRFP Honorable Mention

UF Astronomy Department Honors Thesis Award, 2024

William Oegerle Scholarship in Physics & Astronomy, 2023-24 ☑

- \$5000 for showing exceptional promise in conducting research in physics and/or astronomy

Outstanding Service Award for the UF Astronomy Department, 2023

SETI Forward Scholarship, 2023

- \$1500 research support, aimed at nurturing new SETI research talent, to be awarded at the Drake Awards Gala 2024

GSMI Scholar of Científico Latino x Simons Foundation, 2023

- Selected to join the Graduate Student Mentorship Initiative (GSMI), a national cohort of 100 STEM students from minoritized backgrounds to engage in grad school preparation

UF University Scholars Program, 2022

- \$1750 research support, selected to join cohort of 200 UF students across all disciplines conducting research with faculty one-on-one

Presentations	
Talk, Characterizing Planets Around Small Stars	Mar 2025
- Presented at the Fulbright Commission Enhancement Meeting, Santiago, Chile	
Talk, Detecting Planets Around M Dwarfs	May 2022
- Presented as the 2024 Oegerle Scholar at the University of Florida Honors Thesis Seminar	•
Poster, Detectability of Megastructures in TESS Data Archive	Jan 2022
- Awarded travel grant to present at the American Astronomical Society Winter Meeting, New Orleans, LA	
Talk, Estimating the Probability of Megastructures in TESS - Presented at UC Berkeley SETI REU Symposium, Berkeley, CA	Aug 2023
Posters, Assessing the Detectability of Transiting Planets around Small Stars	Jan 2023 -
- Presented at UF Spring Undergraduate Research Symposium, Gainesville, FL	Apr 2023
 Awarded travel grant to present at Florida Undergraduate Research Conference, Miami, FL Awarded travel grant to present at Conference for Undergraduate Women in Physics, Orlando, FL 	
Talk, Upgrading Post Processing of the DESGW Pipeline	Aug 2022
- Presented at University of Michigan Physics REU Symposium, Ann Arbor, MI	
Talk, Assessing Detectability of Transits Around Active vs. Inactive M dwarfs - Presented at University of Florida Astronomy REU Symposium, Gainesville, FL	Aug 2021
Involvement	
Exohost Summer School	Sep 2024
- Accepted with full funding to attend I-week exoplanets workshops in Tartu, Estonia	
NASA Executive Secretary - Took notes for NASA Review Panel	Apr 2024
- Gained insight into funding application review process	
Activate Student Mentoring Programme (Mentee) - Mentee in mentoring scheme dedicated to supporting under-represented PhD students at Imperial College London	Nov 2024
Unsolved Problems in Astrophysics	May 2024
 Member of the network to revolutionize our understanding of the universe through inclusive workplaces and equitable practices 	Way 2024
Other Service & Outreach	
Women & Non-Binary Students in Physics (Mentor)	Oct 2024 -
- Completed mentor training on helping students identify and reach their goals	Mar 2024
- Coached an undergraduate student considering a PhD in Physics	
Co-Founder & Director, Women's Astronomy & Astrophysics Mentorship (WAAM!) Program □	May 2023 -
 Conceptualized and constructed a mentorship program focused on serving women and underrepresented minorities pursuing astronomy/astrophysics degrees Match compatible graduate/undergraduate mentors & mentees as "big stars" and "little stars" 	May 2022
 - Match compatible graduate/undergraduate mentors & mentees as big stars and intre stars - Organize and coordinate monthly events, including mentor training, team building, internship workshops, women's discussion panels, telescope observing nights 	
Apprentice Teacher, P.K. Yonge Developmental Research School	May 2023
 Wrote lesson plans and taught 8th grade science classes full time for one month Improved teaching based on recorded videos of myself teaching class 	
Tutor , Triunfadores College Prep Program	Aug 2022 -
- Tutored English language learner elementary students in math, reading, and science 2 hours weekly	Dec 2022
STEM Club, Carolyn Beatrice Parker Elementary School	Jan 2022 -
- Created lesson plans and ran weekly STEM club for the local elementary school's after-school education program	Apr 2022