

KATIYA FOSDICK

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EDUCATION

Ph.D., Astrophysics Division, Physics Department, MIT In Progress (Start: 2022)
BSc with Honors, Astronomy Department, UW - Madison 2022

GRANTS, HONORS, & AWARDS

Lowell Doherty Award for Excellence in Astronomy, Astronomy Department, UW-Madison 2022
Dean's List, College of Letters and Science, UW-Madison 2019 - 2022
Dr. Maritza Irene Stapanian Crabtree Award, Physics Department, UW-Madison 2021
Undergraduate Research Award, Wisconsin Space Grant Consortium 2021
Summer Student Research Assistantship, NRAO 2021
Undergraduate Research Award, Wisconsin Space Grant Consortium 2020
Undergraduate Scholarship for Summer Study, UW-Madison 2019
Undergraduate Research Award, Wisconsin Space Grant Consortium 2019

RESEARCH EXPERIENCE

Research Assistant, MIT Kavali Institute 2022 - Present
Advisor: Professor Mike McDonald
Project: *The Formation and Evolution of the Most Massive Galaxies Across Cosmic Time*
Research Intern, MIT Kavali Institute 2022
Advisor: Professor Mike McDonald
Project: *Simulating the Red-Sequence of Evolved-Galaxy Populations with FSPS*
Undergraduate Researcher, Astronomy Department, UW-Madison 2018 - 2022
Advisor: Professor Eric Wilcots
Project: *The Evolution and Growth of Nearby Galaxy Groups*
Independent Study Student, Astronomy Department, UW-Madison 2018 - 2022
Instructor: Professor Eric Wilcots
REU Researcher, Very Large Array, NRAO 2021
Advisors: Dr. Luis Henry Quiroga-Nuñez & Dr. Lorant Sjouwerman
Project Title: *Extracting Periods from ZTF Data for MIRAs Identified by Gaia*
Research Intern, Wisconsin IceCube Particle Astrophysics Center 2017
Supervisor: Professor Kael D. Hanson

PUBLICATIONS

4. Quiroga-Nuñez et al. (including **K. Fosdick** - co-author). *Characterizing the Evolved Stellar Population in the Galactic Foreground II: Kinematics, Variability, and SiO Maser Luminosity Functions*. (in preparation for submission to ApJ)

3. **K. Fosdick.** *The Evolution and Growth of Nearby Galaxy Groups.* Mar. 2022, published to the Proceedings of the 31st Annual Wisconsin Space Conference: Advancing Aerospace with Artificial Intelligence. DOI: <https://doi.org/10.17307/wsc.v1i1.326>
2. **K. Fosdick, L.H. Quiroga-Nuñez, & L. Sjouwerman.** *Characterizing The Variability of Long Period Variable Stars in the $r \leq 2$ kpc Solar Neighborhood with Gaia and ZTF.* Sep. 2021, published to the Proceedings of the 2021 NRAO/GBO Summer Student Symposium. URL: <https://www.nrao.edu/students/2021/Reports/FosdickKatiya.pdf>
1. **K. Fosdick.** *The Evolution and Growth of Nearby Galaxy Groups.* Mar. 2020, published to the Proceedings of the 29th Annual Wisconsin Space Conference: Future of Space Flight. DOI: <https://doi.org/10.17307/wsc.v1i1.282>

PRESENTATIONS

INVITED PRESENTATIONS

Research Talk , Monday Science Seminar, UW-Madison Astronomy Department	2023
Research Talk , NRAO Socorro Colloquium	2022

CONFERENCE PRESENTATIONS

Poster , 240th AAS Meeting	2022
Research Talk , NRAO/GBO Summer Student Symposium	2021
Poster , 29th Annual Wisconsin Space Conference	2019

TEACHING & OUTREACH EXPERIENCE

Panelist , UW-Madison Astronomy Department Graduate Admissions FAQ Panel	2023
Teaching Assistant , Physics 8.398: First-Year Graduate Seminar, Physics Department, MIT	2023
Course Developer (200 hr), Online Astrophysics Research Course for URM high schoolers, MITES Semester, MIT	2023
Instructor (6 weeks), Online Astrophysics Research Course for URM high schoolers, MITES Semester, MIT	2023
Participant , Inclusive Clusters Inclusive Classes Instructor Training, MITES Semester, MIT	2023
Scientific Consultant , Article: Drew Turney. <i>A Brief History of the Ludicrous (And Misguided) Plots to Blow Up the Moon.</i> Apr. 2023, published to PopularMechanics.com.	

LEADERSHIP AND PROFESSIONAL SERVICE

Member , MIT Physics Values Committee	2023
Member , Physics 322 Teaching Equity Board, UW-Madison	2021