Isobel Romero-Shaw

PhD Student

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🌐 Melbourne, Australia

Education

PhD Astrophysics
Since 2018 | Monash University | Melbourne | Australia

MSci Physics with integrated Foundation Year
2013-18 | Class I - 81% | University of Birmingham | Birmingham | UK

A Levels
2011-13 | A*AB | Ralph Allen School | Bath | UK

GCSEs
2007-11 | 8 A* | 3 A | Ralph Allen School | Bath | UK

Current Projects

Constraining Eccentricity in GWTC-1 Events

Using the Eccentric Merger Rate to Measure Globular Cluster Evolution

OzGrav: A High Frequency Detector

BILBY: A Bayesian Inference Library for Gravitational Wave Astronomy

Software

Languages
Python | C++ | Java | Matlab | Ada | HTML | LabVIEW | Epsilon (EOL) | CZT

Other
LaTeX | QT Creator | Papyrus | Eclipse | ForTran | JIRA | Unix | Linux

Training
3 placements at Altran UK | 2 Uni programming modules (Matlab, C++) | 1 LabVIEW intensive training week

References

Available on request

University & Internships

Since Mar'18	Teaching Assistant	Monash University, Melbourne, Australia
	Astrophysics labs & maths/computing tutorials	
Since Nov'18	PhD Student	Monash University, Melbourne, Australia
Jun-Oct'18	Engineering Consultant & Team Lead	Altran, Bath, UK
	Led a team of 4 graduates in developing full software project life-cycle tool	
Oct'14-Jun'18	MSci Student	University of Birmingham, Birmingham, UK
	Graduated with Class I - 81%	
Aug-Oct'17	Jr. Engineering Consultant	Altran, Bath, UK
	Contributed to the development of full software project life-cycle tool	
Jun-Aug'17	Summer Research Student	University of Birmingham, Birmingham, UK
	Investigated integration of MIST stellar tracks into population sythesis code COMPAS	
Jun-Oct'16	Jr. Engineering Consultant	Altran, Bath, UK
	Redesigned Ada SPARK training course and developed new training package for microcontroller-embedded systems	
Oct'13-Jun'14	EPS Foundation Year Student	University of Birmingham, Birmingham, UK
	Required to replace Mathematics A-Level	

Completed Academic Projects

2018	Gravitational Wave Detector Noise	git.ligo.org/IFOsim/MAGIC
	Developed a modular and adaptable tool for modelling frequency-domain noise at gravitational wave interferometers	
2017	Gravitational Wave Astrophysics	
	Acted as team organiser for a group of 16 students simulating a gravitational wave detection pipeline	
2016	Birds	github.com/IsobelMarguarethe/birds
	Simulated the characteristic behaviours of birds in 3 dimensions	

Academic Prizes, Scholarships & Awards

Jul'19	Best Student Talk	Astronomical Society of Australia
Dec'18	J.L. William International Scholarship	Monash University
Oct'18	International Postgraduate Research Scholarship	Monash University
Aug'18	Dean's Postgraduate Research Scholarship Faculty of Science	Monash University
Jun'18	Nolan Merril Prize for Best Master's Project	University of Birmingham
Mar'18	Best Project Poster Peer-nominated	University of Birmingham

Volunteering

Since '18	Treasurer, OSA Chapter	Monash University
2017-18	Board of Misconduct	University of Birmingham
2017-18	Secretary, Art Society	University of Birmingham
2017	*Listening to Einstein's Universe*	Royal Society Summer Science Exhibition
2016-17	Class Assistant	Teach Programming, Bath, UK
2013-18	Physics Student Rep Peer-nominated	University of Birmingham