

Curriculum Vitae

KAROLA MÉSZÁROS

Work Address: Department of Mathematics
Cornell University
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Employment

2026 – **Professor of Mathematics**, Cornell University.
2020 – 2026 **Associate Professor of Mathematics**, Cornell University.
2014 – 2020 **Assistant Professor of Mathematics**, Cornell University.
2012 – 2014 **H.C.Wang Assistant Professor**, Department of Mathematics, Cornell University.
2011 – 2012 **NSF Fellow**, Department of Mathematics, University of Michigan, Ann Arbor.
2010 – 2011 **Lecturer**, Department of Mathematics, MIT.

Education

2005 – 2010 **Ph. D. in Mathematics**, Massachusetts Institute of Technology.
Thesis: *Root polytopes, triangulations, and subdivision algebras*,
advised by Richard P. Stanley
2001 – 2005 **B.S. in Mathematics**, Massachusetts Institute of Technology.

Scientific/Academic Honors

2026 AMS Fellow
2026 Robert A. and Donna B. Paul Award for Excellence in Advising, College of Arts and Sciences, Cornell University
2024 – 2027 National Science Foundation Grant [DMS-2348676](#) (\$329,999.00)
2019 – 2024 CAREER National Science Foundation Grant, [DMS-1847284](#) (\$511,910.00)
2018 – 2019 von Neumann Fellowship at the Institute for Advanced Study
2015 – 2019 National Science Foundation Grant [DMS-1501059](#) (\$170,000.00)
2016 Invitée Paris 7, Invited Scholar at Université Paris 7 Diderot
2011 – 2014 National Science Foundation Postdoctoral Research Fellowship
2009 – 2010 MIT Department of Mathematics Graduate Student Appreciation Fellowship
2005 – 2006 AKAMAI Fellowship
2005 AMITA (Association of MIT Alumnae) Senior Academic Award
2005 MIT Jon A. Bucsela Prize in Mathematics

Research Interests

Algebraic combinatorics, discrete geometry.

Publications and Preprints

- preprints 1. Karola Mészáros, Melissa Sherman-Bennett, Alexander Vidinas, *A dimer view on Fox's trapezoidal conjecture*, <https://arxiv.org/pdf/2512.02314>
2. Elena Hafner, Karola Mészáros, Alexander Vidinas, *On the Alexander polynomial of special alternating links*, <https://arxiv.org/pdf/2401.14927>
- 2026 3. Tamás Kálmán, Karola Mészáros, Alexander Postnikov, *Trapezoidal property of the generalized Alexander polynomial*, accepted to Bull. Lond. Math. Soc. (2026) <https://arxiv.org/pdf/2504.20967>

