Shun Yin Cheung

PhD student in Gravitational-Wave Astronomy — Affiliations: Monash University, Ozgrav
shunyincheung@gmail.com — +61 490-462-873 — www.linkedin.com/in/shun-cheung-45a300238

EDUCATION

Monash University, Melbourne, Australia — March 2019 — December 2022
Bachelor of Science Advanced - Research (Honours) — First-Class Honours
Thesis Title: Ultrafast Carrier Dynamics in 2D MoS_2 using
Time-Resolved Pump-Probe Terahertz Spectroscopy

Monash University, Melbourne, Australia — March 2023 — Current
Doctor of Philosophy: Astrophysics

PROJECTS

Searching for Extra Polarisations in Gravitational-Waves using a Gaussian Process

- Searching for extra polarisations in null streams using a gaussian process.
- Optimising the gaussian processor to run faster.
- Developing and implementing a neural network into gaussian processor to speed up the code.

Searching for Gravitational-Wave Memory in O4 Data

- Analyse the O4 data for evidence of memory.
- Develop and automate an analysis pipeline to detect memory.

PUBLICATIONS

Does spacetime have memories? Searching for gravitational-wave memory in the third LIGO-Virgo-KAGRA gravitational-wave transient catalogue
Published in Classical and Quantum Gravity on May 2024

- Authors: **Shun Yin Cheung**, Paul D. Lasky, Eric Thrane. DOI: 10.1088/1361-6382/ad3ffe.

Possible Causes of False General Relativity Violations in Gravitational Wave Observations
Submitted to Arxiv on May 2024

- Authors: Anuradha Gupta, ..., **Shun Yin Cheung**, ..., B. S. Sathyaprakash.

AWARDS

Winter Vacation Research Scholarship — June 2021
Awarded $1400 on the condition I worked a 4-week research project over the winter break.

Research First Scholarship — December 2019
Awarded $2100 on the condition I worked a 6-week research project over the summer break.

EXPERIENCE

Teaching Assistant *Monash University* February 2024 — Current

- Supervise students in physics laboratories.
- Mark tests and reports.
- Invigilate assessments.

High School Tutor *Self-employed* January 2022 — February 2024

- Offered tutoring to high school students in physics and mathematics.

SKILLS

- **Programming:** Python, SQL, Mathematica
- **Communicating and presenting complex ideas**
- **Collaborating with other people**

REFERENCES

Prof. Eric Thrane
Professor, School of Physics and Astronomy, Monash University
E-mail: eric.thrane@moansh.edu
Mobile: 9902 0393

Associate Prof. Paul Lasky
Associate Professor, School of Physics and Astronomy, Monash University
E-mail: paul.lasky@monash.edu
Mobile: 9905 0770