

Contact Information:

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Academic Positions:

- Universität Bonn, Postdoctoral Researcher, October 2024 – September 2028.
- Universidad Autónoma de Madrid, Margarita Salas Researcher, February 2023 – September 2024.
- Imperial College London, Research Associate in Formal Mathematics, August 2021 – February 2023.
- ICMAT, Visitor, June – July 2021.
- Universidad Nebrija, Assistant Professor, April – August 2021.

Education:

- Ph.D. Mathematics, Boston University, USA, 2020.
- M.A. Mathematics, Boston University, USA, 2018.
- B.S. Mathematics, Universidad Autónoma de Madrid, Spain, 2014.
- B.S. Computer Science, Universidad Autónoma de Madrid, Spain, 2014.

External Memberships:

Member of the Instituto de Ciencias Matemáticas (ICMAT), November 2023 – September 2024.

Research Fields:

Formal Mathematics, Number Theory, Arithmetic Geometry.

Awards and Honors:

- Department Citation for Teaching Excellence: Boston University Department of Mathematics and Statistics, 2017.
- Dean's Fellowship, Department of Mathematics and Statistics, Boston University, 2014-2015.
- Mención Honorífica de la primera promoción del Doble Grado de Ingeniería Informática y Matemáticas por la Univ. Autónoma de Madrid (Honorific Mention of the first promotion of the Dual B.S. Degree in Computer Science and Mathematics at Univ. Autónoma de Madrid). I graduated at the top of my class, with a GPA of 9.48/10.
- Beca de Excelencia, Comunidad de Madrid (Spain), 2013-2014.
Excellence scholarship awarded to the best undergraduate students (approximately those in the top 1%) in any university of the Community of Madrid. This award is exclusively based on academic performance during the previous academic year.

- Beca de Excelencia, Comunidad de Madrid (Spain), 2012-2013.
- Beca de Excelencia, Comunidad de Madrid (Spain), 2011-2012.
- Beca de Excelencia, Comunidad de Madrid (Spain), 2010-2011.
- Beca de Excelencia, Comunidad de Madrid (Spain), 2009-2010.
- Premio Extraordinario de Bachillerato de la Comunidad de Madrid (Spain), 2009.
Award granted to the best high school senior students (top 0.1%) in the Community of Madrid.
- Matrícula de Honor en Bachillerato, 2009.
Graduated with honors from high school.

Publications:

- *Formalizing polynomial laws and the universal divided power algebra*, with Antoine Chambert-Loir. In Nikhil Swamy and Nicolas Tabareau, editors, *Proceedings of the 15th ACM SIGPLAN International Conference on Certified Programs and Proofs (CPP 2026)*, pages 75–87, New York, NY, USA, 2026. Association for Computing Machinery. [doi:10.1145/3779031.3779108](https://doi.org/10.1145/3779031.3779108).
- *A blueprint for the formalization of Carleson’s theorem on convergence of Fourier series*, with Lars Becker, Leo Diederich, Floris van Doorn, Sébastien Gouëzel, Asgar Jamneshan, Evgenia Karunus, Edward van de Meent, Pietro Monticone, Jasper Mulder-Sohn, Jim Portegies, Joris Roos, Michael Rothgang, Rajula Srivastava, James Sundstrom, Jeremy Tan, and Christoph Thiele, 2025. Preprint. [arXiv:2405.06423](https://arxiv.org/abs/2405.06423).
- *A Formalization of Divided Powers in Lean*, with Antoine Chambert-Loir. In Yannick Forster and Chantal Keller, editors, 16th International Conference on Interactive Theorem Proving (ITP 2025). Leibniz International Proceedings in Informatics (LIPIcs), Volume 352, pp. 4:1-4:17, Schloss Dagstuhl – Leibniz-Zentrum für Informatik (2025). <https://doi.org/10.4230/LIPIcs.ITP.2025.4>.
- *A Formalization of Complete Discrete Valuation Rings and Local Fields*, with Filippo Alberto Edoardo Nuccio Mortarino Majno di Capriglio. In Amin Timany and Dmitriy Traytel, editors, *Proceedings of the 13th ACM SIGPLAN International Conference on Certified Programs and Proofs (CPP 2024)*. Association for Computing Machinery, New York, NY, USA, 190–204. [doi:10.1145/3636501.3636942](https://doi.org/10.1145/3636501.3636942).
- *The refined class number formula for Drinfeld modules*, with Daniel Macías Castillo and Daniel Martínez Marqués, 2023. Accepted to *Compositio Mathematica*. [arXiv:2309.17256](https://arxiv.org/abs/2309.17256).
- *Formalizing Norm Extensions and Applications to Number Theory*, In Adam Naumowicz and René Thiemann, editors, 14th International Conference on Interactive Theorem Proving (ITP 2023), volume 268 of Leibniz International Proceedings in Informatics (LIPIcs), pages 13:1–13:18, Schloss Dagstuhl – Leibniz-Zentrum für Informatik, 2023. [doi:10.4230/LIPIcs.ITP.2023.13](https://doi.org/10.4230/LIPIcs.ITP.2023.13).

