

EDUCATION

Università di Bologna

Ph.D. in Mathematics

Bologna, Italy

November 2018 – November 2021

- ▶ Thesis: *The Ehrhart theory of matroid polytopes*
- ▶ Advisor: Dr. Luca Moci

Universidad Nacional de Córdoba

Licentiate in Mathematics, GPA: 10.00/10.00

Córdoba, Argentina

March 2013 – March 2018

- ▶ Thesis: *Grupos de Coxeter y bimódulos de Soergel*
- ▶ Advisor: Dr. Iván E. Angiono

PUBLICATIONS

- [1] **L. Ferroni**, “Hypersimplices are Ehrhart positive”, *J. Combin. Theory Ser. A*, vol. 178, Paper No. 105365, 13, 2021, ISSN: 0097-3165.
- [2] **L. Ferroni**, “On the Ehrhart polynomial of minimal matroids”, *Discrete Comput. Geom.*, Jun. 2021, ISSN: 1432-0444.
- [3] **L. Ferroni**, “Integer point enumeration on independence polytopes and half-open hypersimplices”, *Discrete Math.*, vol. 344, no. 8, Paper No. 112446, 6, 2021, ISSN: 0012-365X.
- [4] **L. Ferroni** and L. Vecchi, “Matroid relaxations and Kazhdan-Lusztig non-degeneracy”, Apr. 2021. arXiv: 2104.14531 [math.CO].
- [5] **L. Ferroni**, “Matroids are not Ehrhart positive”, May 2021. arXiv: 2105.04465 [math.CO].
- [6] **L. Ferroni**, K. Jochemko, and B. Schröter, “Ehrhart polynomials of rank two matroids”, Jun. 2021. arXiv: 2106.08183 [math.CO].
- [7] **L. Ferroni**, G. D. Nasr, and L. Vecchi, “Stressed hyperplanes and Kazhdan-Lusztig gamma-positivity for matroids”, Oct. 2021. arXiv: 2110.08869 [math.CO].

TEACHING

Università di Bologna

Tutor (Graduate Teaching Assistant) - in Italian

Bologna, Italy

February 2020 – December 2021

- ▶ Numerical Analysis with MATLAB
- ▶ Geometry 1A, Algebra and Geometry T (Linear Algebra)
- ▶ Algebra 1 (Group theory)
- ▶ Algebra 2 (Rings and fields)

Universidad Nacional de Córdoba

Ayudante alumno (Undergraduate Teaching Assistant) - in Spanish

Córdoba, Argentina

March 2015 – March 2018

- ▶ Mathematical Analysis I, II, III (Calculus and Calculus in several variables)
- ▶ Algebra I (Discrete Mathematics)
- ▶ Algebra II (Linear Algebra)

SOFTWARE SKILLS

- **Programming:** C++, C, Python
- **Mathematics:** SAGE, MATLAB, Polymake
- **Text processors:** L^AT_EX, T_EX, MS Office

LANGUAGES

- **Spanish:** Native
- **Italian:** Bilingual proficiency
- **English:** C2 proficiency
- **ECPE Michigan**

AWARDS & SCHOLARSHIPS

- Marie Curie PhD Fellow, INdAM DP-COFUND Program November 2018 - October 2021
- Abanderado de la Universidad Nacional de Córdoba, Promedio 10.00/10.00. July 2017 - June 2018
- Abanderado de la FAMAF - UNC, Promedio 10.00/10.00. June 2017 - May 2018
- Premio *10 Jóvenes Sobresalientes*, Bolsa de Comercio de Córdoba. October 2018
- First place *Premio al Mérito Académico*, Banco Santander September 2017
- ICPC World Finals 2020, Moscow (Russia), Coach, 38th place October 2021
- ICPC World Finals 2019, Porto (Portugal), Coach, 43rd place (Latin American Champions) April 2019
- ICPC World Finals 2018, Beijing (China), Contestant, 25th place April 2018
- ICPC World Finals 2017, Rapid City (United States), Contestant, 67th place May 2017
- First place *Competencia CIMA* (previously *Competencia Paenza*), with Azul Fatalini. 2016
- First place *Competencia CIMA* (previously *Competencia Paenza*), with Azul Fatalini. 2015

SEMINARS AND TALKS

- Combinatorics Seminar - University of California at Berkeley. November 2021
- Combinatorics Seminar - Royal Institute of Technology (KTH) Stockholm. October 2021
- Combinatorics Seminar - Royal Institute of Technology (KTH) Stockholm. June 2021
- (Polytop)ics, Max Planck Institute for Mathematics in the Sciences. April 2021
- Algebra and Geometry Seminar - University of Bologna. March 2021
- Students Seminar - Universidad Nacional de Córdoba. May 2020
- Discrete Geometry Seminar - Freie Universität Berlin. May 2020
- Students Seminar - Universidad Nacional de Córdoba. June 2019
- Students Seminar - Universidad Nacional de Córdoba. October 2017

EXTRACURRICULAR ACTIVITIES

- Training Camp ICPC Argentina 2019–Current
Collaborator in the organization and lecturer in open training camps of programming for students from all over Latin America
- International Mathematical Olympiad July 2012
Guide of the Canadian team
- Olimpiada Matemática Argentina 2012–2017
I collaborated with FOMA in the organization of math olympiads and trainings for high school students