

### POSTDOCTORAL RESEARCHER · SCIENCE COMMUNICATOR

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# **EMPLOYMENT**

**Postdoctoral Fellow in Exoplanet Atmospheres** · Lund University

2024-PRESENT

### **EDUCATION**

Guest PhD ResearcherLudwig Maximilian University of MunichFebruary 1–July 31, 2023PhD in AstronomyValongo Observatory, Federal University of Rio de Janeiro[Read Thesis]2019–2024Master Degree in AstronomyValongo Observatory, Federal University of Rio de Janeiro[Read Thesis]2017–2019Bachelor Degree in AstronomyValongo Observatory, Federal University of Rio de Janeiro[Read Thesis]2012–2017Research at the National Observatory, Rio de Janeiro2015–2017

## **PUBLICATION**

- 4. **A. Novais**, C. Fisher, K. Heng, D. Kitzmann, B. Thorsbro, L. Ghezzi (in review). "Parameter degeneracies associated with interpreting HST WFC3 transmission spectra of exoplanetary atmospheres."
- 3. A. Lueber, **A. Novais**, 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 CO-INVESTIGATOR (CO-I)

1. **GHOST Spectrograph @ Gemini South** · Semester 2025A, 5.3 hours. *Program ID GS-2025A-Q-121* 

### **PRESENTATION**

# **ORAL CONTRIBUTIONS**

XVII Latin American Regional IAU Meeting (LARIM) · Montevideo, Uruguay	November 28, 2023
XLVI Anual 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 Anual Meeting of the Brazilian Astronomical Society (SAB) · Online	September 28, 2022
Exoplanet Atmospheres Workshop · Online	March 9, 2022
IV Anual Meeting of the Brazilian Society of Astrobiology (SBAstrobio) · Online	November 26, 2021
Astrobiology Graduate Conference (AbGradCon) · Online	September 17, 2021
XLIV Anual Meeting of the Brazilian Astronomical Society (SAB) · Online	September 14, 2021
Astrobiology Graduates in Europe (AbGradE) · Online	September 2, 2021
<b>Exoplanet Atmosphere Characterization: from HST and Spitzer to JWST</b> · Online	March 11, 2021
1st Brazilian Women's Meeting in Astrophysics, Gravitation and Cosmology · Online	February 8, 2021
<b>Precision Spectroscopy Stellar Connections: From Galaxy Evolution to Exoplanets</b> · Online	February 1, 2021
II Anual Meeting of the Brazilian Society of Astrobiology (SBAstrobio) · São Paulo, Brazil	October 17, 2019
Astrochemistry LLAMA Meeting (ALLAM) · São Paulo, Brazil	August 9, 2019
<b>Astrobiology Graduate Conference (AbGradCon)</b> · Salt Lake City, USA	July 22, 2019
Precision Spectroscopy 2018: From the First Stars to Exoplanets · São Paulo, Brazil	September 10–11, 2018

### **POSTER CONTRIBUTIONS**

Astrobiology Graduates in Europe + Europlanet Early Career Network (AbGradEPEC) · La Palma, Spain May 5, 2023

Exoplanets III · Online July 31, 2020

XLIII Anual Meeting of the Brazilian Astronomical Society (SAB) · São Paulo, Brazil September 12, 2019

XLII Anual Meeting of the Brazilian Astronomical Society (SAB) · São Paulo, Brazil July 12, 2018

1st Anual Meeting of the Brazilian Astronomical Society (SAB) · Ribeirão Preto, Brazil August 31, 2016

### **TEACHING EXPERIENCE**

Assistant Lecturer: "Planetary Systems" (Master's course) · Lund University September 02–October 30, 2024

Mentor for Freshmen Students: "Astrobiology and Exoplanets" · Federal University of Rio de Janeiro (UFRJ) 2021–2023

Teaching Traineeship: "Planetary Systems" (Bachelor's course) · Federal University of Rio de Janeiro (UFRJ) 2020

Teaching Traineeship: "Astrobiology" (Bachelor's course) · Federal University of Rio de Janeiro (UFRJ) 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 (UFRJ) 2015

### REFEREE EXPERIENCE

**Examining Committee for Bachelor Thesis "Detailed Diagnosis of Absorption Lines in Solar Twin Stars" by Francielle Maria Antonio Silva** · Federal University of Rio de Janeiro December 17, 2024

**Examining Committee for Bachelor Thesis "Size Determination of Small Solar System Bodies from Single-String Occultation Events" by Natasha Costa da Fonseca** · Federal University of Rio de Janeiro August 30, 2024

**Examining Committee for Bachelor Thesis "Ionic Desorption of Methanol Ice in Different Space Environments" by Tarek Eduardo Haimuri Guimarães** · Federal University of Rio de Janeiro

February 23, 2024

Abstract Reviewer for Astrobiology Graduate Conference (AbGradCon) 2023 · Online

**Research Grant** · Royal Physiographic Society, from the Walter Gyllenberg Foundation ·  $\sim$ 13 000 EUR

March, 2023

2024

**Examining Committee for Bachelor Thesis "Use of Machine Learning for Stellar Spectral Classification" by Julia Camões Alves** · Federal University of Rio de Janeiro

August 19, 2022

## **GRANTS, FELLOWSHIPS, AND AWARDS**

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 September 30, 2024

"Revista Brasileira de Astronomia"

Science Outreach Events, Planetarium, and Telescope Observations 2024-PRESENT

"Kulturnatten", "ForskarFredag", "Astronomins dag och natt"

Science Outreach Talks and Roundtable Discussions 2018–PRESENT

Valongo Observatory (OV/UFRJ), Institute of Physics (IF/UFRJ), "Pint of Science Brazil"

Interviews, Podcasts, and Live Streams 2019–PRESENT

"Superinteressante", "g1", "CNN Brazil", "Canal Tech"

Science Outreach on Social Media 2017-PRESENT

Twitter, Bluesky, Instagram, Tiktok, YouTube

**Graduate Students Representative** 2017–2019, 2021–2022

Valongo Observatory, Federal University of Rio de Janeiro