



FRANCISCO G. MAION

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EDUCATION

PhD | *Computational Cosmology*

Donostia International Physics Center

Supervisor - Dr. Raúl E. Angulo

Sep. 2021 – Sep. 2025 (Projected)

Donostia/San Sebastián, Spain

Research Internship | *Computational Cosmology*

Donostia International Physics Center

Supervisor - Dr. Raúl E. Angulo

Feb. 2021 – Apr. 2021

Donostia/San Sebastián, Spain

Master of Science | *Cosmology*

Universidade de São Paulo

Supervisor - Prof. Dr. L. Raul W. Abramo

Apr. 2019 – Aug. 2021

São Paulo, Brazil

Abstract: The main objective of this project has been to perform an analysis of real data from the VIPERS survey using multi-tracer analysis methods, in order to assess whether they are capable of improving the constraints on the cosmological parameters. This involved the development of a power spectrum estimation pipeline, and careful forward modeling of the systematic effects into the theoretical models, to ensure we would obtain unbiased values for the cosmological parameters.

Bachelor of Science | *Physics*

Universidade de São Paulo

Mar. 2015 – Jan 2019

São Paulo, Brazil

SUMMER COURSES

General Relativity | *Graduate Level*

IFT - Unesp / ICTP - SAIFR

Jan. 2019 – Feb. 2019

São Paulo, Brasil

Functional Analysis | *Graduate Level*

IMPA

Jan. 2018 – Feb. 2018

Rio de Janeiro, Brazil

Introduction to Linear Algebra | *Undergraduate Level*

IMPA

Jan. 2017 – Feb. 2017

Rio de Janeiro, Brazil

HONORS AND AWARDS

Prêmio Vídeo Pós-Graduação USP

Prize given to best outreach video made by a graduate student in the area of Exact and Earth Sciences.

2019

FAPESP M.Sc. Fellowship

Highly competitive grant given by state funding agency.

2019-2021

FAPESP Undergraduate Fellowship

Highly competitive grant given by state funding agency.

2017-2018

TEACHING EXPERIENCE

Cosmology (5 Day Workshop)

Universidade de São Paulo

Aug. 2021

São Paulo, Brazil

Physics I (Teaching Assistant)

Universidade de São Paulo

Jan. 2019 - Jul. 2019

São Paulo, Brazil

Physics I (Teaching Assistant)

Universidade de São Paulo

Jan. 2020 - Jul. 2020

São Paulo, Brazil

SKILLS**Languages:** Portuguese (Native), English (C2)**Programming:** Python (NumPy, SciPy, Matplotlib), C, emcee, CAMB**Document Creation:** Profficient LaTeX user

COMMUNITY INVOLVEMENT**Preparatory Course for Underprivileged Students**

Physics teacher at a preparatory course focusing on university admission exams.

Jan. 2019 – Aug. 2020

São Paulo, Brazil

SCIENTIFIC MEETINGS ATTENDED**Summer Cosmology School**

University of Michigan

Jan. 2019

Online

III Joint ICTP-Trieste/ICTP-SAIIR School on Observational Cosmology

IFT - Unesp / ICTP - SAIIR / ICTP - Trieste

Jun. 2020

São Paulo, Brazil