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EMPLOYMENT

2022-	Herchel Smith Research Fellow	*University of Cambridge (Darwin College)*
2021-22	Research Fellow	*Monash University*
2016–18	Software Engineer/Consultant,	*Altran Intelligent Systems*
2017	Astrophysics & Space Research,	*University of Birmingham*

EDUCATION

NOV. 2018-21	Ph.D.: *Eccentricity in Gravitational-Wave Transients.* Supervisors: Assoc. Prof. Paul Lasky & Prof. Eric Thrane	*Monash University*
2014–18	B.A. and M.Sci. Physics with Honours, Class I, Supervisor: Prof. Andreas Freise	*University of Birmingham*

TALKS

2022	GWPAW 2022	
-	University of Cambridge	*Data Intensive Science Group (Invited)*
-	University of Cambridge	*Cosmology Group (Invited)*
-	University of Amsterdam	*Anton Pannekoek Institute Colloquium (Invited)*
-	University of Cambridge	*Kavli Institute for Cosmology Mini Symposium (Invited)*
-	University of Warwick	*National Astronomy Meeting (UK)*
-	Niels Bohr Institute	*Conference on Dynamical Binary Black Hole Formation (Invited)*
-	Eliiza Artificial Intelligence	*Lunchtime Seminar Co-Presented with Paul Lasky (Invited)*
2021	University of Cambridge	*DAMTP Group*
-	Columbia University	*THEA Group*
-	ACAMAR7,	*Conference Talk on behalf of OzGrav*
-	CSIRO Australia Telescope National Facility	*Seminar (Invited)*
-	OzGrav Centre of Excellence for Gravitational-Wave Discovery	*(Invited)*
-	Oxford University	*GalNUC Group*
-	Massachusetts Institute of Technology	*(Invited)*
-	California Institute of Technology	*TAPIR Group Seminar (Invited)*
-	Edoardo Amaldi Conference on Gravitational Waves	
-	Astronomical Society of Australia	
-	Australian National Institute for Theoretical Astrophysics	
-	Royal Astronomical Society Ordinary Meeting	*(Invited)*
-	University of Queensland	*(Invited)*
-	Astro3D Centre of Excellence for All Sky Astrophysics in 3D	
2020	OzGrav Centre of Excellence for Gravitational-Wave Discovery	*(Invited)*
-	University of Santiago de Compostela	*Seminar (Invited)*
-	Australian National Institute for Theoretical Astrophysics	
-	Monash University	*Seminar (Invited)*
2019	Astronomical Society of Australia	

PRIZES, AWARDS & SCHOLARSHIPS

2021	Norris Family Award, Awarded for "Outstanding Author Contribution by a Graduate Research Student to a Published Scholarly Research Output"	*Monash University, Faculty of Science.*
2020	Homeward Bound Membership,	*Leadership Initiative for Women in STEMM*
-	Outreach Award,	*OzGrav Centre of Excellence for Gravitational Wave Discovery*
-	ECR Poster Prize,	*Royal Astronomical Society*
2019	Student Poster Award,	*OzGrav Centre of Excellence for Gravitational Wave Discovery*
-	Student Talk Award,	*Astronomical Society of Australia*
2018	J.L. William International Scholarship,	*Monash University, School of Physics and Astronomy*
-	Dean's International Postgraduate Research Scholarship,	*Monash University, Faculty of Science*
-	International Postgraduate Research Scholarship,	*Monash University*
-	Nolan Merril Prize, Awarded for "the highest-scoring M.Sci. project in the School of Physics & Astronomy"	*University of Birmingham.*
-	M.Sci. Poster Prize, School of Physics & Astronomy,	*University of Birmingham*