4. Karola Mészáros, Gregg Musiker, Melissa Sherman-Bennett, Alexander Vidinas, *Dimer face polynomials in knot theory and cluster algebras*, Selecta Math. (N.S.), Volume 32, article number 57 (2026) <https://arxiv.org/pdf/2408.11156>
- 2025 5. Karola Mészáros, Linus Setiabrata and Avery St. Dizier, *On the support of Grothendieck polynomials*, Ann. Comb. 29 (2025), no. 2, 541–562.
- 2024 6. Elena Hafner, Karola Mészáros, Alexander Vidinas, *Log-concavity of the Alexander polynomial*, Int. Math. Res. Not. IMRN 2024, no. 13, 10273–10284.
7. Elena Hafner, Karola Mészáros, Linus Setiabrata and Avery St. Dizier, *M-convexity of Grothendieck polynomials via bubbling*, SIAM J. Discrete Math. 38 (2024), no. 3, 2194–2225.
8. Matt Dreyer, Karola Mészáros, and Avery St. Dizier, *On the degree of Grothendieck polynomials*, Algebr. Comb. 7 (2024), no. 3, 627–658.
- 2022 9. Karola Mészáros, Linus Setiabrata and Avery St. Dizier, *An orthodontia formula for Grothendieck polynomials*, Trans. Amer. Math. Soc., 375 (2022), 1281–1303.
10. Ricky I. Liu, Karola Mészáros and Avery St. Dizier, *Schubert polynomials as projections of Minkowski sums of Gelfand-Tsetlin polytopes*. Comb. Theory 2 (2022), no. 3, Paper No. 4.
- 2021 11. June Huh, Jacob Matherne, Karola Mészáros and Avery St. Dizier, *Logarithmic concavity of Schur and related polynomials*, Trans. Amer. Math. Soc. 375 (2022), no. 6, 4411–4427.
- Karola Mészáros, Avery St. Dizier and Arthur Tanjaya, *Principal specialization of dual characters of flagged Weyl modules*, Electron. J. Combin. 28 (4) (2021), #P4.17
12. Karola Mészáros and Arthur Tanjaya, *Inclusion-exclusion on Schubert polynomials*, Algebr. Comb. 5 (2022), no. 2, 209–226.
13. Karola Mészáros and Linus Setiabrata, *Lorentzian polynomials from polytope projections*, Algebr. Comb., Volume 4 (2021) no. 4, pp. 723–739.
14. Samuel C. Gutekunst, Karola Mészáros and T. Kyle Petersen, *Root cones and the resonance arrangement*. Electron. J. Combin. 28 (1) (2021), #P1.12.
15. Kabir Kapoor, Karola Mészáros and Linus Setiabrata, *Counting integer points of flow polytopes*, Discrete Comput. Geom. 66 (2021), no. 2, 723–736.
16. Sylvie Corteel, Jang Soo Kim and Karola Mészáros, *Volumes of generalized Chan-Robbins-Yuen polytopes*. Discrete Comput. Geom. 65 (2021), no. 2, 510–530.
- 2020 17. Alex Fink, Karola Mészáros and Avery St. Dizier, *Zero-one Schubert polynomials*. Math. Z. 297 (2021), no. 3-4, 1023–1042.
18. Karola Mészáros and Avery St. Dizier, *From generalized permutahedra to Grothendieck polynomials via flow polytopes*. Algebr. Comb. 3 (2020), no. 5, 1197–1230.
- 2019 19. Ricky I. Liu, Karola Mészáros and Avery St. Dizier, *Gelfand-Tsetlin polytopes: a story of flow and order polytopes*. SIAM J. Disc. Math. 33 (2019), no. 4, 2394–2415.
20. Karola Mészáros and Alejandro H. Morales, *Volumes and Ehrhart polynomials of flow polytopes*. Math. Z. 293 (2019), no. 3-4, 1369–1401.
21. Karola Mészáros, Alejandro H. Morales and Jessica Striker, *On flow polytopes, order polytopes, and a certain face of the alternating sign matrix polytope*. Discrete Comput. Geom. 62 (2019), no. 1, 128–163.
22. Ricky I. Liu, Karola Mészáros and Alejandro H. Morales, *Flow polytopes and the space of diagonal harmonics*. Canad. J. Math., 71 (2019), no. 6, 1495–1521.
23. Karola Mészáros, Connor Simpson and Zoe Wellner, *Flow polytopes of partitions*. Electron. J. Combin. 26 (2019), no. 1, Paper 1.47, 12 pp.

