PERSONAL INFORMATIONS

Claudio Gambino

EDUCATION

- 2022 – Now, **PhD**, University of Rome "La Sapienza"
- 2020 – 2022, **Master Degree**, Theoretical Physics, University of Rome "La Sapienza", 110/110 cum laude
- 2017 – 2020, **Bachelor Degree**, Physics, University of Rome "La Sapienza", 110/110 cum laude

MASTER THESIS

- Title: The Reissner-Nordström-Tangherlini solution from graviton and photon emission processes
- Supervisor: Fabio Riccioni
- Abstract: Analysis on how classical gravity emerges from quantum gravity processes and computation of both metric and electromagnetic potential associated to a Reissner-Nordström-Tangherlini black hole at third post-Minkowskian order from scattering amplitudes in quantum gravity as an effective field theory. Discussion on the renormalization procedure of the classical observables by means of non-minimal coupling terms.

BACHELOR THESIS

- Title: Ultra-cold neutrons in gravitational field
- Supervisor: Guido Martinelli
- Abstract: Characterization of a model which describes bound states of ultracold neutrons in a gravitational potential and discussion of experimental techniques to measure them. Analysis of possible implementation on ultracold antihydrogen atoms and further applications.

SCHOLARSHIPS

Feb 2022--Jen 2022 Scholarship for talented students for tutor position referred to the course of Electromagnetism and Circuit Laboratory of the Bachelor Degree in Physiscs at University of Rome "La Sapienza".
Examiner of the laboratory reports of the students.

Feb 2022--Jul 2022 Scholarship for talented students for assistant position referred to the course of Physics I of the Bachelor Degree in Chemistry Sciences at University of Rome "La Sapienza".
Assistant to the course in form of frontal lectures of classical mechanics.

Sep 2021--Feb 2022 Scholarship for talented students for tutor position referred to the course of Calculus Laboratory of the Bachelor Degree in Physiscs at University of Rome "La Sapienza.
Assistant during the frontal laboratory exercises.

2019--2022 Scholarship for talented students for managing the Informational Student Point of the Physics Department at the University of Rome "La Sapienza".

Lingua madre Italiano

Altre lingue

	COMPRENSIONE		PARLATO		PRODUZIONE SCRITTA
	Ascolto	Lettura	Interazione	Produzione orale	
Inglese	B2	B2	B2	B2	B2

Patente di guida B

Pubblicazioni

- Simone D'Onofrio, Federica Fragomeno, Claudio Gambino, and Fabio Riccioni. The Reissner-Nordström-Tangherlini solution from scattering amplitudes of charged scalars. JHEP, 09:013, 2022.
- Massimo Bianchi, Claudio Gambino, and Fabio Riccioni. A Rutherford-like formula for scattering off Kerr-Newman BHs and subleading corrections. JHEP, 08:188, 2023.

Conferences 10/15/23, **GravityShapePisa: New Frontiers in Gravity Phenomenology**, Pisa (Italy), Invited Speaker, talk title: *Gravitational Observables from Scattering Amplitudes*

Ph.D. Schools 07/24/23--08/04/23, **School on Modern Amplitude Methods for Gauge and Gravity Theories**, Saõ Paulo (Brazil), ICTP-SAIFR/IFT-UNESP

Internships Mar 2021--Jul 2021, Internship at Frascati National Laboratories (LNF), INFN, Accelerator Division, MagLens Project: design and characterization of magnetic quadrupoles for particle accelerators.

- Design of magnetic quadrupoles in both geometry and electric characteristics.
- Simulations using Opera 3D software.
- Measurement of magnetic performance on a real quadrupole using Hall probes and Single-Stretched Wire.

Computer Skills

- Operative Systems: Mac OS, Windows, Linux
- Programming: C, C++, Python, RStudio, Mathematica, Latex
- Software: Office, Opera 3D, Keynote

ALLEGATI

Dati personali Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".

Io sottoscritto dichiaro di essere consapevole che il presente *curriculum vitae* sarà pubblicato sul sito istituzionale dell'Ateneo, nella Sezione "Amministrazione trasparente", nelle modalità e per la durata prevista dal d.lgs. n. 33/2013, art. 15.

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