

Aline Novais

POSTDOCTORAL RESEARCHER · SCIENCE COMMUNICATOR

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EMPLOYMENT

Postdoctoral Fellow in Exoplanet Atmospheres · Lund University, Sweden 2024–PRESENT

EDUCATION

PhD in Astronomy · Federal University of Rio de Janeiro, Brazil [[Thesis](#)] 2019–2024
· Guest PhD Researcher at Ludwig Maximilian University of Munich, Germany February 1–July 31, 2023
Master Degree in Astronomy · Federal University of Rio de Janeiro, Brazil [[Thesis](#)] 2017–2019
Bachelor Degree in Astronomy · Federal University of Rio de Janeiro, Brazil [[Thesis](#)] 2012–2017
· Research at the National Observatory, Rio de Janeiro, Brazil 2015–2017

PUBLICATION

AS FIRST AUTHOR

4. **A. Novais**, C. Fisher, L. Ghezzi, D. Kitzmann, B. Thorsbro, K. Heng, 2025. “Parameter degeneracies associated with interpreting *HST* WFC3 transmission spectra of exoplanetary atmospheres.” Monthly Notices of the Royal Astronomical Society (MNRAS), v. 538, i. 4, p. 2521–2547. doi: 10.1093/mnras/staf397. [[arXiv](#)] [[PDF](#)]
3. A. Lueber, **A. Novais** (shared 1st author), C. Fisher, K. Heng, 2024. “Information content of *JWST* spectra of WASP-39b.” Astronomy & Astrophysics (A&A), v. 687, p. A110. doi: 10.1051/0004-6361/202348802. [[arXiv](#)] [[PDF](#)]
2. **A. Novais**, C. Fisher, L. Ghezzi, K. Heng, 2023. “Effects of pressure dependency in exoplanetary atmospheric retrieval.” Bulletin of the Brazilian Astronomical Society (SAB), v. 35, n. 1, p. 7-11. ISSN: 0101-3440. [[PDF](#)]
1. **A. Novais**, D. Andrade, H. Boechat-Roberty, 2020. “Formation and destruction of organic molecules in the upper atmosphere of *Titan*.” Bulletin of the Brazilian Astronomical Society (SAB), v. 32, n. 1, p. 10-11. ISSN: 0101-3440. [[PDF](#)]

OBSERVING PROPOSALS

AS PRINCIPAL INVESTIGATOR (PI)

1. **UVES Spectrograph @ VLT** · Cycle P116, 18.5 hours. *Program ID* 116.297R. P.I. A. Novais

AS CO-INVESTIGATOR (CO-I)

2. **CRILES+ Spectrograph @ VLT** · Cycle P115, 55.0 hours. *Program ID* 115.2857. P.I. B. Prinoth
1. **GHOST Spectrograph @ Gemini South** · Semester 2025A, 5.3 hours. *Program ID* GS-2025A-Q-121. P.I. L. Ghezzi

PRESENTATION

ORAL CONTRIBUTIONS

XVII Latin American Regional IAU Meeting (LARIM) · Montevideo, Uruguay November 28, 2023
XLVI Annual Meeting of the Brazilian Astronomical Society (SAB) · Rio de Janeiro, Brazil October 2, 2023
Goldschmidt · Lyon, France July 11, 2023
CN-2 “Planets and other Habitats” Science Afternoon · Garching, Germany March 6, 2023
XLV Annual Meeting of the Brazilian Astronomical Society (SAB) · Online September 28, 2022
Exoplanet Atmospheres Workshop · Online March 9, 2022
IV Annual Meeting of the Brazilian Society of Astrobiology (SBAstrobio) · Online November 26, 2021
Astrobiology Graduate Conference (AbGradCon) · Online September 17, 2021
XLIV Annual Meeting of the Brazilian Astronomical Society (SAB) · Online September 14, 2021
Astrobiology Graduates in Europe (AbGradE) · Online September 2, 2021
Exoplanet Atmosphere Characterization: from HST and Spitzer to JWST · Online March 11, 2021
1st Brazilian Women’s Meeting in Astrophysics, Gravitation and Cosmology · Online February 8, 2021
Precision Spectroscopy Stellar Connections: From Galaxy Evolution to Exoplanets · Online February 1, 2021
II Annual Meeting of the Brazilian Society of Astrobiology (SBAstrobio) · São Paulo, Brazil October 17, 2019
Astrochemistry LLAMA Meeting (ALLAM) · São Paulo, Brazil August 9, 2019
Astrobiology Graduate Conference (AbGradCon) · Salt Lake City, USA July 22, 2019

