

Alice Townsend

✉ a.townsend@bham.ac.uk

📄 aotownsend.github.io/



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](#).