

# Thiago Ferreira dos Santos

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Last update: July 30, 2025

## EDUCATION

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### Yale University

Ph.D. in Astronomy

08/2023 – Present

New Haven (CT), US

### Universidade de São Paulo – Instituto de Astronomia, Geofísica e Ciências Atmosféricas

M.Sc. in Astronomy

08/2021 – 06/2023

São Paulo (SP), Brazil

Dissertation: [Unveiling Planetary Systems in Solar Twins with High-Precision Radial Velocity](#)

Advisor: Jorge Luis Meléndez Moreno, Ph.D.

### Universidade Federal de Santa Catarina

B.Sc. in Physics

03/2016 – 08/2021

Florianópolis (SC), Brazil

Advisor: Roberto Kalbusch Saito, Ph.D.

## PUBLICATIONS

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Full record at [ADS Library](#) | [Google Scholar](#)

**Metrics:** 90 citations, h-index = 5 (July 2025)

### Referred Publications

10. Galarza J. Y., Lorenzo-Oliveira, D., **Ferreira T.**, et al., 2025, ApJ, 983, 70  
[HIP 8522: A Puzzling Young Solar Twin with the Lowest Detected Lithium](#)
9. Fermiano, V., et al., (incl. **Ferreira, T.**), 2024, A&A, 690, L7.  
[The Young Exoplanetary System TOI-4562: Confirming The Presence of a Third Body in the System](#)
8. **Ferreira, T.**, Rice, M., et al., 2024, AJ, 168, 145.  
[SOLES XI. The Aligned Orbit of TOI-2533 b, a Transiting Brown Dwarf Orbiting an F8-type Star](#)
7. Galarza J. Y., **Ferreira T.**, Lorenzo-Oliveira, D., et al., 2024, AJ, 168, 91.  
[TOI-1173 A b: The First Inflated Super-Neptune in a Wide Binary System](#)
6. Galarza J. Y., Reggiani H., **Ferreira T.**, et al., 2024, ApJ, 974, 122  
[Detailed abundances of the planet-hosting TOI-1173 A/B system: Possible evidence of planet engulfment in a very wide binary](#)
5. Saito R. K., et al., (incl. **Ferreira, T.**), 2024, A&A, 689, A148  
[The VISTA Variables in the Vía Láctea eXtended \(VVVX\) ESO public survey: Completion of the observations and legacy](#)
4. **Ferreira T.**, Saito R. K., Minniti D., et al., 2024, MNRAS, 527, 10737.  
[A benchmark white dwarf-ultracool dwarf wide field binary](#)
3. Botan, E., et al., (incl. **Ferreira, T.**), 2021, MNRAS, 504, 654.  
[Unveiling short-period binaries in the inner VVV bulge.](#)
2. Herpich, F.R., et al., (incl. **Ferreira, T.**), 2021, A&A, 647, A169.  
[VVV survey near-infrared colour catalogue of known variable stars](#)
1. **Ferreira, T.**, Saito, R.K., Minniti, D., et al., 2019, MNRAS, 586, 1220.  
[The asymptotic evolution of the stellar merger V1309 Sco: a Blue Straggler in the making?](#)

## Non-Referred Publications & Conference Proceedings

8. **Ferreira, T.** & Meléndez, J., 2022. Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun. *HIP 102152b: A low-mass planet candidate around an old solar twin*
7. **Ferreira T.S.**, Saito, R.K., & Minniti D., 2021, The Astronomer's Telegram #14626. *VVV near-IR observations of the X-ray transient Swift J174038.1-273712.*
6. **Ferreira T.S.**, Saito, R.K., & Minniti D., 2021, The Astronomer's Telegram #14625. *VVV near-IR observations of V6585 Sgr progenitor.*
5. **Ferreira dos Santos, T.** & Kalbusch Saito, R. 2020, Planets 2020, Ground and Space Observatories 11. *Exoplanetary transits in the Galactic bulge.*
4. **Ferreira, T.**, Saito, R.K., Gran, F. et al. 2018, RNAAS, 2, 39. *VVV Survey Orbital Period Confirmation for the Cataclysmic Variable IGR J17014-4306.*
3. Masetti, N., **Ferreira, T.S.**, Saito, R.K., et al. 2018, The Astronomer's Telegram #11992. *The possible VVV near-infrared counterpart of IGR J17503-2636.*
2. Kammers, R., **Ferreira, T.S.**, Saito, R.K. & Minniti, D. 2018. The Astronomer's Telegram #11365. *The likely progenitor of Nova ASASSN-18ds.*
1. **Ferreira, T.S.** & Saito, R.K. 2017, The Astronomer's Telegram #10780. *The likely progenitor of Nova ASASSN-16ra.*

