

Maddalena Mula

✉ maddalenamula98@hotmail.it

in maddalenamula

Date of birth: 09/03/1998 | Nationality: Italian

EDUCATION

- Nov 2023 - -* **PhD Student in Economics and Finance**
Centro Ricerche Enrico Fermi (CREF) and Tor Vergata University of Rome
Supervisor and Co-Supervisor: Prof. Pasquale Scaramozzino, Dr. Angelica Sbardella
Research area: Economic Fitness and Complexity
- Jan 2021 - Sept 2023* **Master's Degree in Physics**
110/110
Facoltà di Scienze MFN, University of Rome 'La Sapienza'
Main field: Statistical Mechanics, Complex Systems, Machine Learning
Thesis: Modularity and Nestedness of the Italian Firm-Product Network
Supervisor: Dr. Andrea Zaccaria
- Sept 2017 - Jan 2021* **Bachelor's Degree in Physics**
102/110
Facoltà di Scienze MFN, University of Rome 'La Sapienza'
Thesis: Deep Learning e Domain Adaptation per l'identificazione di transizioni di fase in hamiltoniane
Supervisor: Prof. Stefano Giagu
- Oct 2019 - June 2020* **Scuola di Politiche - Formiamo il futuro**
Scholarship for the attendance of the Enrico Letta Policy School annual course. Part of 100 selected students at the national level. Lessons, conferences, project works - concerning policy analysis and design in a cross-topic perspective: environment, economics, politics, immigration, job market, Europe, etc.
- 1 July 2017* **High school leaving qualification in classical studies**
100/100
IIS Eliano-Luzzatti, Palestrina (Rome)

RESEARCH EXPERIENCE

- Mar 2021 - Oct 2021* **Researcher at Scuola di Politiche for Pantelleria Youth Forum**
Ente Parco dell'Isola di Pantelleria, Svimez, Ministero per la Transizione Ecologica
Research topic: Analysis on ex ante and ex post evaluation tools of the effects of public policies on natural capital and ecosystem services
Research group: E. Bellucci, A. Bruno, M. Mula, G. Persico, D. Zaccagnino
Reference: Prof. Giliberto Capano (University of Bologna and member of the Scientific Board of Scuola di Politiche).

WORK EXPERIENCE

- May 2021 - May 2023* **Student Representative**
Department Council of Physics - University of Rome 'La Sapienza'
- Nov 2022 - May 2023* **Tutor in Mathematics**
Tutor of two mini-courses in mathematics for students enrolled in Facoltà di Scienze MFN (University of Rome 'La Sapienza') who have contracted Additional Formative Obligations (OFA).
Reference: Prof. Flavia Lanzara, Prof. Andrea Sambusetti
- Nov 2021 - Jan 2022* **Laboratory assistant**
Thermodynamics laboratory assistant at University of Rome 'La Sapienza'.
Reference: Prof. Naurang L. Saini

June 2021 - Oct 2021

NET - Science Together project co-worker

Support for the organisation of outreach activities planned in the NET - Science Together project for the European Researchers' Night 2021 in Rome.
Reference: Prof. Paolo Pani (University of Rome 'La Sapienza')

Oct 2012 - Nov 2020

Swim Instructor

Heracles Sporting Club - Cave (Roma)

LANGUAGES

Italian – Mother tongue
English – Lvl B2

SKILLS

COMPUTER SKILLS

- Proficient in Python programming language with a good level of knowledge.
- Proficient in LaTeX for efficient and professional document preparation.
- Good knowledge of C programming language.
- Competent in algorithmic and programming techniques for Big Data analysis with a good knowledge of Machine Learning, Neural Networks, and Deep Learning algorithms.
- Familiar with C++, MATLAB, R programming languages.
- Proficient in standard Microsoft Office software.
- Experienced in utilizing digital image processing software such as Photoshop and Adobe Illustrator.

SKILLS ACQUIRED DURING MY STUDIES

- Problem-solving
- Teamwork
- Proficient in writing comprehensive and well-structured laboratory reports.

SOCIAL AND COMMUNICATIVE SKILLS AND COMPETENCES

- Member of Forum Giovani di Labico, an association that actively organizes cultural and social events.
- I attended Scuola di Politiche which improves my skills in public relations.
- In 2016 and 2017, I attended the MUN ROME Conference. Additionally, I was honored with an Honourable Mention in 2017 for my outstanding performance within my group.

ARTISTIC SKILLS AND COMPETENCES

- I am actively involved in two amateur theatre companies: 'Fritto Misto' of Forum Giovani di Labico in Labico (Rome) and 'Teatro in Casa' in Cave (Rome).

OTHER INFORMATIONS

Elective Master courses

Physics Of Complex Systems (FIS/03) - 30/30
Advanced Machine Learning For Physics (INF/01) - 30/30 cumlaude
Computing Methods for Physics (INF/01) - 30/30
Statistical Mechanics And Critical Phenomena (FIS/02) - 30/30
Computational Statistical Mechanics (FIS/02) - 29/30
Statistical Mechanics of Disordered Systems (FIS/02) - 29/30
Big Data Computing (INF/01)

Driving licence

B

Certificates

Scuola di Politiche 2019/2020,
Scuola di Politiche, Piazza Sant'Andrea della Valle 6, 00186 Roma

Pantelleria Youth Forum - Pantelleria, 7-9 Ottobre 2021
Ministero della Transizione Ecologica, Parco Nazionale Isola di Pantelleria, SVIMEZ, Scuola di Politiche

IMUN - Roma 2016 e 2017

Federazione Italiana Nuoto - Brevetto Assistente Bagnanti

D.Lgs. 812008 Lavoratori - Certificate of achievement

Corso di formazione Rischio COVID-19