- *Moduli spaces of shtukas over the projective line*. Journal de Théorie des Nombres de Bordeaux, Volume 34 (2022) no. 2, pp. 393–418. [doi:10.5802/jtnb.1207](https://doi.org/10.5802/jtnb.1207).
- *Formalizing the Ring of Adèles of a Global Field*, In June Andronick and Leonardo de Moura, editors, 13th International Conference on Interactive Theorem Proving (ITP 2022), volume 237 of Leibniz International Proceedings in Informatics (LIPIcs), pages 14:1–14:18, Schloss Dagstuhl – Leibniz-Zentrum für Informatik, 2022. [doi:10.4230/LIPIcs.ITP.2022.14](https://doi.org/10.4230/LIPIcs.ITP.2022.14).
- *Computing rational points on rank 0 genus 3 hyperelliptic curves*, with Sachi Hashimoto. In: Balakrishnan, J.S., Elkies, N., Hassett, B., Poonen, B., Sutherland, A.V., Voight, J. (eds) *Arithmetic Geometry, Number Theory, and Computation*, Simons Symposia. Springer, Cham. (2021), pp. 449–460. [doi:10.1007/978-3-030-80914-0_14](https://doi.org/10.1007/978-3-030-80914-0_14).
- *Rational linear subspaces of hypersurfaces over finite fields*, with Sumita Garai, Kelly Isham, Takumi Murayama and Geoffrey Smith, 2021. Preprint. [arXiv:2111.10976](https://arxiv.org/abs/2111.10976).
- *Modularity of elliptic curves defined over function fields*, Boston University PhD dissertation, May 2020. Available at <https://open.bu.edu/handle/2144/41489>. Advisor: Jared Weinstein.

Seminar and Conference Talks:

- (Upcoming) New Perspectives on Stable Homotopy and Beyond, MPI Bonn, September 2026.
- (Upcoming) Undécimas Jornadas de Teoría de Números, Universidad de Aveiro, July 3, 2026 (Plenary lecture).
- Aarhus Mathematics & AI Workshop, Aarhus (online talk), January 30, 2026.
- Arithmetische und Algebraische Geometrie Seminar, Munich, January 28, 2026.
- 15th ACM SIGPLAN International Conference on Certified Programs and Proofs, Rennes, January 12, 2026.
- Institute for Mathematics Colloquium, Universität Potsdam, December 17, 2025.
- Graduate Colloquium, Universität Bonn, November 26, 2025.
- CMSA New Technologies in Mathematics, Harvard University, October 22, 2025.
- Sixteenth Conference on Interactive Theorem Proving, Reykjavik University, October 1st, 2025.
- MATRIX-MFO Tandem Workshop: Machine Learning and AI for Mathematics, Oberwolfach, September 26, 2025.
- Dynamics and Analysis in Interaction, Royal Spanish Academy of Sciences, September 4, 2025 (Plenary lecture).
- Rational Points 2025, Schney, July 29, 2025.
- Big proof: formalizing mathematics at scale, Isaac Newton Institute, June 10, 2025.

