Giulia Campailla

EDUCATION AND TRAINING

09/2023 – CURRENT Genoa, Italy
DOCTOR OF PHILOSOPHY (PHD) University of Genoa, Department of Physics

My research activity focuses on the application of machine learning (ML) techniques to statistical inference problems in cosmology and astrophysics, within the broader context of multimessenger astrophysics. My research developed along two complementary lines: a personal project on the use of gravitational waves for cosmological studies, with particular attention to the phenomenon of strong gravitational lensing; and a collaborative effort within the Dark Energy Survey (DES), focused on the statistical analysis of survey data. These activities have been carried out as part of my active involvement in both the LIGO–Virgo–KAGRA (LVK) and DES collaborations. I work under the supervision of Professor Marco Raveri at the University of Genoa (UniGe).

Field of study Machine Learning Applications in Astrophysics and Cosmology

Links https://www.darkenergysurvey.org/ | https://www.virgo-gw.eu/about/scientific-collaboration/ | https://www.ligo.caltech.edu/page/ligo-scientific-collaboration

2021 – 2023 Genoa, Italy
MASTER DEGREE University of Genoa, Department of Physics

Supervisors: Professour Enzo Franco Branchini (UniGe), Professour Marco Raveri (UniGe).

Field of study Theoretical Physics, Astrophysics and Cosmology | **Final grade** 110/110 cum laude |

Thesis Towards a Generalized Dark Radiation model

2018 – 2021 Genova, Italy
BACHELOR DEGREE University of Genoa, Department of Physics

Field of study Physics | **Thesis** Thermodynamics of off-equilibrium systems

2013 – 2018 Chiavari, Italy
SCIENTIFIC HIGH-SCHOOL DIPLOMA Marconi-Delpino Scientific High School

Final grade 100/100 cum laude

WORK EXPERIENCE

▥ DEPARTMENT OF ELECTRICAL ENGINEERING (DITEN), UNIGE
TEACHING ASSISTANT – 02/2025 – 06/2025

Teaching support activity (35 hours) as a teaching assistant for the Electromagnetism section of the FISICA GENERALE course (cod. 72360) for "Corso di Laurea in Ingegneria Elettrica a.a. 2024-2025", University of Genova.

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▥ FESTIVAL DELLA SCIENZA DI GENOVA – GENOVA, ITALY
Website www.festivalscienza.it

SCIENCE POPULARIZER – 10/2022 – 11/2022

- ## PROFESSIONAL ACTIVITIES

11/2023 – CURRENT
Organizer of the Cosmology Journal Club for the Cosmology Research Group at the University of Genoa (UniGe)

Organization of the Astrophysics and Cosmology Journal Club, including special sessions on DESI, ACT, and KM3NeT data releases.

02/2025
Outreach activity to students about Astrophysics

Outreach activity at "Scuola Media Statale A. Cantore" in Genova, where I introduced various aspects of the profession of a researcher in astrophysics to middle school students.

10/2025 – CURRENT
Member of "Ente Associazione StarAntola"

Active member since 2025. Associazione StarAntola is a scientific outreach organization that collaborates with Parco Antola to manage the public opening and educational activities of the Osservatorio Astronomico del Monte Antola—a major regional center for astronomy research and public engagement, featuring Italy's largest amateur telescope and a planetarium.

- ## LANGUAGE SKILLS

Mother tongue(s):   **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

- ## LANGUAGE CERTIFICATES

2016
B2 First, Cambridge English Certification

Valuation: 188/190 (Level: C1)