

Education

- Sep 2024 – Current **PhD in Astrophysics**, *Trinity College Dublin*
Thesis: Equator-to-Pole Atmospheric Differences in Giant Extrasolar Worlds
Supervisor: Prof. Johanna Vos
- Aug 2022 – Jun 2024 **Masters in Astrophysics**, *Lund University*
Thesis: Using Exoplanets to Determine Photospheric Properties of Fast-Rotating A-type Stars
Supervisor: Dr. Jens Hoeijmakers
- Mar 2017 – Aug 2022 **Bachelor of Engineering Honours (Mechatronic Engineering) and Bachelor of Science (Advanced)**, *The University of Sydney*, Honours Class I
Majors: Space Engineering, Physics
Thesis: EEG System Design for Sleep Monitoring on a Wearable Biofeedback Device
Supervisor: Prof. Graham Brooker

Workshops

- Feb 2025 **La Silla Observing School**, *European Southern Observatory (ESO)*, Santiago/La Silla, Chile
- July 2024 **7th Institute of Space Sciences Summer School: Multiwavelength Approach to Exoplanetary Systems**, *The Institute of Space Sciences (ICE-CSIC/IEEC)*, Barcelona, Spain

Contributed Talks and Posters

- June 2025 **European Astronomical Society Annual Meeting Cork 2025**
- May 2025 **Pint of Science Ireland**
- May 2025 **Big Lund Exoplanet Get-Together**
- Dec 2024 **DUBlin STar formation, deBris dIsks and plaNets (DUSTBIN) meeting**
- Nov 2024 **Trinity College Dublin Astrophysics Seminar**
- July 2024 **Two HoRSEs Berlin**

Awards

- Dec 2024 **Trinity Travel Grant**, *Trinity College Dublin*
- Sep 2024 **Trinity Research Doctorate Award**, *Trinity College Dublin*
- Aug 2022 **Eleanor Sophia Wood Postgraduate Research Travelling Scholarship**, *The University of Sydney*
- July 2022 **Lund University Global Scholarship**, *Lund University*
- Jan 2021 **Engineering Sydney Industry Placement Scholarship**, *The University of Sydney*
- Jan 2019 **Vice Chancellor's Global Mobility Scholarship**, *The University of Sydney*

Publications

First-authored

1. **M. B. Lam**, H. J. Hoeijmakers, B. Prinoth, and B. Thorsbro, "Secrets in the shadow: High precision stellar abundances of fast rotating A-type exoplanet host stars through transit spectroscopy", 2024. DOI: [10.1051/0004-6361/202450624](https://doi.org/10.1051/0004-6361/202450624)
2. **M. B. Lam**, J. Vos, et al., "Equator-to-Pole Atmospheric Differences in Giant Exoplanet Analogues", (in prep.)

Co-authored

1. B. Prinoth, H. J. Hoeijmakers, B. M. Morris, **M. Lam**, et al., "An atlas of resolved spectral features in the transmission spectrum of WASP-189 b with MAROON-X", 2024. DOI: [10.1051/0004-6361/202349125](https://doi.org/10.1051/0004-6361/202349125)
2. H.J. Hoeijmakers et al. (Incl. **M. B. Lam**). "StarRotator: A model of the RM-effect in high-dispersion transit time-series spectra" (in prep.)

Outreach

I have been involved in several outreach efforts (see [here](#) and [here](#) for example) to promote astronomy to the wider public.

- Sep 2022 – Jun 2024 **ALVA Astronomy Club**, *Communications Officer*, Lund University
- Sep 2022 – Aug 2023 **Lund University Ambassador**, Lund University
- 2022 **Kulturnatten (Culture Night)**, *Lund Observatory*
- Aug 2021 – Jun 2022 **Sydney University Queer STEM (QUEST)**, *General Executive*, The University of Sydney
- Aug – Dec 2018 **Sydney University Astronomy Society**, *General Executive*, The University of Sydney