- Proofs: from Euclides to AI, Royal Netherlands Academy of Arts and Sciences (KNAW), May 22, 2025.
- AI for Mathematics and Theoretical Computer Science, Simons Institute for the Theory of Computing, April 7, 2025.
- MPI-Oberseminar, Max Planck Institute for Mathematics, January 30, 2025.
- Informal Formalization Seminar, Vrije Universiteit Amsterdam, January 24, 2025.
- RSME's Congress of Young Researchers, University of the Basque Country, January 16, 2025 (Plenary lecture).
- Women in Algebra and Symbolic Computation III, Bad Dürkheim, December 10, 2024.
- Number Theory Lunch Seminar, Max Planck Institute for Mathematics, November 20, 2024.
- Formalisation of Mathematics with Interactive Theorem Provers, University of Cambridge, November 14, 2024.
- Research Seminar on Formal Mathematics, Heidelberg University, October 22, 2024.
- AMS–UMI Joint Meeting, Università degli Studi di Palermo, July 24, 2024.
- CRM Exploratory Workshop, Centre de Recerca Matemàtica, July 15, 2024.
- Women in EuroProofNet 2024, Hausdorff Institute of Mathematics, July 6, 2024.
- VaNTAGe math seminar, Online, April 16, 2024.
- Seminario del Departamento de Matemáticas, Universidad Autónoma de Madrid, March 14, 2024.
- Summer Workshop in Mathematics, Universidade de Brasília (Online), February 8, 2024.
- Congreso Bienal de la Real Sociedad Matemática Española, Universidad Pública de Navarra, January 23, 2024.
- 13th ACM SIGPLAN International Conference on Certified Programs and Proofs, London, January 15, 2024.
- Lean Together 2024, Online, January 12, 2024.
- Seminario de Álgebra, Universidad de Sevilla, December 1st, 2023.
- Seminario de Otoño, IMUS, Sevilla, December 1st, 2023.
- Lean for the Curious Mathematician 2023, Düsseldorf, September 7, 2023.
- Lean for the Curious Mathematician 2023, Düsseldorf, September 5, 2023.
- Fourteenth Conference on Interactive Theorem Proving, Białystok, August 2, 2023.

- Machine-Checked Mathematics, Lorentz Center, July 12, 2023 (Keynote lecture).
- Formalization of Cohomology Theories, BIRS, May 23, 2023.
- Lean in Lyon 2023, Université de Lyon, April 17, 2023.
- Conferencias 14M: Día Internacional de las Matemáticas, Facultad de Matemáticas, Universidad Complutense de Madrid, March 14, 2023 (Plenary lecture).
- Machine Assisted Proofs, IPAM, UCLA, February 16, 2023.
- Conferencias de Posgrado, Facultad de Informática, Universidad Complutense de Madrid, November 8, 2022.
- Thirteenth Conference on Interactive Theorem Proving, Haifa, August 9, 2022.
- Lean for the Curious Mathematician 2022, ICERM, July 14, 2022.
- Novenas Jornadas de Teoría de Números, Universidad de La Rioja, June 29, 2022.
- London Learning Lean, Imperial College London, June 16, 2022.
- Women in Number Theory and Geometry, Norfolk, June 7, 2022.
- London Number Theory Seminar, University College London, March 9, 2022.
- London Learning Lean, Imperial College London, January 13, 2022.
- Seminario de Álgebra, Geometría y Topología, Universidad Complutense de Madrid, January 14, 2020.
- Seminario de Teoría de Números, Universidad Autónoma de Madrid – ICMAT, January 10, 2020.
- Junior Number Theory Days, Johns Hopkins University, December 7, 2019.
- Algebra seminar, University of Connecticut, November 6, 2019.
- Number Theory seminar, Stanford University, November 4, 2019.
- Number Theory seminar, Boston University, October 28, 2019.

Grants:

- Margarita Salas Postdoctoral Grant (CA1/RSUE/2021-00623), granted by the Spanish Ministry of Universities (2023–2024).
- Cecilia Tanner Research Impulse Grant, Department of Mathematics, Imperial College London (2022).

Participation in Research Projects:

- Symmetries and Invariants in Geometry and Arithmetic (PID2022-142024NB-I00) Principal Investigators: José Ignacio Burgos Gil and Daniel Macías Castillo. Funded by the Ministry of Science and Innovation, Spain, 2023–2027.
- Digitising the Langlands Program (EPSRC Grant EP/V048724/1). Principal Investigator: Kevin Buzzard. Funded by EPSRC, UK 2021–2023.
- Perfectoid Spaces, Diamonds, and the Langlands Program (NSF Award 1902148). Principal Investigator: Jared Weinstein. Funded by the National Science Foundation (NSF), USA. 2019–2020.

