Curriculum Vitae

Francisco Neme Campos Dahab

1 Personal Information

• Name: Francisco Neme Campos Dahab

• Gender: Male

• Place and Date of Birth: Campinas, Brazil – 12/20/2001

• Address: Av. Padre Pereira de Andrade, 127, Apt. 64 Block CA – São Paulo, SP, Brazil 05469-901

• Email: f.dahab@unesp.br

2 Academic Education

2.1 Graduate Education

• Master's degree in Physics (Ongoing): Institute of Theoretical Physics, São Paulo State University, Brazil. Period: 2024 – (expected 2026)

2.2 Undergraduate Education

• Bachelor's degree in Physics: Institute of Physics of the University of São Paulo, Brazil.

Period: 2020 – 2023. GPA: 9.4/10 (Rank 1/43)

2.3 Additional relevant courses

• 12th CERN Latin-American School of High-Energy Physics: European Organization for Nuclear Research (CERN)

Year: 2025

• III Joint ICTP-SAIFR/ICTP-Trieste School on Particle Physics: International Centre for Theoretical Physics - South American Institute for Fundamental Research (ICTP-SAIFR).

Year: 2024

• School on Origin of Matter Domination in the Universe: International Centre for Theoretical Physics - South American Institute for Fundamental Research (ICTP-SAIFR).

Year: 2023

• 7th International Summer School on Intelligent Signal Processing for Frontier Research and Industry (INFI-ERI): Hosted at the University of São Paulo (USP).

Year: 2023

• Perimeter Scholar International Start (PSI-Start) Online School: Perimeter Institute for Theoretical Physics (PI).

Year: 2023

• Journeys into Theoretical Physics: International Centre for Theoretical Physics - South American Institute for Fundamental Research (ICTP-SAIFR).

Year: 2023

• Jayme Tiomno Physics Winter School Minicourse on Beyond the Standard Model Physics: Institute of Physics of the University of São Paulo (IF-USP).

Year: 2022

• Jayme Tiomno Physics Winter School Minicourse on an Introduction to Quantum Field Theory in Curved Spacetime: Institute of Physics of the University of São Paulo (IF-USP).

Year: 2022

• Reading Course on the Foundations of Quantum Mechanics: Under the advisory of Prof. Marcelo Terra Cunha.

Year: 2021

 $\bullet \ \ International \ Summer \ School \ for \ \ Young \ Physicists: \ Perimeter \ Institute \ for \ Theoretical \ Physics \ (PI).$

Year: 2018

• Minicourse on Relativity, Gravitation and Quantum Mechanics: Institute of Theoretical Physics at the São Paulo State University (IFT-UNESP)

Year: 2017

3 Research Experience

• Master's Research Project: Under the advisory of Prof. Ricardo D'Elia Matheus, at the Institute of Theoretical Physics at the São Paulo State University

Title of the project: Probing Higgs Compositeness at FCC-ee

Period: 2024 - 2026

• Undergraduate Research Project: Under the advisory of Prof. Ricardo D'Elia Matheus, at the Institute of Theoretical Physics at the São Paulo State University

Title of the project: Introduction to Quantum Field Theory and Particle Physics with applications on derivations via Mathematica

Period: 2022 – 2023

• Undergraduate Research Project: Under the advisory of Prof. Orlando Luis Goulart Peres, at the Gleb Wataghin Institute of Physics of the University of Campinas

Title of the project: Physics of Neutrino Oscillation

Period: 2018 – 2019

4 Funding and Scholarships

- Master's Scholarship from The São Paulo Research Foundation (FAPESP) 2024 Ongoing
- Master's Scholarship from CAPES 2024 2024
- Undergraduate Research Scholarship from FAPESP 2023 2024

5 Awards and Achievements

- Special Prize for Excellent Undergraduate Poster Contribution, 7th Intelligent Signal Processing for Frontier Research and Industry (INFIERI), 2023
- Unified Examination of Graduate Courses in Physics (EUF): National undergraduate level assessment for access to graduate courses 99.4th percentile
- Third Place, 2018 Brazilian Qualifiers for the International Young Physicists Tournament
- Gold Medal, 2017 Brazilian Astronomy Olympiad
- Gold Medal, 2017 Brazilian Physics Olympiad
- Silver Medal, 2017 São Paulo State Physics Olympiad

- Gold Medal, 2016 Brazilian Physics Olympiad
- Bronze Medal, 2016 São Paulo State Physics Olympiad
- Bronze Medal, 2014 São Paulo State Physics Olympiad
- Bronze Medal, 2013 São Paulo State Physics Olympiad
- Gold Medal, 2013 Math Kangaroo

6 Additional Skills

6.1 Languages

• Portuguese: Fully proficient

• English: Fully proficient

• Spanish: Reading and Listening

6.2 Programming

• Mathematica: Proficient

• Python: Some experience

6.3 Teaching

- Teaching assistant for Quantum Field Theory II 2025;
- Gave supplementary lectures intended to help freshmen in 2022 and 2023;
- Volunteered as a teacher of mathematics and physics at a public school from 2018 to 2019.