- 2018 24. Alex Fink, Karola Mészáros and Avery St. Dizier, *Schubert polynomials as integer point transforms of generalized permutahedra*. Adv. Math. 332 (2018), 465–475.
25. Laura Escobar and Karola Mészáros, *Subword complexes via triangulations of root polytopes*. Algebr. Comb. 1 (2018), no. 3, 395–414.
- 2017 26. Sylvie Corteel, Jang Soo Kim and Karola Mészáros, *Flow polytopes with Catalan volumes*. C. R. Math. Acad. Sci. Paris 355 (2017), no. 3, 248–259.
27. Patricia Hersh and Karola Mészáros, *SB-labelings and posets with each interval homotopy equivalent to a sphere or a ball*. J. Combin. Theory Ser. A, (2017), 152, 104–120.
28. Karola Mészáros, Alejandro H. Morales and Brendon Rhoades, *The polytope of Tesler matrices*. Selecta Math. (N.S.), 23 (2017), no. 1, 425–454.
29. Karola Mészáros, *Calculating Greene’s function via root polytopes and subdivision algebras*. Pacific J. Math., 286 (2017), no. 2, 385–400.
- 2016 30. Laura Escobar and Karola Mészáros, *Toric matrix Schubert varieties and their polytopes*. Proc. Amer. Math. Soc., 144 (2016), no. 12, 5081–5096.
31. Karola Mészáros, *Pipe dream complexes and triangulations of root polytopes belong together*. SIAM J. Disc. Math., 30 (2016), no. 1, 100–111.
32. Karola Mészáros, *h -Polynomials of Reduction Trees*. SIAM J. Disc. Math., 30 (2016), no. 2, 736–762.
33. Jonah Blasiak, Ricky I. Liu and Karola Mészáros, *Subalgebras of the Fomin-Kirillov algebra*, J. Algebraic Combin., 44 (2016), no. 3, 785–829.
- 2015 34. Karola Mészáros and Alejandro H. Morales, *Flow polytopes of signed graphs and the Kostant partition function*. Int. Math. Res. Notices (2015) no. 3: 830–871.
35. Louis J. Billera, Lionel Levine and Karola Mészáros, *How to decompose a permutation into a pair of labeled Dyck paths by playing a game*. Proc. Amer. Math. Soc. 143 (2015), no. 5, 1865–1873.
36. Karola Mészáros, *Product formulas for volumes of flow polytopes*. Proc. Amer. Math. Soc. 143 (2015), no. 3, 937–954.
37. Karola Mészáros, *h -Polynomials via Reduced Forms*. Electron. J. Combin. 21. 22(4) (2015), #P4.18
- 2014 38. Karola Mészáros, Greta Panova and Alexander Postnikov, *Schur times Schubert via the Fomin-Kirillov algebra*. Electron. J. Combin. 21 (2014), no. 1, Paper 1.39, 22 pp.
39. Jang Soo Kim, Karola Mészáros, Greta Panova and David B. Wilson, *Dyck tilings, increasing trees, descents, and inversions*. J. Combin. Theory Ser. A 122 (2014), 9–27.
- 2013 40. Karola Mészáros and Alexander Postnikov, *Branched polymers and hyperplane arrangements*. Discrete Comput. Geom. 50, Issue 1 (2013), Page 22–38.
41. Karola Mészáros, *Labeling the regions of the type C_n Shi arrangement*, Electron. J. Combin. 20, Issue 2 (2013), P31.
- 2012 42. Karola Mészáros, *Demystifying a divisibility property of the Kostant partition function*. Pacific J. Math. 260-1 (2012) 215–225.
- 2011 43. Karola Mészáros, *Root polytopes, triangulations, and the subdivision algebra, II*. Trans. Amer. Math. Soc. **363**: # 11, 6111–6141, 2011.
44. Karola Mészáros, *Root polytopes, triangulations, and the subdivision algebra, I*. Trans. Amer. Math. Soc. **363**: # 8, 4359–4382, 2011.

- 2008 45. Alexander Holroyd, Lionel Levine, Karola Mészáros, Yuval Peres, James Propp, and David Wilson, *Chip-firing and rotor-routing on finite digraphs*. In and out of Equilibrium II, “Progress in Probability,” Birkhäuser (2008), 331-364.
46. Karola Mészáros, *On low degree k -ordered graphs*. Discrete Math. 308, Issue 12 (2008), 2418-2426.
47. Karola Mészáros, *On 3-regular 4-ordered graphs*. Discrete Math. 308, Issue 11 (2008), 2149-2155.
48. Karola Mészáros, *Latin squares and their defining sets*. Discrete Math. 308, Issue 12 (2008), 2366-2378.
- 2007 49. Karola Mészáros, *On the number of genus one labeled circle trees*, Electron. J. Combin. 14 (2007), #R68.