Research Stays:

- Invited Professor at Institut Camille Jordan, Université Jean Monnet.
June 29 – July 12, 2025, Saint-Étienne, France.
- Invited Professor at Institut Camille Jordan, Université Jean Monnet.
March 20 – April 3, 2025, Saint-Étienne, France.
- Prospects of Formal Mathematics Trimester Program at the Hausdorff Research Institute for Mathematics.
June 2 – July 5, 2024, Bonn, Germany.
- Invited Professor at Institut Camille Jordan, Université Jean Monnet.
June 6 – 21, 2023, Saint-Étienne, France.
- Invited Professor at Institut Camille Jordan, Université Jean Monnet.
April 12 – 27, 2023, Saint-Étienne, France.

Conference Organization:

- (Upcoming) Future-proofing formal mathematics (Research Semester Programme).
Fall 2027. Centrum Wiskunde & Informatica (CWI), Amsterdam, The Netherlands.
- (Upcoming) Lean Workshop (FLoC 2026).
July 24/25, 2026 (TBC). ISCTE, Lisbon, Portugal.
- AI for Mathematics and Theoretical Computer Science.
April 7 – 11, 2025. Simons Institute for the Theory of Computing and SLMATH, Berkeley, California, USA.
- 10^{as} JTN: Décimas Jornadas de Teoría de Números.
July 8 – 12, 2024, Madrid, Spain.
- Formalisation of Mathematics: Workshop for Women and Mathematicians of Minority Gender.
May 27 – 31, 2024. International Centre for Mathematical Sciences (ICMS), Edinburgh, United Kingdom.
Lead organizer.

- Lean for the Curious Mathematician 2024.
March 25 – 29, 2024. Centre international de rencontres mathématiques (CIRM), Luminy, France.

Conferences Attended:

- (Upcoming) New Perspectives on Stable Homotopy and Beyond.
September 7 – 11, 2026, MPI Bonn, Germany.
Invited speaker.
- (Upcoming) FLoC Lean workshop.
July 25, 2026, ISCTE, Lisbon, Portugal.
Co-organizer.
- (Upcoming) 11^{as} JTN: Undécimas Jornadas de Teoría de Números.
July 3, 2026, Universidade de Aveiro, Portugal.
Invited plenary speaker.
- (Upcoming) Formal Mathematics and Proof Systems Interoperability (FMPSI'26).
June 22 – July 2, 2026, Institut Pascal, Orsay, France.
- (Upcoming) Women in Numbers 7.
June 14 – 19, 2026, BIRS, Banff, Canada.
Project leader.
- Certified Programs and Proofs (CPP) 2026.
January 12 – 13, 2026, Rennes, France.
- ITP 2025: Sixteenth Conference on Interactive Theorem Proving.
September 28 – October 1, 2025, Reykjavik, Iceland.
- MATRIX-MFO Tandem Workshop: Machine Learning and AI for Mathematics.
September 21 – 16, 2025, Oberwolfach, Germany.
By invitation only.
- Dynamics and Analysis in Interaction.
September 1 – 5, 2025, Madrid, Spain.
Invited plenary speaker.
- Rational Points 2025.
July 27 – August 2, 2025, Schney, Germany.
Invited speaker.
- Magma Meeting: Rational Points 2025.
July 25 – 26, 2025, Würzburg, Germany.

- Big proof: formalizing mathematics at scale.
June 9 – 13, 2025, Cambridge, UK.
Invited speaker.
- Proofs: from Euclides to AI.
May 22, 2025, Amsterdam, The Netherlands.
Invited speaker.
- AI for Mathematics and Theoretical Computer Science.
April 7 – 11, 2025. Simons Institute for the Theory of Computing and SLMATH, Berkeley, California, USA.
- RSME's Congress of Young Researchers.
January 13 – 17, 2025, University of the Basque Country, Bilbao, Spain.
Invited plenary speaker.
- Women in Algebra and Symbolic Computation III.
December 9 – 11, 2024, Kurpark-Hotel, Bad Dürkheim, Germany.
Invited speaker.
- AMS–UMI Joint Meeting
July 23 – 26, 2024, Università degli Studi di Palermo, Italy.
Invited speaker at the special session 'Arithmetic and Geometric Aspects of Drinfeld Modules, Anderson Motives, and Computational Aspects'.
- CRM Exploratory Workshop.
July 15, 2024. Centre de Recerca Matemàtica, Barcelona, Spain.
Invited speaker.
- 10^{as} JTN: Décimas Jornadas de Teoría de Números.
July 8 – 12, 2024, Madrid, Spain.
- Women in Formal Mathematics 2024.
July 6 – 7, 2024. Hausdorff Institute of Mathematics, Bonn, Germany.
- Women in EuroProofNet 2024.
July 6, 2024. Hausdorff Institute of Mathematics, Bonn, Germany.
Invited speaker.
- Formalising algebraic geometry.
June 24 – 28, 2024. AIM, California, USA. (Online workshop).
By invitation only.
- Formalisation of Mathematics: Workshop for Women and Mathematicians of Minority Gender.
May 27 – 31, 2024. ICMS, Edinburgh, United Kingdom.
Lead organizer and project leader.