POSTER CONTRIBUTIONS

Astrobiology Graduates in Europe + Europlanet Early Career Network (AbGradEPEC) · La Palma, Spain	May 5, 2023
Exoplanets III · Online	July 31, 2020
XLIII Annual Meeting of the Brazilian Astronomical Society (SAB) · São Paulo, Brazil	September 12, 2019
XLII Annual Meeting of the Brazilian Astronomical Society (SAB) · São Paulo, Brazil	July 12, 2018
1st Annual Meeting of the Brazilian Society of Astrobiology (SBAstrobio) · São Paulo, Brazil	July 11, 2018
XL Annual Meeting of the Brazilian Astronomical Society (SAB) · Ribeirão Preto, Brazil	August 31, 2016

SUPERVISING EXPERIENCE**AS CO-SUPERVISOR**

Master Student: Alexandra Stockwell Murphy · Lund University	February 2025–July 2026
Mentor for Freshmen Students: “Astrobiology and Exoplanets” · Federal University of Rio de Janeiro	2019–2023

TEACHING EXPERIENCE

Assistant Lecturer: “Planetary Systems” (Master’s course) · Lund University	September 02–October 30, 2024
Teaching Traineeship: “Planetary Systems” (Bachelor’s course) · Federal University of Rio de Janeiro	2020
Teaching Traineeship: “Astrobiology” (Bachelor’s course) · Federal University of Rio de Janeiro	2019
Introduction Course: “Astrochemistry and the Molecules of Life” · Museum of Astronomy and Related Sciences (MAST)	May 2, 2019
Tutoring: “Physics IV – Optics, Special Relativity” (Bachelor’s course) · Federal University of Rio de Janeiro	2015

REFeree EXPERIENCE

Examining Committee for Master Thesis · Lund University	
· “The great divide in gas kinematics between cold and warm tracers in the early universe” by Eddie Larsson	June 17, 2025
Examining Committee for Bachelor Thesis · Lund University	
· “Characterization of the Galactic disks using t-SNE and k-means clustering” by Nicolai Dimkovski Gottschalk	June 4, 2025
· “Automated morphological classification of LMC-like galaxies through machine learning” by Marlin Mahmud	June 4, 2025
Examining Committee for Bachelor Thesis · Federal University of Rio de Janeiro	
· “Detailed Diagnosis of Absorption Lines in Solar Twin Stars” by Francielle Maria Antonio Silva	December 17, 2024
· “Size Determination of Small Solar System Bodies from Single-String Occultation Events” by Natasha Costa da Fonseca	August 30, 2024
· “Ionic Desorption of Methanol Ice in Different Space Environments” by Tarek Eduardo Haimuri Guimarães	February 23, 2024
· “Use of Machine Learning for Stellar Spectral Classification” by Julia Camões Alves	August 19, 2022
Abstract Reviewer for Astrobiology Graduate Conference (AbGradCon) · Online	March, 2023

GRANTS, FELLOWSHIPS, AND AWARDS

Research Grant · Royal Physiographic Society, from the Walter Gyllenberg Foundation · ~13 000 EUR	2024
International Research Scholarship · Institutional Program for Internationalization (PrInt), from the Brazilian Federal Agency for Support and Evaluation of Graduate Education (CAPES) · 10 200 EUR	February 1–July 31, 2023
PhD Scholarship · Brazilian Federal Agency for Support and Evaluation of Graduate Education (CAPES)	2019–2024
MSc Scholarship · Brazilian Federal Agency for Support and Evaluation of Graduate Education (CAPES)	2017–2019
Honorable Mention · Scientific Initiation Journey (JICON) at the National Observatory (ON/MCTIC)	2017

EXTRACURRICULAR ACTIVITIES

Article in Magazine · “Revista Brasileira de Astronomia”	September 30, 2024
Outreach Events, Planetarium, and Telescope Observations · “Kulturnatten”, “ForskarFredag”, “Astronomins dag och natt”	2024–PRESENT
Outreach Talks and Roundtable Discussions · Valongo Observatory and Institute of Physics, Federal University of Rio de Janeiro, “Pint of Science Brazil”	2019, 2024
Interviews · “Folha de São Paulo”, “Superinteressante”, “g1”, “CNN Brazil”, “Canal Tech”	2019–PRESENT
Science Outreach on Social Media · Twitter, Bluesky, Instagram, Tiktok, YouTube	2017–PRESENT
Graduate Students Representative · Valongo Observatory, Federal University of Rio de Janeiro	2017–2019, 2021–2022