## RESEARCH EXPERIENCE

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<b>Pre-Thesis Doctoral Research</b> <i>Advisors:</i> Earl P. Bellinger, Ph.D., and Malena Rice, Ph.D.	08/2023 – Present
<b>M.Sc. Graduate Research Assistant</b> <b>Seeking Solar System Analogues</b> <i>Advisor:</i> Jorge Luis Meléndez Moreno, Ph.D.	08/2021 – 08/2023
<b>Undergraduate Research Assistant</b> <b>Time-series analysis of near-IR variabilities with the ESO/VVV &amp; VVV-X surveys</b> <i>Advisor:</i> Roberto Kalbusch Saito, Ph.D.	08/2017 – 08/2021

## OBSERVING EXPERIENCE & ACCEPTED PROPOSALS

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\*\*\* *Observations personally conducted*

<b>GHOST / Gemini South, Cerro Pachón (Chile) – DDT - 5.6 hrs</b>	2025A
<b>MIKE/PFS / Clay–Magellan II, Las Campanas Observatory (Chile) – 2 nights</b> <i>Confirming Thick Disc Membership for Known Exoplanets and TESS Objects of Interest</i>	2025A
<b>***WINERED / Clay–Magellan II, Las Campanas Observatory (Chile) – 1 night</b> <i>Investigating Atmospheric Outflows in a Neptunian-Desert Planet Using He III <math>\lambda 10\,833\text{ \AA}</math></i>	2025A
<b>MIKE / Clay–Magellan II, Las Campanas Observatory (Chile) – 2 nights</b> <i>Correlated Abundances of Exoplanets and Their Host Stars? Constraints from Polluted White Dwarfs in Stellar Binaries</i>	2024B
<b>MIKE / Clay–Magellan II, Las Campanas Observatory (Chile) – 4 nights</b> <i>Exploring the Star-Planet Connection with Host Solar-Type Stars</i>	2024B
<b>***HARPS / ESO 3.6-m, La Silla Observatory (Chile) – 6 nights</b> <i>How rare are analogues of the Solar System?</i>	2023A

## TEACHING APPOINTMENTS

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### **ASTR 220 - Galaxies and Cosmology, Yale University**

*Instructor:* Robert Zinn

Jan 2025 - May 2025

### **ASTR 110 - Planets and Stars, Yale University**

*Instructor:* Michael Faison

Aug 2024 - Dec 2024

### **AGA 0502 - Planets and Planetary Systems, IAG/USP**

*Instructor:* Jorge Meléndez

Aug 2022 - Dec 2022

## FELLOWSHIPS, AWARDS & GRANTS

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- GSAS Yale Graduate Fellowship Aug 2023 – Present
- Boris Garfinkel Prize Fellowship in Astronomy Aug 2023
- CAPES M.Sc. Research Fellowship, IAG/USP, Brazil Aug 2021 – Jul 2023
- exoLaTam 2022 Travel Award Dec 2022
- Teaching Improvement Program, IAG/USP Aug 2022 – Dec 2022
- ESO/ALMA Planets2020 Workshop Travel Award Mar 2020
- CNPq Undergraduate Research Fellowship, Department of Physics, UFSC, Brazil 2017 – 2021