- Lean for the Curious Mathematician 2024.
March 25 – 29, 2024. CIRM, Luminy, France.
Co-organizer and project leader.
- Congreso Bienal de la Real Sociedad Matemática Española.
January 22 – 26, 2024, Pamplona, Spain.
Invited speaker at the Number Theory special session.
- CPP 2024 : 13th ACM SIGPLAN International Conference on Certified Programs and Proofs.
January 15 – 16, 2024, London, UK.
- Lean Together 2024.
January 9 – 12, 2024, Virtual.
Invited speaker.
- Lean for the Curious Mathematician 2023.
September 4 – 8, 2023, Düsseldorf, Germany.
Invited as project leader/lecturer.
- ITP 2023: Fourteenth Conference on Interactive Theorem Proving.
July 31 – August 4, 2023, Białystok, Poland.
- Machine-Checked Mathematics.
July 10–14, 2023, Lorentz Center, Leiden, The Netherlands.
Invited keynote speaker and project leader.
- Formalization of Cohomology Theories.
May 21 – 26, 2023, BIRS Juniper, Banff, Canada.
By invitation only.
- Machine Assisted Proofs.
February 13–17, 2023, IPAM, UCLA, Los Angeles, USA.
Invited speaker.
- Global Young Scientists Summit (GYSS) 2023.
January 17 – 20, 2023, Singapore.
- 2022 Xena Summer Workshop.
September 26 – 30, 2022, Imperial College London, London, UK.
Invited as project leader.
- ITP 2022: Thirteenth Conference on Interactive Theorem Proving.
August 7 – 10, 2022, Haifa, Israel.
- Lean for the Curious Mathematician 2022.
July 11 – 15, 2022, ICERM, Providence, USA.
Invited as group leader/lecturer.

- 9^{as} JTN: Novenas Jornadas de Teoría de Números.
June 28 – July 1, 2022, Universidad de La Rioja, Logroño, Spain.
- WINGs 2022: Women in Number Theory and Geometry.
June 6 – 8, 2022, West Lexham, Norfolk, UK.
- LMS Women in Mathematics Day.
May 11, 2022, University of Reading, Reading, UK (virtual attendee).
- Lean in Lyon.
May 10, 2022, Université Claude Bernard Lyon, Lyon, France (virtual attendee).
- Learning Mathematics with LEAN.
April 6, 2022, Loughborough University, Loughborough, UK (virtual attendee).
- Arizona Winter School 2020: Nonabelian Chabauty.
March 7 – 11, 2020, University of Arizona, Tucson, USA.
- Junior Number Theory Days 2019.
December 7 – 8, 2019, Johns Hopkins University, Baltimore , USA.
Invited speaker.
- Boston University/Keio University workshop 2019.
June 24 – 28, 2019, Boston University, Boston, USA.
- MRC: Explicit Methods in Arithmetic Geometry in Characteristic p .
June 16 – 22, 2019, Whispering Pines, Rhode Island, USA.
- Geometrization of the local Langlands program.
May 6 – 10, 2019, McGill University, Montréal, Canada.
- Arizona Winter School 2019: Topology and Arithmetic.
March 2 – 6, 2019, University of Arizona, Tucson, USA.
- Boston University Data Science Day 2019.
February 6, 2019, Boston University, Boston, USA.
- Mathematics is a long conversation: a celebration of Barry Mazur.
June 4 – 8, 2018, Harvard University, Cambridge, USA.
- CTNT 2018 Conference (Connecticut Summer School in Number Theory).
June 1 – 3, 2018, University of Connecticut, Storrs, USA.
- Women and Mathematics 2018: Mathematics of Modern Cryptography.
May 19 – 25, 2018, Institute for Advanced Study, Princeton, USA.
- Strength in Numbers: A Graduate Workshop in Number Theory and Related Areas.
May 11 – 12, 2018, Queen's University, Kingston, Canada.

