

Alice Townsend

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 [aotownsend.github.io/](https://github.com/aotownsend)



Research experience

University of Birmingham

- Research Fellow February 2026 – Present

Institut de Physique des 2 Infinis de Lyon (IP2I)

- Visiting researcher. Awarded the [Procope Mobility grant](#). October – November 2025

Humboldt-Universität zu Berlin

- Graduate research assistant. November 2021 – November 2025

Queen's University Belfast

- Research assistant (supervised by Dr. Michael Fulton). June – July 2020

The University of Manchester

- Research assistant (supervised by Prof. Neal Jackson). August – September 2020

Education

PhD, Astrophysics

- Humboldt-Universität zu Berlin November 2021 – February 2026

Thesis: Exploring type Ia supernovae for cosmology: from strong lensing to photometric classification (supervised by Prof. Marek Kowalski).

Fields: supernovae, strong gravitational lensing, observational cosmology.

Master of Physics (MPhys), Physics with Astrophysics

- The University of Manchester, First class (Hons) September 2017 – June 2021

Thesis: Investigating the optical modes of the transitional millisecond pulsar PSR J1023+0038 with Kepler (supervised by Prof. Rene Breton).

Teaching and supervision

Teaching assistant at HU Berlin

- Analysis techniques in astrophysics and gravitational wave astronomy. Summer 2022 and 2023
- Statistical methods for data analysis. Winter 2022/23
- Cosmology. Winter 2023/24

Guest lecturer at HU Berlin

- Cosmology. Winter 2023/24 and 2024/25

Service and Outreach

LOC of conference

- ZTF Cosmology WG meeting in Berlin. December 2022
- ZTF Collaboration meeting in Berlin. May 2023

Observing for ePESSTO+

- 5 nights observing with the NTT at La Silla Observatory, Chile. November 2024

Student representative for graduate school

- Duties involved organising journal clubs, annual meetings and social events. May 2022 – 2024

Speaker at Wilde Möhre Festival

- Outreach talk for the general public on exoplanet detection. August 2022

Talks and posters

Invited talks

Seminar at Laboratoire de Physique de Clermont Auvergne, *Clermont-Ferrand, France* November 2025

Contributed talks

Strongly Lensed Transients from LSST, <i>Birmingham, UK</i>	September 2025
Cosmic Lighthouses, <i>Cambridge, UK</i>	July 2025
ULTRASAT Germany Meeting, <i>Berlin, Germany</i>	April 2025
ZTF Cosmology WG Meeting, <i>Barcelona, Spain</i>	December 2024
ZTF Machine Learning WG telecon, <i>Virtual seminar</i>	August 2024
European Astronomical Society Meeting, <i>Padova, Italy</i>	July 2024
ZTF Collaboration Meeting, <i>Stockholm, Sweden</i>	June 2024
SuperVirtual, <i>Virtual conference</i>	November 2023
ZTF Collaboration Meeting, <i>Pasadena CA, USA</i>	October 2023
ZTF Collaboration Meeting, <i>Berlin, Germany</i>	May 2023
ZTF Cosmology WG Meeting, <i>Berlin, Germany</i>	December 2022
ZTF and DES Cosmology Meeting, <i>Stockholm, Sweden</i>	July 2022
ZTF Collaboration Meeting, <i>Paris, France</i>	May 2022

Posters

Cosmic Lighthouses, <i>Cambridge, UK</i>	July 2025
European Astronomical Society Meeting, <i>Padova, Italy</i>	July 2024

List of publications

First author:

1. Candidate strongly lensed type Ia supernovae in the Zwicky Transient Facility archive (2025).
A. Townsend, J. Nordin, A. Sagués Carracedo et al.
2. Photometric classification of supernovae detected by the Zwicky Transient Facility using noise augmentation (2026).
A. Townsend, J. Nordin, M. Kowalski et al.

Additional publications I contributed to can be found on my [ADS library](#), [ORCID](#) or [Google Scholar](#).