Selected talks

- 2026 July Mathematics Colloquium, Budapest Semesters in Mathematics, Budapest, Hungary
Mar. Combinatorics Seminar, University of Michigan, Ann Arbor, MI
- 2025 Dec. Princeton Topology Seminar, Princeton, NJ
Nov. Mathematics Colloquium, Stony Brook University, Stony Brook, NY
Oct. Mathematics Colloquium, Cornell University, Ithaca, NY
Jan. NCSU Algebra and Combinatorics Seminar, Raleigh, NC
- 2024 Dec. Cascade Lectures in Combinatorics, Eugene, OR
Jun. The Many Combinatorial Legacies of Richard P. Stanley, 80th birthday conference, Cambridge, MA
Feb. MIT Geometry and Topology Seminar, Cambridge, MA
Feb. Mathematics Colloquium, University of Miami, Miami, FL
- 2023 Nov. UC Boulder Lie Theory Seminar, Boulder, CO
Oct. UC Berkeley Combinatorics Seminar, Berkeley, CA
Sept. Invited Speaker, Groups in action: from representations and harmonic analysis on Lie groups to index theory, A meeting in honour of Michèle Vergne’s 80th birthday, Paris, France
- 2022 Apr. MSU Combinatorics and Graph theory seminar, Lansing, MI
Mar. Brandeis Combinatorics seminar, Waltham, MA
Jan. Plenary Speaker, FPSAC (Formal Power Series and Algebraic Combinatorics), Ramat-Gan, Israel
- 2021 May Workshop on Degeneracy Loci, Columbus, OH
Apr. Invited Speaker, Workshop on Algebraic Geometry and Polyhedra, ICERM, Providence, RI
Apr. Invited Speaker, (Polytop)ics: Recent advances on polytopes, Max Planck Institute for Mathematics in the Sciences, Leipzig, Germany
- 2019 May Invited Speaker, Mid-Atlantic Algebra, Geometry & Combinatorics Workshop, Philadelphia, PA
Apr. Mathematics Colloquium, UIUC, Urbana-Champaign, IL
Apr. Computer Science/Discrete Mathematics Seminar, Institute for Advanced Study, Princeton, NJ
Apr. MIT Combinatorics Seminar, Cambridge, MA
- 2018 Dec. IAS Members’ Seminar, Institute for Advanced Study, Princeton, NJ
Nov. Invited Speaker, Subtraction-Free combinatorics, a conference in honor of Sergey Fomin’s 60th birthday, Ann Arbor, MI
Nov. Mathematics Colloquium, Haverford College, Haverford, PA
- 2017 Oct Mathematics Colloquium, George Mason University, Fairfax, VA

- Jun. Invited speaker, Algebraic and Geometric Combinatorics of Reflection Groups, CRM/LaCIM, Montréal, Canada
- Jan. Mathematics Colloquium, Technische Universität, Berlin, Germany
- 2016 Nov. UC Berkeley Combinatorics Seminar, Berkeley, CA
- Nov. Invited Speaker, AIM Workshop on Polyhedral geometry and partition theory, San Jose, CA
- Jan. LIAFA: Enumerative and analytic combinatorics seminar, Université Paris 7, Paris, France
- 2015 Nov. Combinatorics Seminar, University of California, San Diego, CA
- Nov. Combinatorics Seminar, University of Washington, Seattle, WA
- Mar. Kempner Colloquium, University of Colorado, Boulder, CO
- Feb. Invited speaker, Perspectives in Lie Theory, Pisa, Italy
- 2014 June Invited speaker, Richard P. Stanley's 70th birthday conference, Cambridge, MA
- May Plenary speaker, ALGECOM, Urbana-Champaign, IL
- Jan. Invited speaker, AMS joint meetings, Session on Geometric applications of Algebraic Combinatorics, Baltimore, MD
- 2013 Oct. LACIM Combinatorics Seminar, Montreal, Canada
- Sep. Invited speaker, COMETA, Cortona, Italy
- 2012 Nov. Cornell Discrete Geometry and Combinatorics Seminar, Ithaca, NY
- Apr. UM Combinatorics Seminar, Ann Arbor, MI
- 2011 Aug. Invited speaker, Cluster Algebras and Statistical Physics, ICERM, Providence, RI
- Feb. UBC Mathematics Colloquium, Vancouver, Canada
- 2010 Sep. Cornell Discrete Geometry and Combinatorics Seminar, Ithaca, NY
- May. Plenary speaker, Discrete Math Day, Worcester, MA.
- 2009 Oct. Brown University Discrete Mathematics Seminar, Providence, RI
- Apr. UC Berkeley Discrete Mathematics Seminar, Berkeley, CA
- Apr. AMS Special Session on Matroids in algebra and geometry, San Francisco, CA
- Feb. MIT Combinatorics Seminar, Cambridge, MA
- 2008 Dec. ELTE Egerváry Seminar, Budapest, Hungary
- Dec. University of Szeged Combinatorics Seminar, Szeged, Hungary
- Nov. Dartmouth Combinatorics Seminar, Hanover, NH

