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WORK EXPERIENCE

FEMTOSCOPY GROUP - SAPIENZA UNIVERSITY OF ROME – ROME, ITALY

Department Physics Department | **Website** <https://sites.google.com/uniroma1.it/femtoscopia/home?authuser=0>

INTERNSHIP – 05/2024 – 03/2025

- Performed ultrafast pump-probe electronic (Transient Absorption) and vibrational (Impulsive Vibrational Spectroscopy) experiments on thionated nucleobases using femtosecond laser sources.
- Manipulated and optimized the experimental setup required for conducting the experiments, exploiting various nonlinear optical phenomena.
- Operated and optimized a Non-collinear Optical Parametrical Amplifier (NOPA) to amplify ultrashort broadband pulses.
- Designed and developed MATLAB codes for the data analysis of the pump-probe spectroscopy experiments.

CONFERENCES & SEMINARS

28/07/2024 – 02/08/2024 Rome

Volunteer at the International Conference on Raman Spectroscopy (ICORS) 2024

Tasks:

- Relation with guests, supporting speakers and attendees both during conference sessions and social events.
- Team working.
- Development and maintenance of a system for parallel abstract upload.

Link <https://icors2024.org/>

EDUCATION AND TRAINING

11/2022 – 03/2025 Rome, Italy

MASTER'S DEGREE IN PHYSICS Sapienza University of Rome

The abstract of the thesis is attached to this CV.

Website <https://www.uniroma1.it/en/pagina-strutturale/home> | **Field of study** Condensed Matter Physics, Photonics |

Final grade 110/110 with honors. **Level in EQF** EQF level 7 **Type of credits** ECTS | **Number of credits** 120 |

Thesis Exploring singlet to triplet ultrafast dynamics on Thiouracil via pump-probe vibrational spectroscopy.

Link https://drive.google.com/drive/folders/1clpYVUKgk4oDw_xwX2GHR8bZvpqzD2D4?usp=drive_link

09/2023 – 04/2024 Paris, France

ERASMUS+ MOBILITY FOR STUDY Université Paris Cité

List of attended courses, all valid 3 ECTS:

- Electronic quantum devices
- Advanced solid state physics
- Electrons and Phonons in nanostructures
- Nanomagnetism and spintronics
- Photonic Quantum Devices
- Quantum theory of light
- Quantum communication

- Quantum computing
- Circuits and network dynamics in synthetic biology and neuroscience (Sorbonne Université)
- Functional materials (École Polytechnique)

Website <https://u-paris.fr/> **Field of study** Condensed Matter Physics **Level in EQF** EQF level 7 **Type of credits** ECTS |

Number of credits 30

09/2019 – 11/2022 Rome, Italy

BACHELOR DEGREE IN PHYSICS Sapienza University of Rome

Field of study Physics | **Final grade** 110/110 with honors. **Level in EQF** EQF level 6 **Type of credits** ECTS |

Number of credits 180 |

Thesis The Migdal effect in low-mass dark matter direct detection research with the DarkSide-50 experiment.

2014 – 2018 Grottaferrata, Italy

MATURITÀ SCIENTIFICA (HIGH SCHOOL DIPLOMA) Liceo Scientifico Bruno Touschek

Final grade 100/100 | **Level in EQF** EQF level 4

● 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

● SKILLS

Microsoft Powerpoint | programming language: C, Python, MATLAB | Microsoft Word | Microsoft Excel | Text processing (Word, LaTeX) | Google Drive

● DRIVING LICENCE

Driving Licence: B

Consapevole che le dichiarazioni false comportano l'applicazione delle sanzioni previste dall'art. 76 del D.P.R. 445/2000, dichiaro che le informazioni riportate nel curriculum vitae corrispondono a verità.