Academic Service

2022-	Organiser: GR Seminar, GR Journal Club, DAMTP Colloquia	*University of Cambridge*
2020-22	Steering Committee,	*Australian National Institute for Theoretical Astrophysics*
2019-	Referee,	*Physical Review D, Monthly Notices of the Royal Astronomical Society Astrophysical Journal, Astrophysical Journal Letters*
-	Women in Physics & Astronomy Student Co-Chair,	*Monash University*
2018	Board of Misconduct Student Rep.,	*University of Birmingham*

Supervision & Teaching

- ▷ Undergraduate Supervision:
  - Teagan Clarke. Honours Project: *Gravitational Waves from Eccentric Binary Black Holes*
- ▷ Teaching Assistant:
  - ASP1010: Introductory Astronomy
  - ASP2062: Introduction to Astrophysics
  - ASP3162: Computational Astrophysics & the Extreme Universe

Outreach

Publications & Articles

2021	*Women in Physics*, *Colouring book;* co-author, editor, and illustrator
2020	*Planetymology: Why Uranus is not called George and other facts about space and words*, *Children's non-fiction book;* author, editor, and illustrator
-	*The CO2 Elephant in the Room: Curbing the Carbon Footprint of Astronomy*, *Astrobites article*

Talks and Interactive Visits

2022	U3A Deepdene (Australia; virtual)
-	Casey Tech School (Australia)
-	Haileybury Middle School (Australia)
2021	Astronomical Society of Victoria (Australia)
-	Cambridge Festival (UK; virtual)
-	Denver Astronomical Society (US; virtual)
2020	Girlguiding (UK; virtual)
-	Mount Burnett Observatory (Australia)
-	OzGrav Public Lecture Series (Australia)
2019	Mount Burnett Observatory (Australia)

Media Interviews

Podcasts	*Astrophiz*
-	*Storytellers of STEMM*
-	*Listening to the Cosmos (LIGO India)*
Radio	*Einstein A Go-Go, Triple R*
-	*The Space Show, Southern FM*
Articles	*Space Australia*
-	*Monash University Science*

Public Software Projects

- ▷ MAGIC: Gravitational-wave interferometer noise simulation. pypi.org/project/ifomagic
- ▷ Space Py Quest: Toy model of gravitational-wave interferometer noise profile adjustment & signal detection. github.com/gwoptics/SpacePyQuest, documentation
- ▷ Birds: 3D simulations of birds flocking, fleeing predators and chasing prey. github.com/IsobelMarguarethe/birds

Citation counts on this page are taken from NASA ADS on 05.10.22.