Teaching

- 2026 Fall MATH 2210: Linear Algebra, Cornell undergraduate course
- 2026 Spring MATH 3360: Applicable Algebra, Cornell undergraduate course
- 2025 Fall MATH 4410: Introduction to Combinatorics I, Cornell undergraduate course
- 2025 Spring MATH 3360: Applicable Algebra, Cornell undergraduate course
- 2024 Fall MATH 4410: Introduction to Combinatorics I, Cornell undergraduate course
- 2024 Fall AS 1102: AS Advising Seminar, Cornell undergraduate course
- 2023 Spring MATH 3360: Applicable Algebra, Cornell undergraduate course
- 2022 Fall MATH 4410: Introduction to Combinatorics I, Cornell undergraduate course
- 2022 Spring MATH 3360: Applicable Algebra, Cornell undergraduate course
- 2021 Fall MATH 4410: Introduction to Combinatorics I, Cornell undergraduate course
- 2020 Fall MATH 4410: Introduction to Combinatorics I, Cornell undergraduate course
- 2020 Spring MATH 6410: Enumerative Combinatorics, Cornell graduate course
- 2020 Spring MATH 3340: Abstract Algebra, Cornell undergraduate course
- 2019 Fall MATH 4370: Computational Algebra, Cornell undergraduate course
- 2018 Spring MATH 6410: Enumerative Combinatorics, Cornell graduate course
- 2017 Spring MATH 2310: Linear Algebra with Applications, Cornell undergraduate course
- 2016 Spring MATH 6410: Enumerative Combinatorics, Cornell graduate course

- 2015 Fall MATH 4410: Introduction to Combinatorics I, Cornell undergraduate course
- 2015 Spring MATH 4550: Applicable Geometry, Cornell undergraduate course
- 2014 Fall MATH 4410: Introduction to Combinatorics I, Cornell undergraduate course
- 2014 Spring MATH 6410: Enumerative Combinatorics, Cornell graduate course
- 2013 Spring MATH 4550: Applicable Geometry, Cornell undergraduate course

