

PERSONAL INFORMATION

Luca Pezzini

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🔗 <https://cheshirepezz.github.io/>

🐙 <https://github.com/cheshirepezz>

🚀 <https://gitlab.com/cheshirepezz>

🌐 <https://www.linkedin.com/in/luca-pezzini-51b4b01a5/>

Date of birth 18 October 1993 | Nationality Italian

JOB APPLIED FOR PhD position

WORK EXPERIENCE

March 2020 – Present Virtual Traineeship

Centre for mathematical Plasma Astrophysics (CmPA), KU Leuven
Celestijnenlaan 200B, bus 2400
B-3001 Leuven (Belgium)

- Developing a General Relativity explicit PiC Algorithm solving Vlasov-Maxwell eqs., conserving energy and mimetic property.
- Testing on an adaptive grid around an arbitrary compact object.
- Study Magnetic reconnection.

Sept 2019 – Present Co-Founder

Machine Learning Journal Club
Turin, Italy

Open Source cultural association which aims to spread AI tool to tackle real problems in a word tha is more complex than ever.

Sept 2017 – Feb 2018 Mathematics and Physics Tutor for ADHD

Comune di Torino, Turin (Italy)

Working as Tutor for kids affected by Attention deficit hyperactivity disorder (ADHD), helping them to develop their own technique to understand and learn science.

EDUCATION AND TRAINING

Sept 2017 – Present Master of Science in Astrophysics and Theoretical Physics- Thesis Title: "Curvilinear Particle in Cell algorithm in General Geometry" CFU 45

Università degli Studi di Torino, Torino, Italy

- Astrophysics Fundamentals: Stellar Genesis, MW, Galaxy, Cosmology.
- Matter in Plasma state.
- Numeric Algorithm.
- Introduction to QCD.

Sept 2018 – April 2019 Erasmus Traineeship Program

Centre for Mathematical Plasma Physics (KU Leuven), Leuven, Belgium

- Curvilinear GR PiC simulation.
- Vlasov-Maxwell eqs.
- Asteroseismology.
- Magnetic Reconnection.

March 2020 – Present Erasmus+ Program

KU Leuven, Leuven, Belgium

- General Relativity.
- Introduction to Plasma Dynamics.
- Asteroseismology.
- Advanced Quantum Mechanics.

Sept 2012 – July 2017 Bachelor of Science in Physics; Thesis Title: "Particles acceleration to non-thermal energy by shock waves in AGN Jet."

Università degli studi di Torino, Torino, Italy

- Quantum Mechanics.
- Complex Analysis.
- Statistical Mechanics.
- Numerical Simulation MHD.

CERTIFICATIONS

- 2020 IBM Data Science Professional Certificate
 - What is Data Science?, Credential ID PE62LKKLGH2M.
 - Python for Data Science and AI, Credential ID 93YJEC7NCFY.
 - Databases and SQL for Data Science, Credential ID 4JNEJ4RMVYWD.
 - Data Analysis with Python, Credential ID YJPK9RZGLYHC.
 - Data Visualization with Python, Credential ID HG94LB8A6XMX.
 - Databases and SQL for Data Science, Credential ID 4JNEJ4RMVYWD.
- 2020 Google: Introduction to Git and GitHub, Credential ID M6JW8VS6CK93.
- 2011 DELF: Ministère de l'Éducation nationale et de la Jeunesse, Credential ID 039015-002258.
- 2010 ECDL: AICA, Credential ID IT1383114.

VOLUNTEER EXPERIENCES

- 2019 – 2019 Volunteer, GreenTo, Plastic-Free movida project
- 2016 – 2016 Pint of Science Turin, fund raising volunteer.
- 2011 – 2011 Mani Tese, volunteer for environmental cleaning.
- 2011 – 2011 FAI Fondo Ambientale Italiano, Cicerone at Monastero di San Gerolamo
- 2008 – 2010 Entertainer for children, Parrocchia S. Stefano.

PERSONAL SKILLS

Mother tongue Italian

Other languages

| | UNDERSTANDING | | SPEAKING | | WRITING |
|---------|---------------|---------|--------------------|-------------------|---------|
| | Listening | Reading | Spoken interaction | Spoken production | |
| English | C1 | C1 | C1 | B2 | B2 |
| French | A2 | A2 | A2 | A2 | A2 |

Diplôme d'études en langue française (DELFI) A2

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

- Team work: I have worked in various types of teams from research teams to open sources AI team.
- Mediating skills: I volunteer as recruiter from my association Machine Learning Journal Club.
- Intercultural skills: I am experienced at working in a European dimension such as being an Erasmus student.

Organisational / managerial skills

- Whilst: start a PhD on Computational Astrophysics.

Digital competences

| SELF-ASSESSMENT | | | | |
|------------------------|------------------|------------------|------------------|-----------------|
| Information Processing | Communication | Content creation | Safety | Problem solving |
| Basic user | Independent user | Proficient user | Independent user | Basic user |

[Digital competences - Self-assessment grid](#)

Computer skills

- LaTeX - Advanced: beamer, articles, posters.
- C++ - Intermediate: developing numerical simulations.
- Python - Basic: scientific programming and data visualisation.
- Mathematica - Intermediate: animation and data analysis.
- Mac OS X - Advanced: main operating system.
- Linux Ubuntu - Advanced
- Git - Basic.
- HTML - I coded my own web page.
- Bash - Basic.
- SQL - Basic.

Other skills I enjoy running and swimming in summer I use to climb and swim in lakes. Philosophical talks are my passion and trivially I love travelling and meet new people.

Driving licence B