	RESEARCH PUBLICATIONS: SHORT-AUTHOR	CITATIONS
[16]	Eccentricity or spin precession? Distinguishing subdominant effects in gravitational-wave data — ***IRS***, *D. Gerosa, N. Loutrel* Published in *MNRAS*, January 2023	
[15]	Inferring Interference: Identifying a Perturbing Tertiary with Eccentric Gravitational Wave Burst Timing — ***IRS***, *N. Loutrel, M. Zevin* Submitted to *PRD*, November 2022	
[14]	General-relativistic precession in a black-hole binary —*M. Hannam et al. (incl.* ***IRS****)* Published in *Nature*, October 2022	24
[13]	Four eccentric mergers increase the evidence that LIGO–Virgo–KAGRA's binary black holes form dynamically — ***IRS***, *P. D. Lasky, E. Thrane.* Published in *ApJ*, October 2022	18
[12]	A Rosetta Stone for Eccentric Gravitational Waveform Models — *A. Knee,* ***IRS***, *P. D. Lasky, J. McIver, E. Thrane.* Published in *ApJ*, September 2022	4
[11]	Subtracting glitches from gravitational-wave detector data during the third observing run —*D. Davis, T. B. Littenberg,* ***IRS***, *M. Millhouse, J. McIver, F. Di Renzo, G. Ashton* Submitted to *Class. Quant. Grav.*, July 2022	7
[10]	Gravitational-wave inference for eccentric binaries: the argument of periapsis — *T. A. Clarke,* ***IRS***, *P. D. Lasky, E. Thrane.* Accepted for publication in *MNRAS*, June 2022	5
[9]	When models fail: an introduction to posterior predictive checks and model misspecification in gravitational-wave astronomy — ***IRS***, *P. D. Lasky, E. Thrane.* Published in *PASA*, June 2022	10
[8]	Signs of Eccentricity in Two Gravitational-Wave Signals may Indicate a Sub-Population of Dynamically Assembled Binary Black Holes — ***IRS***, *P. D. Lasky, E. Thrane.* Published in *ApJ Letters*, November 2021	29
[7]	Implications of Eccentric Observations on Binary Black Hole Formation Channels — *M. Zevin,* ***IRS***, *K. Kremer, E. Thrane, P. D. Lasky.* Published in *ApJ Letters*, November 2021	25
[6]	Gravitational Waves as a Probe of Globular Cluster Formation and Evolution — ***IRS***, *K. Kremer, P. D. Lasky, E. Thrane, J. Samsing.* Published in *MNRAS*, July 2021	8
[5]	An Interactive Gravitational-Wave Detector Model for Museums and Fairs — *S. Cooper et al. (incl.* ***IRS****).* Published in *Am. J. Phys.*, July 2021	2
[4]	GW190521: Orbital Eccentricity and Signatures of Dynamical Formation in a Binary Black Hole Merger Signal — ***IRS***, *P. Lasky, E. Thrane, J. Calderón Bustillo.* Published in *ApJ Letters*, October 2020	133
[3]	Bayesian Inference for Compact Binary Coalescences with BILBY: Validation and Application to the First LIGO-Virgo Gravitational-Wave Transient Catalogue — ***IRS***, *C. Talbot, S. Biscoveanu, V. D'Emilio, G. Ashton et al.* Published in *MNRAS*, September 2020	167
[2]	On the origin of GW190425 — ***IRS***, *N. Farrow, S. Stevenson, X-J. Zhu, E. Thrane.* Published in *MNRAS Letters*, May 2020	43
[1]	Searching for Eccentricity: Signatures of Dynamical Formation in the First Gravitational-Wave Transient Catalogue of LIGO and Virgo — ***IRS***, *P. Lasky, E. Thrane.* Published in *MNRAS*, October 2019	79

RESEARCH PUBLICATIONS: LARGE COLLABORATION

I list here publications to which I have actively contributed. To see all papers upon which I am listed as an author, please visit my ADS bibliography.

[5] The Population of Merging Compact Binaries Inferred using Gravitational Waves through GWTC-3 — *The LVK Collaboration (incl. **IRS**)*. Submitted to *ApJ Letters*, November 2021. Contribution: Internal review of population spin analysis. 317

[4] GWTC-3: Compact Binary Coalescences Observed by LIGO and Virgo During the Second Part of the Third Observing Run — *The LVK Collaboration (incl. **IRS**)*. Submitted to *PRX*, November 2021. Contribution: Member of the paper-writing team. Writing, result presentation, analysis. 754

[3] Population Properties of Compact Objects from the Second LIGO-Virgo Gravitational-Wave Transient Catalog — *The LVK Collaboration (incl. **IRS**)*. Published in *ApJ Letters*, May 2021. Contribution: Internal review of population spin analysis. 549

[2] GWTC-2: Compact Binary Coalescences Observed by LIGO and Virgo During the First Half of the Third Observing Run — *The LVK Collaboration (incl. **IRS**)*. Published in *PRX*, April 2021. Contribution: Analysis of strain data surrounding one event trigger. 1196

[1] Neutron Star Extreme Matter Observatory: A Kilohertz-Band Gravitational-Wave Detector in the Global Network — *OzGrav: K. Ackley et al. (incl. **IRS**)*. Published in *PASA*, November 2020. Contribution: Research into efficacy of GW detector network including Australian instrument for observing binary neutron stars. 90