## CONFERENCE PRESENTATIONS

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15. 9th TESS/16th Kepler Asteroseismic Science Consortium Workshop – Vienna, Austria Jul 2025  
On the Structure and Oscillations of the First Stars [Poster]
14. exoLaTam 22 – Santiago, Chile Dec 2022  
HIP 102152b: A Low-Mass Planet Candidate Around an Old Solar Twin [Talk].
13. XLV Annual Meeting of the Brazilian Astronomical Society - Virtual Oct 2022  
HIP 102152b: A Low-Mass Planet Candidate Around an Old Solar Twin [Poster & Talk].
12. Cool Stars 21 - Virtual Jul 2022  
HIP 102152b: A Low-Mass Planet Candidate Around an Old Solar Twin [Poster].
11. 31° Seminário de Iniciação Científica, UFSC - Virtual Jul 2021  
Studies of Stellar Astrophysics and Exoplanets in the Central Region of the Milky Way [Talk].
10. Exoplanets III - Virtual Jul 2021  
A Box-Fitting Implementation for the Transit Method Detection of Exoplanets [Poster].
9. Sagan Exoplanet Summer Workshop - Virtual Jul 2021  
Time-Series Analysis of Near-IR Variabilities on VVV M Dwarf Stars [Poster].
8. 30° Seminário de Iniciação Científica, UFSC - Virtual Oct 2020  
Transiting Extrasolar Planets Orbiting Red Dwarf Stars Towards the Galactic Bulge [Talk].
7. ALMA Planets2020 Workshop – Santiago, Chile Mar 2020  
Exoplanetary Transits in the Galactic Bulge [Poster].
6. VIII PPGFSC/UFSC Meeting – Florianópolis, Brazil Feb 2020  
The Asymptotic Evolution of the Blue Straggler V1309 Sco [Poster].
5. 29° Seminário de Iniciação Científica, UFSC - Virtual Oct 2019  
Stellar Variability Towards the Central Region of the Milky Way with the VVV/VVV-X Surveys [Talk].

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| 4. EWASS 2019 - European Astronomical Society<br>Infrared Counterparts of Gaia Alerts (Ivanov+ incl. Ferreira, T.) [Poster].                                   | Jun 2019 |
| 3. 28° Seminário de Iniciação Científica, UFSC - Virtual<br>Stellar Variability Towards the Central Region of the Milky Way with the VVV/VVV-X Surveys [Talk]. | Oct 2018 |
| 2. VVV & VVV-X Science Workshop – Florianópolis, Brazil<br>On the Photometric Study of the Cataclysmic Variable IGR J17014-4306 [Poster].                      | Apr 2018 |
| 1. VI PPGFSC/UFSC Meeting – Florianópolis, Brazil<br>Stellar Variability Towards the Central Region of the Milky Way with the VVV/VVV-X Surveys [Poster].      | Feb 2018 |

## WORKSHOPS AND ADVANCED SCHOOLS ATTENDED

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| • MESA (Modules for Experiments in Stellar Astrophysics) Summer School – Leuven, Belgium | Jul 2025 |
| • Yale Tinsley Workshop – New Haven, USA   | Oct 2024 |
| • New York Area Exoplanets Meeting – New York, USA                                       | May 2024 |
| • exoLaTam 22 – Santiago, Chile  | Dec 2022 |
| • ESO The Star-Planet Connection Workshop - Virtual                                      | Oct 2021 |
| • XIII CBPF School - Virtual   | Aug 2021 |
| • ZTF Summer School on Variable Stars - Virtual  | Aug 2021 |
| • Sagan Exoplanet Summer Workshop - Circumstellar Disks and Young Planets – Virtual      | Jul 2021 |

## ACADEMIC REFERENCES

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### Jorge Luis Meléndez Moreno, PhD (MSc Advisor)

Departamento de Astronomia/IAG, Universidade de São Paulo – Brazil

[jorge.melendez@iag.usp.br](mailto:jorge.melendez@iag.usp.br)

### Roberto Kalbusch Saito, PhD (Undergraduate Advisor)

Departamento de Física, Universidade Federal de Santa Catarina – Brazil

[robsaito@gmail.com](mailto:robsaito@gmail.com)

### Dante Minniti, PhD

Instituto de Astrofísica, Facultad de Ciencias Exactas, Universidad Andres Bello – Chile  
Vatican Observatory, I-00120 Vatican City State, Italy

[vvvdante@gmail.com](mailto:vvvdante@gmail.com)

## COMPLEMENTARY INFORMATION

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### Languages

**Portuguese** (native), **English** (fluent), **Spanish** (basic).

### Other

- Programming:  $\text{\LaTeX}$ , PYTHON (9+ years); Little experience with C, R, JAVA, BASH.
  - Databases & Softwares: [VISTA/ESO](#) Science Archive, TOPCAT, VIZIER, IRAF/DS9, VOSA, MESA+GYRE, etc.
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