- Arithmetic of Algebraic Curves.
April 6 – 8, 2018, University of Wisconsin, Madison, USA.
- Arizona Winter School 2018: Iwasawa Theory.
March 3 – 7, 2018, University of Arizona, Tucson, USA.
- Graduate Workshop in Algebraic Geometry (GWAGWMMG).
February 16 – 18, 2018, Harvard University and MIT, Cambridge, USA.
- MSRI Summer School: Automorphic Forms and the Langlands Program.
July 24 – August 4, 2017, MSRI, Berkeley, California, USA.
- Arizona Winter School 2017: Perfectoid Spaces.
March 11 – 15, 2017, University of Arizona, Tucson, USA.
- Rubinfest: L-functions and Arithmetic.
June 13 – 16, 2016, Harvard University, Cambridge, USA.

Teaching:

(Upcoming) Invited Lecturer at the ‘Perspectives on Mathematics and AI’ thematic week at SISSA:

- Lean minicourse (Trieste, July 13 –17, 2026).

Instructor at Universidad Autónoma de Madrid:

- Minicourse on Mathematical Formalization with Lean (April 4 – 5, 2024).
- Coding Theory and Cryptography (Fall 2023).

Invited Lecturer at the Sixth EACA International School on Computer Algebra and its Applications:

- Formalizing Mathematics in Lean (Santiago de Compostela, July 18 – 21, 2023).

Invited Lecturer at Universidad Complutense de Madrid’s PhD Program in Mathematical Research:

- Formalizing Mathematics in Lean (Formalización de matemáticas en Lean), PhD Course (February–March 2023).

Assistant Professor at Universidad Nebrija:

- Calculus II (Spring 2021).
- Mathematics II (Spring 2021).

Summer School Instructor at Boston University:

- MA 226: Differential Equations (Summer I 2019).
- MA 142: Introduction to Linear Algebra (Summer I 2017).

- MA 242: Linear Algebra (Summer I 2016).
- MA 121: Calculus for the Life and Social Sciences I (Summer I 2015).

Teaching Assistant at Boston University:

- MA 225: Multivariate Calculus (Spring 2019).
- MA 123: Calculus I (Fall 2018).
- MA 225: Multivariate Calculus (Spring 2018).
- MA 123: Calculus I (Fall 2017).
- MA 113: Elementary Statistics (Spring 2017).
- MA 411: Advanced Calculus (Fall 2016).
- MA 225: Multivariate Calculus (Spring 2016).
- MA 569: Optimization Methods of Operations Research (Fall 2015).

Counselor in PROMYS for Teachers (Summer II 2019, Summer II 2018, Summer II 2016, Summer II 2015).

Student supervision:

- Wenrong Zou, Master's thesis, May 2026 (expected). Co-supervised with Floris van Doorn (Universität Bonn).
- Santiago Mourenza Rivero, Bachelor's thesis, June 2024. Co-supervised with Ángel González Prieto (Universidad Complutense de Madrid).
- Sofía Berrojo Ramiro, Bachelor's thesis, June 2024. Co-supervised with Enrique González Jiménez (Universidad Autónoma de Madrid).

Academic Service:

- (Upcoming) Program committee member for the 17th Conference on Interactive Theorem Proving (ITP 2026).
- Program committee member for the 18th Conference on Intelligent Computer Mathematics (CICM 2025).
- Program committee member for the 16th Conference on Interactive Theorem Proving (ITP 2025).
- Referee for the 'Annals of Formalized Mathematics' journal.
- 2024 – present: Reviewer for Lean's mathematical library Mathlib.
- Panel discussion on research careers, V UAM Formative Days, February 10, 2024.
- Doctorate committee member, Anne Baanen, Vrije Universiteit Amsterdam, January 29, 2024.

- Spring 2019: Boston University Number Theory Expository Seminar, topic: Tools for Fermat's Last Theorem. Organizer, Boston University.
- Fall 2018: Boston University Number Theory Expository Seminar, topics: Supersingular Isogeny Graphs; Shimura Varieties. Organizer, Boston University.

Languages:

- English: Fluent in spoken and written English.
- Spanish: Native language.
- French: Intermediate level. Able to understand mathematical literature.

Computer Skills:

- Mathematical software: Lean, SAGE, Magma, Matlab.
- Programming languages:
 - Proficient with Lean, Python, C, Java.
 - Some experience with Lisp, R, VHDL, Javascript, HTML, XML, CSS.
- Databases: SQL.

Last modified on February 15th, 2026.