



Ai fini della pubblicazione

EDUCATION AND TRAINING

09/2019 – 10/2022 Rome, Italy

BACHELOR'S DEGREE IN PHYSICS Sapienza University of Rome

Final grade 108/110 | **Thesis** Evidenze sperimentali dell'esistenza dei Bosoni Vettori

09/2022 – 10/2024 Rome, Italy

MASTER'S DEGREE IN PHYSICS, CURRICULUM 'FUNDAMENTAL INTERACTIONS: THEORY AND EXPERIMENT' Sapienza University of Rome

Final grade 110/110 cum laude |

Thesis Characterization and Irradiation study for the future Muon Collider Electromagnetic Calorimeter

11/2024 – CURRENT Rome, Italy

DOCTORAL DEGREE IN ACCELERATOR PHYSICS AND TECHNOLOGY Sapienza University of Rome

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C1	C1	C1	C1
FRENCH	B1	B2	B1	B1	B1

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

CONFERENCES, SCHOOLS AND SCHOLARSHIPS

13/01/2025 – 14/02/2025

JUAS - Joint Universities Accelerator School

Five-week school on Accelerator Physics, organized by ESI (European Scientific Institute) and held at CERN.

Link <https://www.esi-archamps.eu/juas-presentation/>

07/2024 – 10/2024

INFN Scholarship "Graziano Fortuna, Giovanni Volpini"

Awarded to support scientific training in the context of a Master's thesis on the 'Development of new technologies' at one of the INFN National Laboratories.

09/09/2024 – 13/09/2024

SIF (Italian Physical Society) National Congress

Contribution with a talk on the topic of my Master's thesis.

Attendance of the lectures, and contribution to the 8th Young Researchers' Workshop with a talk on the topic of my Master's thesis.

Link <https://www.lnf.infn.it/conference/lnfss/24/>

2023 – 2024

Support role at Sapienza's Didactic Laboratories

Collaboration activities with the personnel of the Bruno Pontecorvo didactic laboratories at Sapienza University of Rome. Supporting the Bachelor's Degree laboratory sessions on Mechanics, Optics, Thermodynamics and Electromagnetism.

● **SCIENTIFIC PRODUCTION**

List of publications

- [Interim report for the International Muon Collider Collaboration \(IMCC\)](#) Published in: CERN Yellow Rep.Monogr. 2/2024 (2024), 1
- [CHARACTERIZATION AND IRRADIATION STUDY FOR THE CRILIN ELECTROMAGNETIC CALORIMETER](#) Published in: Frascati Phys.Ser. 76 (2025), 2-7
- [Developing an alternative calorimeter solution for the future Muon Collider: The Crilin design](#) Published in: Nucl.Instrum.Meth.A 1069 (2024), 169973
- [MuCol Milestone Report No. 5: Preliminary Parameters](#) DOI: [10.5281/zenodo.13970100](https://doi.org/10.5281/zenodo.13970100) (publication)
- [Crilin: a semi-homogeneous crystal calorimeter for the muon collider](#) Published in: PoS ICHEP2024 (2025), 1113
- [Development of a sub-mm particle tracking detector based on a plastic scintillator with SiPM charge sharing](#) Published in: JINST 19 (2024) 12, T12006
- [Advancements in Muon Collider Calorimetry: Design, Testing, and Radiation Resistance of the Crilin Calorimeter Prototype](#) Published in: *EPJ Web Conf.* 320 (2025) 00023
- [The Muon Collider](#) e-Print: [2504.21417](https://arxiv.org/abs/2504.21417) [physics.acc-ph]
- [CRILIN: A semi-homogeneous crystal calorimeter for the Muon Collider](#) Published in: Nuovo Cim.C 48 (2025) 3, 112
- [Crilin: A novel calorimeter proposal for the s=10 TeV Muon Collider — Simulations and prototype tests results](#) Published in: Nucl.Instrum.Meth.A 1079 (2025), 170617

Link <https://inspirehep.net/authors/2808581>

Roma,
21/07/2025

F.to Vittoria Ludovica Cicarella