

Claudia Reyes

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 [ANU Research Portal Profile](#)

 [Personal Research Website](#)

Astrophysics Postdoctoral Researcher with a special interest in public engagement, a background in Engineering, and extensive observational experience. Research interests include asteroseismology, stellar evolution, giant stars, stellar modelling, data visualisation, and machine learning.

RESEARCH SUMMARY

- h-index: 9 (ADS, May 2025)
- [Refereed publications: 18 \(4 first-author\)](#)
- Total citations: 267

EDUCATION

- University of New South Wales, Australia**
PhD in Astrophysics September 2020 – September 2024
 - Thesis titled: “Asteroseismology of Giant Stars: Applications on stellar populations in the field and in the open cluster M67”
 - PhD awarded following minor revisions. Conferral date 30 January 2025
- Liverpool John Moores University, England**
MSc in Observational Astrophysics July 2017 - December 2019
 - Awarded High Distinction.
- Universidad de La Frontera, Chile**
Electronic Engineering March 2001 - December 2006
 - Awarded Maximum Distinction.

PUBLICATIONS

- Acoustic Oscillations Probe Deep Stellar Interiors in the Open Cluster M67.**
Reyes, C.; Stello, D.; Ong, J.; Lindsay, C.; Hon, M.; Bedding, T. R.
- *Nature*, Volume 640, Issue 8058, April 2025, pp. 338-342, <https://doi.org/10.1038/s41586-025-08760-2>
- Highlight: [Altmetric score 251](#). In the top 5% of all research outputs scored by Altmetric.
- Asteroseismic Modelling of Giants and Subgiants of the Open Cluster M67 from 3 Campaigns of K2 data.**
Reyes, C.; Stello, D.; Hon, M.; Sandquist, E.; Taylor, L.; Ong, J.; Li, Y.; Vanderburg, A.; Mathieu, R.; Corsaro, E.
- *Monthly Notices of the Royal Astronomical Society*, Volume 538, Issue 3, April 2025, Pages 1720–1746, <https://doi.org/10.1093/mnras/staf353>
- Isochrone Fitting to the Open Cluster M67 in the Era of Gaia and Improved Model Physics.**
Reyes, C.; Stello, D.; Hon, M.; Trampedach, R.; Sandquist, E.; and Pinsonneault, M.
- *Monthly Notices of the Royal Astronomical Society*, Volume 532, Issue 2, August 2024, Pages 2860–2874, <https://doi.org/10.1093/mnras/stae1650>
- Vetting Asteroseismic Δv Measurements Using Neural Networks.**
Reyes, C.; Stello, D.; Hon, M.; Zinn, J.
- *Monthly Notices of the Royal Astronomical Society*, Volume 511, Issue 4, April 2022, Pages 5578–5596, <https://doi.org/10.1093/mnras/stac445>

PRESENTATIONS

1. **The 18th annual Australian National Institute for Theoretical Astrophysics Science Workshop. Melbourne, February 2024.**
Talk Title: "The Open Cluster M67: Modelled Isochrone and Seismology of Red Giants".
2. **TASC7/KASC14 Workshop. Hawaii, USA, 17th-22nd of August 2023.**
Talk Title: "The Open Cluster M67. Seismology of Sub-giants and Red Giants from three campaigns of K2 data".
3. **TASC6/KASC13 Workshop. Leuven, Belgium, 11th-15th of July 2022.**
Poster session. Title: "Fast vetting with machine learning".
4. **Tess Science Conference II (TSC2), Online, 2nd- 6th of August 2021. Machine Learning Splinter.**
Talk Title: "Developing a classifier for asteroseismology using computer vision".

PREVIOUS WORK EXPERIENCE

1. **ESO Telescope and Instrument Operator** July 2008 - December 2019
VLT Science Operations, Chile
Duties included operating telescope units and highly complex instruments with the assistance of a staff astronomer for half the night and working independently for the other half. Other duties included conducting quality assessments, creating training documents for new staff, participating in commissioning activities, investigating technical issues, and evaluating the performance of astronomical instruments. [Contributions during this role led to several non-refereed publications.](#)
2. **Analyst** February 2007 - June 2008
Evalueserve Consulting, Chile
Database management services for financial banks.

GRANTS

1. **UNSW Scientia PhD Scholarship 2020.**
 - Educational award of AUD 41,300 stipend + Travel and development support package AUD 10,000 (per annum)
 - Highly competitive scheme to attract people with exceptionally strong academic and industry backgrounds.
2. **ESO-Chile Local Staff Scholarship 2017.**
 - 50% of Master of Science Program Fees of GBP 14,700.
 - Awarded to a staff member by the European Southern Observatory for outstanding performance.

PUBLIC ENGAGEMENT AND MEDIA

1. Interviewed on [The Best of Our Knowledge](#), WAMC Public Radio (USA), May 2025.
2. Interviewed for the podcast [Spacetime with Stuart Gary](#), produced by StarStuff Studios and broadcast around the world on ScienceZone Radio by the National Science Foundation, iheart Radio, and Tune In Radio, April 2025.
3. Authored article for [The Conversation](#): "Astronomers listened to the 'music' of flickering stars", (15,000+ reads to date), April 2025.
4. Interviewed on [ABC South Queensland Drive with Annie Gaffney](#), ABC Radio (Australia), April 2025.
5. Interviewed on [ABC Melbourne Drive with Ali Moore](#), ABC Radio (Australia), April 2025.
6. Interviewed on [Canberra Live with Leon Delaney](#), 2CC Radio Canberra (Australia), April 2025.
7. Interviewed on [Canberra Mornings with Saskia Mabin](#), ABC Radio (Australia), April 2025.
8. Interviewed by [Julia Carvalho for G1 – Globo News](#) on the scientific potential of stellar oscillations to study the Milky Way's formation, April 2025.
9. Interviewed by [Victoria Corless for SPACE.com](#) about stellar quakes, April 2025.

ADDITIONAL EXPERIENCE

1. **LOC Member** June 2024
MESA Down Under, University of Sydney, Sydney.
2. **Project Design and Mentor: "The Lives of Stars".** July 2023 - January 2024
Science Extension Program "SciX", January 2024, University of New South Wales, Sydney.
3. **Co-Supervisor Honours Thesis** February 2023 - November 2023
Title: "Scanning Asteroseismic Measurements using Neural Networks".
Honours student: Tommy Lee, University of New South Wales, Sydney