

# Stephanie Buttigieg

PHD STUDENT · INSTITUTE OF ASTRONOMY, UNIVERSITY OF CAMBRIDGE

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## Education

### Institute of Astronomy, University of Cambridge

Cambridge, UK

#### PHD IN ASTRONOMY

October 2023 - present

- Supervisors: Prof. Debora Sijacki and Dr Christopher J. Moore
- Research Area: Supermassive black hole mergers
- Courses in data-intensive science, statistics and high-performance computing.

### University of Cambridge

Cambridge, UK

#### MAST IN ASTROPHYSICS

October 2022 - June 2023

- Select courses: Quantum Field Theory, Cosmology, Field Theory in Cosmology and Formation of Structure in the Universe.
- Final Project: 'Is space haunted? Exorcising ghosts from the gravitational particle spectrum' supervised by Dr William Barker.
- Graduated with distinction.

### University of Malta

Msida, Malta

#### BSC IN MATHEMATICS AND PHYSICS

October 2018 - September 2022

- Specialised in Applied Mathematics and Astrophysics.
- Exchange year at the University of Warwick, UK.
- Final Year Project: 'Dynamical Systems in Beyond Standard Theory Cosmology' supervised by Prof. Jackson Levi Said.
- Graduated with first class honours.

## Publications

### PUBLISHED

**Buttigieg, S.,** Sijacki, D., Moore, C. J., Bourne, M. A., 2025. *Premature supermassive black hole mergers in cosmological simulations of structure formation.* Published in the Monthly Notices of the Royal Astronomical Society 2019 (2025), 2038 <https://doi.org/10.1093/mnras/staf1336>. e-Print: arXiv:2504.17549.

## Awards, Fellowships, & Grants

|              |                                                                                                                                                 |                |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 2023 - 27    | <b>Cambridge Centre for Doctoral Training in Data-Intensive Science PhD Studentship, UK</b><br>Science and Technology Facilities Council (STFC) | ~ £20,000 p.a. |
| 2022 - 23    | <b>Tertiary Education Scholarship Scheme, Government of Malta</b>                                                                               | £10,000        |
| 2023         | <b>Field's Scholarship, Christ's College Cambridge</b>                                                                                          | £150           |
| 2025         | <b>Bottomley Fund for Travel, Christ's College, Cambridge</b>                                                                                   | £200           |
| 2023         | <b>Evolve Prize for Science, University of Malta</b>                                                                                            |                |
| 2019, 20, 22 | <b>Dean's List, Faculty of Science, University of Malta</b>                                                                                     |                |

## Presentations

### INVITED TALKS

March 2025. CamGW Meeting, Kavli Institute for Cosmology, University of Cambridge

May 2025. NANOGrav Astrophysics Working Group (teleconference)

November 2025. Galaxy and SMBH formation, growth, and co-evolution workshop, Nepal.

### CONTRIBUTED PRESENTATIONS

February 2025. Talk at Wednesday Seminar Series. Institute of Astronomy, University of Cambridge.

May 2025. Talk at *Unveiling massive black hole evolution with gravitational waves and light* workshop. Paris, France.

July 2025. Talk at *GR – Amaldi* conference. Glasgow, UK.

September 2025. Talk at *Young astronomers on galactic nuclei* meeting. Southampton, UK.

September 2025. Talk at *the black holes across cosmic time* conference. Cambridge, UK.

## Professional Experience

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2022 **Summer Research Intern**, European Organization for Nuclear Research (CERN)

## Teaching Experience

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2025 **Mathematics for Natural Science Tripos Part Ia**, Supervisor, Christ's College, University of Cambridge

2018 - 2024 **Mathematics and Physics**, Private Tutor

2019 **PwC Malta**, STEM Trainer

## Outreach & Professional Development

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### SCIENCE COMMUNICATION & WOMEN IN SCIENCE ADVOCACY

Ongoing. Producing *Astronomija bil-Malti*, an online science communication series in Maltese.

February 2025. Invited panellist. *Curiosity Knows No Boundaries: Celebrating Women and Girls in Science*, organised by the Malta Chamber of Scientists at the University of Malta.

March 2025. Invited panellist. *Her Voice in Science* at the EU parliament.

October 2024. Talk at Institute of Astronomy public open evenings titled *Meet the cosmic giants: understanding supermassive black holes*.

### PROFESSIONAL APPOINTMENTS

#### Women's Network, Institute of Astronomy

CO-CHAIR

January 2025 - present

- Events organised for International Women's Day: public/school outreach, departmental awareness events, social media campaign.

#### Cambridge University for Reproductive Rights

SPEAKERS/MEMBERSHIP & DEVELOPMENT OFFICER

October 2024 - present

#### Faculty Board for Physics and Chemistry, University of Cambridge

PHD ACADEMIC REPRESENTATIVE

October 2024 - October 2025

#### Christ's College MCR

INTERNATIONAL OFFICER, WOMEN'S & NON-BINARY OFFICER, VICE PRESIDENT

October 2022 - March 2024

#### Science Students' Society, University of Malta

EDUCATION OFFICER

July 2019 - June 2020

#### Board of Studies, Department of Physics, University of Malta

STUDENT REPRESENTATIVE

October 2021 - June 2022