Supervised Reading and Research

- 2026 Summer Summer research experience for Cornell math major
- 2026 Spring MATH 4900: Supervised Research, Cornell undergraduate
- 2025 Fall MATH 4900: Supervised Research, Cornell undergraduates
- 2025 Summer Summer research experience for Cornell math major
- 2025 Spring MATH 4900: Supervised Research, Cornell undergraduate
- 2025 Spring MATH 4900: Supervised Research, Cornell undergraduate
- 2025 Spring MATH 4900: Supervised Research, Cornell undergraduate
- 2021 Fall MATH 4900: Supervised Research, Cornell undergraduates
- 2021 Spring MATH 4900: Supervised Research, Cornell undergraduates
- 2020 Spring MATH 4900: Supervised Research, Cornell undergraduates
- 2019 Fall MATH 4900: Supervised Research, Cornell undergraduates
- 2019 Fall MATH 7900: Supervised Reading & Research, Cornell graduates
- 2019 Spring MATH 4900: Supervised Research, Cornell undergraduates
- 2019 Spring MATH 7900: Supervised Reading & Research, Cornell graduates
- 2018 Fall MATH 4900: Supervised Research, Cornell undergraduates
- 2018 Fall MATH 7900: Supervised Reading & Research, Cornell graduates
- 2018 Spring MATH 4900: Supervised Research, Cornell undergraduates
- 2017 Fall MATH 4900: Supervised Research, Cornell undergraduates
- 2017 Fall MATH 7900: Supervised Reading & Research, Cornell graduates
- 2017 Spring MATH 4900: Supervised Research, Cornell undergraduates
- 2017 Spring MATH 7900: Supervised Reading & Research, Cornell graduates
- 2016 Fall MATH 4900: Supervised Research, Cornell undergraduates
- 2013 Fall MATH 4901: Supervised Reading, Cornell undergraduates

Thesis Committees

- 2026 Summer Gabe Udell, Cornell Department of Mathematics B-exam committee member
- 2025 Spring Luis Perez, Cornell Department of Mathematics A-exam committee member
- 2024 Spring Fiona Young, Cornell Department of Mathematics B-exam committee member
- 2024 Spring Elena Hafner, Cornell Department of Mathematics B-exam committee chair
- 2024 Spring Prairie Wentworth-Nice, Cornell Department of Mathematics B-exam committee member
- 2024 Spring Joseph Fluegemann Cornell Department of Mathematics B-exam committee member
- 2024 Spring Matthew Eichhorn, Cornell CAM B-exam committee member
- 2024 Spring Gabe Udell, Cornell Department of Mathematics A-exam committee member
- 2024 Spring Alexander Vidinas, Cornell Department of Mathematics A-exam committee chair
- 2022 Spring Fiona Young, Cornell Department of Mathematics A-exam committee member
- 2021 Summer Elena Hafner, Cornell Department of Mathematics A-exam committee chair
- 2021 Spring Prairie Wentworth-Nice, Cornell Department of Mathematics A-exam committee member
- 2020 Summer Joseph Fluegemann, Cornell Department of Mathematics A-exam committee member

2020	Spring	Sam Gutekunst, Cornell ORIE Department B-exam committee member
2020	Spring	Avery St. Dizier, Cornell Department of Mathematics B-exam committee chair
2019	Spring	Swee Hong Chan, Cornell Department of Mathematics B-exam committee member
2019	Spring	Sagar Jha, Cornell Department of Computer Science A-exam committee member
2018	Spring	Connor Simpson, Cornell Mathematics Undergraduate Honors Thesis Advisor
2018	Spring	Avery St. Dizier, Cornell Department of Mathematics A-exam committee chair
2018	Spring	Sam Gutekunst, Cornell ORIE Department A-exam committee member
2017	Spring	Matvey Soloviev, Cornell Department of Computer Science A-exam committee member
2016	Spring	Swee Hong Chan, Cornell Department of Mathematics A-exam committee member

