Emmanuel Durodola

Dartmouth College, Department of physics and astronomy
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EDUCATION

Dartmouth College Hanover, NH
Ph.D., Astrophysics Expected June 2026
Thesis: *Using Cosmological simulations to better understand Galaxy - Black hole co-evolution in the age of JWST*
Advisor: Ryan Hickox

California State University Northridge, CA
B.S., Physics and Astronomy June 2020

RESEARCH INTERESTS

high redshift galaxy evolution, super massive black hole accretion, AGN phenomena, black hole seeding, observational cosmology

HONORS & AWARDS

Ford Foundation Fellowship (Honorable Mention) 2023
EE Just Liftoff Fellow 2020
NSF Graduate Research Fellow (Honorable Mention) 2020
Fifth Cohort Cal-bridge Scholar Aug, 2019 - Present

RESEARCH EXPERIENCE

Dartmouth College Hanover, NH
Graduate Student Researcher Aug 2020 – Present
Event Horizon Telescope, Black Hole Initiative Cambridge, MA
NSBP Research Intern June 2022 – Aug 2022
Banneker Institute, Harvard Center For Astrophysics Cambridge, MA
Summer Research Intern June 2020 – Aug 2020
Carnegie Observatories Pasadena, CA
Summer Research Intern June 2019 – Aug 2019

TEACHING EXPERIENCE

Dartmouth College Hanover, NH
Teaching Assistant/Lab instructor, Physics and Astronomy June 2021 - Present

- Courses TAed: **Astronomy 25**: Galaxies and Cosmology, **Astronomy 15**: Stars and the Milky Way, **Physics 13**: Introductory Physics, **Physics 3**: General Physics, **Astronomy 1**: Exploration of the solar system, **Astronomy 4**: Development of Astronomy Thought

Dartmouth College Hanover, NH
Guest Lecturer

California State University, Northridge Northridge, CA
Tutor, Physics and Astronomy, Mathematics Aug 2017 – June 2019

Granada Hills Charter School Granada Hills, CA
Tutor, Physics and Mathematics Aug 2018 – June 2019

LEADERSHIP & OUTREACH

Resident Fellow, Dartmouth College August 2022 - Present
Public Observing, Dartmouth College August 2020 - Present

PRESENTATIONS (* = *poster presentation, ** = discussion leader, Bold = invited)*

Boston University Seminar *February, 2025*
*** CHOIR meeting, Maine (Little red dots break out session)* *August, 2025*
JSI Conference, Baltimore *November, 2024*
244th AAS Meeting, Madison, WI *June, 2024*
241st AAS Meeting, Seattle *January, 2023*
Summer Symposium, BHI *August, 2022*
Summer Symposium, Banneker Institute *August, 2020*
**235th AAS Meeting, Hawaii* *January, 2020*
Summer Symposium, Cal-Bridge/CAMPARE *Summer, 2019*
Summer Symposium, Carnegie Observatories *August, 2019*

CODING LANGUAGES

Python (experienced)
Mathematica (Basic)
Javascript (Basic)
HTML (Basic)

PUBLICATIONS (* = contributed)

***Refereed*:**

1. **Emmanuel Durodola,** Fabio Pacucci, R. C. Hickox, *Exploring the AGN Fraction of a sample of JWST's Little Red Dots at 5 < z < 8: Overmassive Black Holes Are Strongly Favored.* Submitted to the Astrophysical Journal. 2025, ApJ, 985, 169.
2. Jonathan H. Cohn, **Emmanuel Durodola,** Quinn O. Casey, Erini Lambrides, R. C. Hickox. *Evidence for Evolutionary Pathway-dependent Black Hole Scaling Relations.* 2025, ApJL, 988, L61.

3. * Anantua Richard et al, *Emission Modelling in the EHT-ngEHT Age*, doi:10.33990/galaxies11010004
4. * Laura C. Hunter et al, *Identifying Dwarfs of MC Analog GalaxiEs (ID-MAGE): The Search for Satellites around Low-mass Hosts.* 2025, ApJ, 989, 58.