

# Alice Townsend

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 [aot Townsend.github.io/](https://aot Townsend.github.io/)



## Research experience

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### 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

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### 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

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### 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

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### 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

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### 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

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### 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](#).