Thiago Ferreira dos Santos

Contact: thiago.dossantos@yale.edu | *Website*: https://thiagofst.github.io | ORCID: 0000-0003-2059-470X
Address: Department of Astronomy, Yale University, 219 Prospect St., New Haven, CT 06511, USA | Office: KT626
Last update: July 28, 2025

Education

Yale University 08/2023 – Present
Ph.D. in Astronomy *New Haven (CT), US*

Universidade de São Paulo – Instituto de Astronomia, Geofísica e Ciências Atmosféricas 08/2021 – 06/2023
M.Sc. in Astronomy *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 03/2016 – 08/2021
B.Sc. in Physics *Florianópolis (SC), Brazil*
Advisor: Roberto Kalbusch Saito, Ph.D.

Publications

Full record at ADS Library (1) | 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

Pre-Thesis Doctoral Research 08/2023 – Present
Advisors: Earl P. Bellinger, Ph.D., and Malena Rice, Ph.D.

M.Sc. Graduate Research Assistant 08/2021 – 08/2023
Seeking Solar System Analogues
Advisor: Jorge Luis Meléndez Moreno, Ph.D.

Undergraduate Research Assistant 08/2017 – 08/2021
Time-series analysis of near-IR variabilities with the ESO/VVV & VVV-X surveys
Advisor: Roberto Kalbusch Saito, Ph.D.

Observing Experience & Accepted Proposals

*** *Observations personally conducted*

GHOST / Gemini South, Cerro Pachón (Chile) – DDT - 5.6 hrs 2025A

MIKE/PFS / Clay–Magellan II, Las Campanas Observatory (Chile) – 2 nights 2025A
Confirming Thick Disc Membership for Known Exoplanets and TESS Objects of Interest

***WINERED / Clay–Magellan II, Las Campanas Observatory (Chile) – 1 night** 2025A
Investigating Atmospheric Outflows in a Neptunian-Desert Planet Using He III λ10 833 Å

MIKE / Clay–Magellan II, Las Campanas Observatory (Chile) – 2 nights 2024B
Correlated Abundances of Exoplanets and Their Host Stars? Constraints from Polluted White Dwarfs in Stellar Binaries

MIKE / Clay–Magellan II, Las Campanas Observatory (Chile) – 4 nights 2024B
Exploring the Star-Planet Connection with Host Solar-Type Stars

***HARPS / ESO 3.6-m, La Silla Observatory (Chile) – 6 nights** 2023A
How rare are analogues of the Solar System?

Teaching Appointments

ASTR 220 - Galaxies and Cosmology, Yale University Jan 2025 - May 2025
Instructor: Robert Zinn

ASTR 110 - Planets and Stars, Yale University Aug 2024 - Dec 2024
Instructor: Michael Faison

AGA 0502 - Planets and Planetary Systems, IAG/USP Aug 2022 - Dec 2022
Instructor: Jorge Meléndez

Fellowships, Awards & Grants

- 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

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].

4. EWASS 2019 - European Astronomical Society — Jun 2019
   Infrared Counterparts of Gaia Alerts (Ivanov+ incl. Ferreira, T.) [Poster].

3. 28° Seminário de Iniciação Científica, UFSC - Virtual — Oct 2018
   Stellar Variability Towards the Central Region of the Milky Way with the VVV/VVV-X Surveys [Talk].

2. VVV & VVV-X Science Workshop – Florianópolis, Brazil — Apr 2018
   On the Photometric Study of the Cataclysmic Variable IGR J17014-4306 [Poster].

1. VI PPGFSC/UFSC Meeting – Florianópolis, Brazil — Feb 2018
   Stellar Variability Towards the Central Region of the Milky Way with the VVV/VVV-X Surveys [Poster].

Workshops and Advanced Schools Attended

- 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

Jorge Luis Meléndez Moreno, PhD (MSc Advisor) — jorge.melendez@iag.usp.br
Departamento de Astronomia/IAG, Universidade de São Paulo – Brazil

Roberto Kalbusch Saito, PhD (Undergraduate Advisor) — robsaito@gmail.com
Departamento de Física, Universidade Federal de Santa Catarina – Brazil

Dante Minniti, PhD — vvvdante@gmail.com
Instituto de Astrofísica, Facultad de Ciencias Exactas, Universidad Andres Bello – Chile
Vatican Observatory, I-00120 Vatican City State, Italy

Complementary Information

Languages

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

Other

- Programming: 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.