

Lucrezia Boccardo

Date of birth:

Nationality: Italian

Phone number:

Email address:

● EDUCATION AND TRAINING

01/11/2023 – CURRENT Genoa, Italy

PHD University of Genoa

Standard Model analysis and flavour tagging in the ATLAS experiment

20/09/2021 – CURRENT Genoa, Italy

MASTER'S DEGREE IN FUNDAMENTAL INTERACTIONS PHYSICS University of Genoa

Particle Physics

Fundamental Interactions

Monte Carlo simulations applied to particle physics

Multivariate data analysis

Symbolic Regression

Thesis supervisors: Federico Sforza & Francesco Armando Di Bello

Grade average: 29.5/30

Address Via Dodecaneso 33, 16146, Genoa, Italy | **Website** <https://corsi.unige.it/9012> | **Field of study** Physics |

Final grade 110/110 Cum Laude |

Thesis Search for the intrinsic charm in the ATLAS experiment using multivariate techniques

2017 – 2021 Genoa, Italy

BACHELOR'S DEGREE IN PHYSICS University Of Genoa

All the mandatory courses offered by the degree

Two electives: Fundamentals of Quantum Computation and MonteCarlo Simulations

Address Via Dodecaneso 33, 16146, Genoa, Italy | **Website** <https://corsi.unige.it/9012> | **Field of study** Physics |

Final grade 103/110 | **Thesis** TOF Mass Spectrometry

● WORK EXPERIENCE

31/12/2017 – CURRENT Genoa, Italy

TUTORING MIDDLE AND HIGH SCHOOL STUDENTS

I've worked as a tutor to several high school and middle school students, some of them with learning disabilities. I mainly focused on scientific subjects (maths, physics and chemistry) and foreign languages (English and French).

04/07/2022 – 30/09/2022 Saclay, France

INTERNSHIP CEA-SACLAY

Subject: Study of the impact of radiations in MARCO, the new solenoidal magnet for the ECCE detector at EIC

I conducted Pythia8 and Geant4 simulations to study the impact of the radiations generated by particles produced in electron-ion collisions.

Department Department of Accelerators, Cryogenics and Magnetism

During the course of the academic year my tutoring efforts will focus on supporting:
-first-year Physics students in their computational courses
-first-year Natural Sciences students in their physics courses

● **LANGUAGE SKILLS**

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2
FRENCH	C2	C2	C2	C2	C2

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

● **DIGITAL SKILLS**

C++ | Python | CERN ROOT | Monte Carlo Simulation | LaTeX | Windows | Microsoft Office |
MATLAB | FeynCalc | Wolfram Mathematica (Basic) | Special Software (HEP, nuclear physics):
ROOT(CERN), GEANT4 | Experience using Monte Carlo event generators (e.g. Pythia, Madgraph) |
RIVET | Basis of Machine Learning

● **ADDITIONAL INFORMATION**

MANAGEMENT AND LEADERSHIP SKILLS

Class Representative

- School and class representative in high school: 2013-2017;
- Students' representative in the Department of Physics council: since 2019
- Students' representative in the Department of Physics board: since 2020