

ISOBEL ROMERO-SHAW

gravitational-wave astrophysics PhD student

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SIGNIFICANT EMPLOYMENT

- SINCE NOV. 2018 **Astrophysics PhD Student**
MONASH UNIVERSITY, AUSTRALIA
(2 years and 9 months)
- SINCE NOV. 2018 **Teaching Assistant**
MONASH UNIVERSITY, AUSTRALIA
(2 years and 9 months)
- 2017 AND 2018 **Summer Internships**
ALTRAN INTELLIGENT SYSTEMS, UK
(2 months, 5 months)
- 2017 **Astrophysics & Space Research Summer Student**
UNIVERSITY OF BIRMINGHAM, UK
(2 months)
- 2016 **Summer Internship**
ALTRAN INTELLIGENT SYSTEMS, UK
(4 months)

PRIZES, AWARDS & SCHOLARSHIPS

- 2020 **Outreach Superstar Award**
OzGrav Centre of Excellence for Gravitational Wave Discovery
- 2020 **Best Poster**
Royal Astronomical Society Early Career Researcher Poster Competition
- 2019 **Best Student Poster Award**
OzGrav Centre of Excellence for Gravitational Wave Discovery
- 2019 **Best Student Talk Award**
Astronomical Society of Australia
- 2018 **J.L. William International Scholarship**
Monash University
- 2018 **RTP International Postgraduate Research Scholarship**
Monash University
- 2018 **Nolan Merrill Prize for best performance in Master's Project**
University of Birmingham, School of Physics & Astronomy
- 2018 **Best Project Poster Prize**
University of Birmingham, School of Physics & Astronomy (peer-nominated)

FIRST-AUTHOR PUBLICATIONS

For a full list of publications that I have contributed to, please see my [Google Scholar](#) profile.

- 2021 **Signs of eccentricity in two gravitational-wave signals may indicate a sub-population of dynamically assembled binary black holes**
M. ROMERO-SHAW, P. D. LASKY, E. THRANE
Submitted to ApJ Letters
- 2020 **Gravitational Waves as a Probe of Globular Cluster Formation and Evolution**
M. ROMERO-SHAW, K. KREMER, P. D. LASKY, E. THRANE, J. SAMSING
Published in MNRAS
- 2020 **GW190521: Orbital Eccentricity and Signatures of Dynamical Formation in a Binary Black Hole Merger Signal**
I. ROMERO-SHAW, P. LASKY, E. THRANE, J. CALDERON BUSTILLO
Published in ApJ Letters
- 2020 **Bayesian inference for compact binary coalescences with BILBY: Validation and application to the first LIGO-Virgo gravitational-wave transient catalogue**
I. ROMERO-SHAW, C. TALBOT, S. BISCOVEANU, V. D'EMILIO, G. ASHTON ET AL.
Published in MNRAS
- 2020 **On the origin of GW190425**
I. ROMERO-SHAW, N. FARROW, S. STEVENSON, X.-J. ZHU, E. THRANE
Published in MNRAS Letters
- 2019 **Searching for eccentricity: signatures of dynamical formation in the first gravitational-wave transient catalogue of LIGO and Virgo**
I. ROMERO-SHAW, P. LASKY, E. THRANE
Published in MNRAS

EDUCATION

University of Birmingham, UK

- 2014–18 **M.Sci. Physics with Honours, Class I**
Integrated Undergraduate Masters
- 2013–14 **Engineering & Physical Sciences Foundation Year**
Required for entry into Physics degree without Mathematics A-Level

Ralph Allen School, Bath, UK

- 2011–13 **A Levels - A*AB**
Fine Art, English Literature, Physics
- 2006–11 **GCSEs - 11 A*-A**
8 A*s including Physics, English Literature, English Language & Fine Art
3 As including Mathematics & ICT

COMMITTEE & REPRESENTATIVE ROLES

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| SINCE 2020 | Student Representative, ANITA Steering Committee |
| SINCE 2019 | Co-chair, Women in Physics and Astronomy group, Monash University |
| 2018–20 | Treasurer, Optical Society Chapter, Monash University |
| 2017–18 | Student Representative Panel Member, Board of Misconduct, University of Birmingham |
| 2016–18 | Secretary, Art Society, University of Birmingham |
| 2013–18 | Physics Student Representative, University of Birmingham |
| 2016 | University of Birmingham representative, Women's Engineering Society conference, Aston University |

PUBLIC SOFTWARE PROJECTS

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| 2018 | MAGIC GRAVITATIONAL-WAVE INTERFEROMETER NOISE SIMULATION pypi.org/project/ifomagic |
| 2018 | Space Py Quest TOY MODEL OF GRAVITATIONAL-WAVE INTERFEROMETER NOISE ADJUSTMENT & DETECTION github.com/gwoptics/SpacePyQuest |
| 2016 | Birds 3D SIMULATIONS OF BIRDS FLOCKING, FLEEING PREDATORS AND CHASING PREY github.com/IsobelMarguarethe/birds |

REFERENCES

| | |
|---|--|
| ✉ | Associate Professor Paul Lasky paul.lasky@monash.edu |
| ✉ | Professor Eric Thrane eric.thrane@monash.edu |
| ✉ | Professor Ilya Mandel ilya.mandel@monash.edu |

RECENT EDUCATION & OUTREACH

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| 2021 | Guest on Astrophiz podcast: Gravitational Wave Detectors and Black Holes |
| 2021 | Guest on Storytellers of STEMM podcast: Gravitational Waves |
| 2021 | Virtual talk on Eccentricity in Gravitational-Wave Transients at Royal Astronomical Society Ordinary Meeting |
| 2021 | Virtual talk on Space Words at Cambridge Festival (UK) |
| 2021 | Guest on Listening to the Cosmos (LIGO India) podcast |
| 2020 | Virtual talk for Brownies (Girlguiding UK) on Constellations |
| 2020 | Virtual talk on Space Words at Mount Burnett Observatory, Melbourne |
| 2020 | Virtual talk on Space Words for OzGrav online public lecture series |
| 2019 | Public talk on Globular Clusters at Mount Burnett Observatory, Melbourne |

HOBBIES, INTERESTS & ACTIVITIES

- In 2020, I was selected to be part of the sixth cohort of Homeward Bound: a leadership development initiative for women in STEMM. As part of this project, I take part in bi-weekly leadership development workshops.
- I am teaching myself Spanish using Duolingo. I started this at the beginning of 2020 and am now on an unbroken 553-day practising streak!
- I am a ferocious reader - I love science fiction and classics, but also enjoy non-fiction, particularly books about anthropology.
- I recently self-published a book called [Planetymology](#), about the planets in our Solar System, how they got their names and the meanings behind them. I am working on a second book: a colouring book about influential women in physics.
- My creative pursuits recently include drawing, pottery, and making polymer clay jewellery. I'm also keen on baking and like to experiment with vegan cakes.
- I enjoy running, biking and hiking. From 2021–2022 I am attempting run, hike and bike over a distance equal to the widest point of Antarctica (5339 km) in one year.