Mentoring and Outreach

2026		Math Club Panel on mathematics and AI
2025-		supervising the research of mathematics graduate student Zach Benton
2025-		supervising the research of mathematics graduate student Bernd Zwanziger
2026		supervised the research of mathematics undergraduate student Moss Blank
2025-2026		supervised the research of mathematics undergraduate student Evan Huang
2025		supervised the research of mathematics undergraduate student Derek Xu
2025		supervised the research of mathematics undergraduate student Richard Li
2025		supervised the research of mathematics undergraduate student Arkar Soe
2025		supervised the research of mathematics undergraduate student Leonardo de Medeiros
2022-		supervising the research of mathematics graduate student Alexander Vidinas
2022		AWM Panel on academia and industry
2022		MIT PRIMES faculty mentor for CMU graduate student Zoe Wellner and Boston area high school student Advay Goel
2021-2023		mentoring undergraduate student Alejandro Maris Natera on a research project
2020-		designed and involved with Discrete Mathematics and Explorations (DIMEX) program for middle and high school students
2020-2024		supervised the research of mathematics graduate student Elena Hafner
2020-2021		mentored undergraduate student Matt Dreyer on a research project
2020-2021		mentored undergraduate student Arthur Tanjaya on a research project
2018-2020		mentored undergraduate student Linus Setiabrata on a research project
2018		mentored undergraduate student Kabir Kapoor on a research project
2017		mentored Amherst College undergraduate student Sylvia Frank on a reading and research project
2017-2020		mentored ORIE graduate student Samuel Gutekunst on a research project
2016-2018		mentored undergraduate students Connor Simpson and Zoe Wellner on a research project
2016-2020		supervised the research of mathematics graduate student Avery St. Dizier
2014-2016		Involved graduate student Laura Escobar and undergraduates Ethan Koenig and Aravind Gollakota in research
2016		Presented on <i>Combinatorial Enumeration</i> to interested non-math majors in the Totally Awesome Math Course at Cornell (MATH 1600)
2016		Presented on <i>Ehrhart polynomials of integer polytopes</i> in the Cornell Undergraduate Math Club
2016		Presented on <i>Catalan numbers</i> to an audience of Central NY high school teachers (MATH 5080)

- 2014 Presented on *Fibonacci numbers* to an audience of Central NY high school teachers (MATH 5080)
- 2014 Presented on *Enumerative Combinatorics* to interested non-math majors in the Totally Awesome Math Course at Cornell (MATH 1600)
- 2013 Designed a reading course on *Combinatorics and Polytopes* for Cornell undergraduate Bradford Aymes
- 2013 Presented on *Polytopes and Magic Squares* in the Cornell Undergraduate Math Club

Postdocs

- 2022-2024 Christian Gaetz, Klarman Fellow.

Service at the Cornell Department of Mathematics

- 2026-2027 Graduate Advising Committee
- 2025-2027 Teaching Observation Committee
- 2021, 2025 Member of ad hoc tenure committees for the Department of Mathematics
- 2024-2025 Transfer Credit Committee
- 2015-2016, 2017-2018, 2019-2020, 2022 Graduate Admissions Committee
- 2012-2016, 2019-2022, 2024-2026 Math Club Committee
- 2014-2015, 2016-2018 Computer Committee

Service at Cornell

- 2024 Taught AS 1102: Advising Seminar for Cornell freshmen
- 2022 Member of ad hoc tenure committee for the College of Engineering

Professional Activities

- 2022 – 2023 Program Committee member for FPSAC 2023 (Formal Power Series and Algebraic Combinatorics)
- 2021 NSF Grant Panelist
- 2017 – 2018 Program Committee member for FPSAC 2018 (Formal Power Series and Algebraic Combinatorics)
- 2017 Organized lecture series by Luca Moci at Cornell “A survey on vector partition functions: quasi-polynomiality and beyond”
- 2014 – Co-organizer of the Cornell Discrete Geometry and Combinatorics seminar since Fall 2014
- 2006 – Reviewer for mathematics journals (Journal of the European Mathematical Society; International Mathematical Research Notices; Advances in Mathematics; Selecta Mathematica; Compositio Mathematica; Mathematische Zeitschrift; Comptes Rendus Mathématique Acad. Sci. Paris; Journal of the London Mathematical Society; Advances in Mathematics; Transformation Groups; Proceedings of the American Mathematical Society; Transactions of the American Mathematical Society; Experimental Mathematics; Symmetry, Integrability and Geometry: Methods and Applications; Discrete & Computational Geometry; Journal of Combinatorial Theory Series A; Journal of Algebraic Combinatorics; Combinatorics, Probability and Computing; SIAM Journal of Discrete Mathematics; European Journal of Combinatorics; Discrete Mathematics; Electronic Journal of Combinatorics; Algebraic & Geometric Topology) and for conferences FPSAC (Formal Power Series and Algebraic Combinatorics) and SODA (Symposium on Discrete Algorithms)