

Alisson M. A. Silva

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Education	University of Brasilia (UnB), Brazil 2017-21 Bachelor in Physics
	IFT-Unesp, Brazil 2022-24 Master of Science (Physics)
Grants and Awards	Scientific Initiation Scholarship Program (PIBIC) 2019-20 University of Brasilia Foundation (FUB)
	Scientific Initiation Scholarship Program (PIBIC) 2020-21 National Council for Scientific and Technological Development (CNPq)
Research Projects	Gauge Symmetries 2019-20 Advisor: Marcos Duarte Maia The project aims to develop and publish an introductory article on gauge theory based on the book by professor Marcos Duarte Maia, "Geometry of the Fundamental Interactions" published by Springer in 2011.
	f(R) Theories of Gravity and Applications 2020-21 Advisor: Daniel Müller The most recent motivations for the study of f (R) theories are due to the presence of anisotropies detected by the PLANCK satellite, which put into play the veracity of the inflation model. The current project aims to study f (R) theories as a more viable model to explain the expansion phase of the universe in the presence of anisotropies.
	Noncommutative Geometry applied to the SM 2020-21 Advisor: Aleksandr Nikolaievich Pinzul The main motivation for the current project is to study a novel approach to the Standard Model which was pioneered in the works of A. Connes and collaborators based on the theory of non-commutative geometry. It radically changes the point of view on the Standard Model (SM), shifting the main stress to the geometrical aspects of the theory. Within this approach gravity and the other three forces get unified, on the classical level, becoming the fluctuations of some generalized geometry.

Work Experience	Mathematical Foundations of Physics A	2018
	Teacher Assistantship	
	Calculus II	2019
	Teacher Assistantship	
	Relativity and Quantum Physics	2020
	Teacher Assistantship	
	Quantum Mechanics A	2021
	Teacher Assistantship	
	Quantum Mechanics B	2021
	Teacher Assistantship	
Language Skills	Portuguese: Native	
	English: Fluent (Cambridge CPE certificate)	
	German: Intermediate (Goethe B2 certificate)	
	Hebrew: Beginner	
Technical Skills	Python Programming	
	R Programming	
	Data Analysis and Visualization	
	* <u>Online portfolio at:</u> github.com/itsalissosilva	
Extracurriculars	Tutorial Education Program (PET)	2019-21
	The Tutorial Education Program (PET) is a program instituted by CNPQ to bring together students who are willing to actively improve the course they are a part of. The groups actions are based on three pillars: research, education and extension.	

Support to the Brazilian Physics Olympiad (OBF) 2019-21

This is a project from the physics institute at UnB for coordinating the Brazilian Physics Olympiads (OBF) on a regional level. The students from the physics course correct tests and teach classes for high school students competing in the olympiads.

Events Attended **XII CBPF School (Brazilian Center for Research in Physics)** 2019

VIII Roberto Salmeron School (UnB) 2019

II Joint ICTP-Trieste/ICTP-SAIFR School on Particle Physics 2020

Joint ICTP-SAIFR/MITP Summer School on Particle Physics 2022

Workshop on Strongly Interacting Matter (ICTP-SAIFR) 2022

Events Organized **XIV Physics Week (UnB)** 2019

Organized the XIV Physics Week together with the PET team at UnB. Activities involved included inviting visiting scientists, searching for accommodations and hosting seminars.

III ICTP Summer School for Young Physicists (ICTP-SAIFR) 2023

Worked as a tutor and taught an introductory course on Quantum Computing during the third edition of ICTP-SAIFR Summer school for Young Physicists.