



# Luca Bastioni

M.Sc. MATHEMATICS STUDENT · LA SAPIENZA UNIVERSITY OF ROME

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*I'm a math enthusiast who loves to challenge himself with every kind brain teasers, alone but above all by working as a team in order to exchange ideas. I'm a curious person, I'd like to know everything I don't know yet. I like swimming and walking, reading books, watching films and TV series, playing the guitar, operas and classical music (Beethoven and Verdi are my favourites).*

## Experience

### Research Internship

[Bilbao, Spain](#)

B.C.A.M. - BASQUE CENTER FOR APPLIED MATHEMATICS

March 2020 - January 2021

[www.bcamath.org](http://www.bcamath.org)

B.C.A.M. offered the opportunity to study the most common probabilistic transformations in Machine Learning from a projective geometry point of view. Research areas: Projective Geometry, Probability

## Education

### Master of Science in Mathematics (LM-40)

[Rome, Italy](#)

LA SAPIENZA UNIVERSITY OF ROME

Sept. 2018 - March 2021

**120 university credits. Curriculum: Algebra and Geometry**

**Final Mark: 110/110 con Lode (Full marks with Honours)**

The degree mixes topics mainly from algebra, geometry and number theory, without neglecting analysis and mathematical physics, in order to give the student a vision on how mathematics is developing and which are the newest problems that are being addressed.

Thesis Title: Projective geometry of convex sets and its application to the interpretation of probabilistic transformations. Advisors: Domenico Fiorenza, Santiago Mazuelas.

Degree's main topics:

- Lie Algebras, PI Algebras and Representation Theory
- Cryptography
- Finite State Automaton, Graph Theory
- Complex Geometry, Algebraic Geometry, Algebraic Topology
- Functional Analysis, Distribution Theory
- Advanced Logic
- Hamiltonian mechanics

### Collegio Universitario Cavalieri del Lavoro "Lamaro Pozzani"

[Rome, Italy](#)

FEDERAZIONE NAZIONALE DEI CAVALIERI DEL LAVORO

Sept. 2015 - July 2020

[www.collegiocavalieri.it](http://www.collegiocavalieri.it)

**Diploma of Business Fundamentals "Gaetano Marzotto", an introduction to the basics of Economics and Business Law.**

**Final Mark: Very Good.**

Collegio Universitario "Lamaro Pozzani" is a merit-only based college, acknowledged by MIUR (Italian Ministry for Research and University), which provides scholarships for the duration of the Bachelor's and Master's degree.

The students eligibility is checked at the end of every academic year.

Students must attend two main courses (Business Fundamentals and Global Studies), a four-years English course, participate in conferences and meetings with journalists, ambassadors, politicians and academic personalities.

### Honours Programme in Mathematics

[Rome, Italy](#)

LA SAPIENZA UNIVERSITY OF ROME

Jan. 2017 - Jul. 2018

**150 hours of supplementary lessons. Final Mark: Qualified**

The Programme aims to enhance the training of deserving students interested in cultural integration and in-depth activities concerning issues not carried out during the courses. Students who have obtained all the credits of the reference course with an average of at least 28/30 can participate in the selection. Main topics:

- Principles of Fractal Analysis
- Principles of Cryptographic Algebra

## Bachelor of Science in Mathematics (L-35)

Rome, Italy

LA SAPIENZA UNIVERSITY OF ROME

Sept. 2015 - Sept. 2018

### 180 university credits. Final Mark: 110/110 (Full marks)

The degree gives the first notions in all the areas of mathematics in order to steer the student into the future academic steps.

Thesis Title: Finite reflection groups and polynomial invariants. Advisor: Alberto De Sole

Degree's main topics: Algebra, Geometry, Analysis, Probability, Logic, Programming C/C++, Physics

## Scientific High School Diploma

Rieti, Italy

LICEO SCIENTIFICO "CARLO JUCCI"

Sept. 2010 - June 2015

### Final Mark: 100/100 con Lode (Full marks with Honours)

## Skills

<b>Languages</b>	Italian (mother tongue), English (Independent User), Spanish (Basic User)
<b>Programming</b>	C/C++, Matlab, $\text{\LaTeX}$ Good communication skills acquired during all my studies at Collegio "Lamaro Pozzani" and developed with some study trips abroad. Excellent interpersonal skills perfected during many meetings with political figures, Cavalieri del Lavoro of the Italian Republic, journalists, diplomats, Italian and foreign ambassadors.
<b>Communications</b>	
<b>Leadership</b>	Coordination of Mensa Pellegrini Commission 2018/2020 of the Collegio "Lamaro Pozzani".
<b>Job-related</b>	Excellent in team-working, working under pressure for long periods without negative effects on the performance, attitude to problem solving.

## Honours & Awards

from 2015 to 2020	<b>Scholarship</b> , Collegio Universitario "Lamaro Pozzani", eligibility is checked every academic year	Rome, Italy
2020	<b>Scholarship</b> , Sorgente Group for studies abroad: 2580€	Rome, Italy
from 2017 to 2018	<b>Mention</b> , Honours Programme in Mathematics, for deserving students only	Rome, Italy
from 2015 to 2017	<b>Tuition fees exemption</b> , La Sapienza University of Rome, eligibility is checked every academic year	Rome, Italy
2015	<b>Scholarship</b> , MIUR scholarship to graduate students with honors: 450€	Rieti, Italy
2014	<b>Journey</b> , "Journey of Memory Auschwitz-Birkenau" full funded by Lazio Region of Italy	Krakow, Poland

## Memberships

From 2018 , Alumni Collegio Lamaro Pozzani	Rome, Italy
From 2016 , Mensa Italia - The High I.Q. Society ; card 4183 IT	Rome, Italy
2014/2015 , National Register of Excellence	Rieti, Italy

## Courses

<b>Transfer of Mathematical Technologies for Innovation</b>	Rome, Italy
C.N.R. - CONSIGLIO NAZIONALE DELLE RICERCHE	July 2019 - Aug 2019 <a href="http://www.sportellomatematico.it/SMII/">www.sportellomatematico.it/SMII/</a>
<b>R.Y.L.A. - Rotary Youth Leadership Awards "Public Speaking"</b>	Rieti, Italy
ROTARY INTERNATIONAL	Nov 2013 - Dic 2013 <a href="http://www.rotary.org/it/our-programs/rotary-youth-leadership-awards">www.rotary.org/it/our-programs/rotary-youth-leadership-awards</a>

## Certifications

2010	<b>D.E.L.E.</b> , Nivel A2 - 10050238052010015 - Instituto Cervantes	Rome, Italy
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