Curriculum Vitae

Cristian Lenart

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Education

09/1993–06/1996	*University of Manchester (UK).*
06/1996	Ph.D. in Mathematics. Thesis: *Combinatorial Models for Certain Structures in Formal Group Theory and Algebraic Topology.*
10/1992–06/1993	*University of Cambridge (UK).*
06/1993	Advanced Studies in Mathematics (*with distinction*, 4th place).
10/1989–09/1992	*University of Cluj-Napoca (Romania).*
09/1992	Ph.D. in Computer Science. Distinguished Dissertation Award. Thesis title: *Classification and Learning in Pattern Recognition.*
09/1984–06/1988	*University of Cluj-Napoca (Romania).*
06/1988	B.S. in Mathematics and Computer Science (*Summa cum laude*).

Postdoctoral positions

1998–1999	*Max-Planck-Institut für Mathematik, Bonn, Germany.* Visiting position (12 months).
1996–1998	*Massachusetts Institute of Technology.* Applied Mathematics Instructor; affiliated with the Laboratory for Computer Science.

Research Interests (including the 2010 Mathematics Subject Classification)

Algebraic combinatorics (05E05, 05E10, 05E99), Lie algebras and their representations (17B10, 17B67, 20G42), Macdonald polynomials (33D52, 33D80), Weyl group multiple Dirichlet series (11F68), algebraic geometry (14C17, 14M15), K-theory (19L47), algebraic topology (55N22, 55S10, 55S25), cluster analysis (62H30).

Positions held

2011–present	*State University of New York at Albany* Professor.
2013–2014	*Max-Planck-Institut für Mathematik, Bonn, Germany.* Visiting position (12 months).

2005–2011 *State University of New York at Albany*
Associate Professor.

1999–2005 *State University of New York at Albany*
Assistant Professor.

1990–1992 *University of Cluj-Napoca (Romania).*
Assistant Professor.

1988–1992 *Geological Prospecting and Exploring*, Cluj-Napoca (Romania).
Computer programmer.

Visitor at mathematical institutes (with support from some of these institutions)

- Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, Providence, RI, 2025 – speaker at the workshop *Computation in Representation Theory*.
- Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, Providence, RI, 2021 – speaker at the workshop *Geometry and Combinatorics from Root Systems*.
- Institut des Hautes Études Scientifiques (IHÉS), Bures-sur-Yvette, France, 2018.
- Henri Poincaré Institute, Paris, France, 2017 – Research in Paris (with Cédric Lecouvey).
- Banff International Research Station, Canada, 2016 – speaker at the workshop *Whittaker Functions: Number Theory, Geometry, and Physics*.
- Korea Institute for Advanced Study (KIAS), South Korea, 2015 – speaker at the workshop *Categorical Representation Theory and Combinatorics*.
- Banff International Research Station, Canada, 2013 – speaker at the workshop *Whittaker Functions: Number Theory, Geometry, and Physics*.
- Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, Providence, RI, 2013 – presented and co-organized a workshop in the semester program *Automorphic Forms, Combinatorial Representation Theory and Multiple Dirichlet Series*.
- Mathematisches Forschungsinstitut Oberwolfach, Germany, 2012 – Research in Pairs (with Satoshi Naito, Anne Schilling, and Mark Shimozono).
- Mathematisches Forschungsinstitut Oberwolfach, Germany, 2011 – Research in Pairs (with Anne Schilling).
- Max-Planck-Institut für Mathematik, Bonn, Germany, 2011 – guest of Prof. Yuri Manin; presented in the seminar *Algebra, Geometry, and Physics*.
- Mathematisches Forschungsinstitut Oberwolfach, Germany, 2010 – speaker at the workshop *Combinatorial Representation Theory*.

- Research Institute for Mathematical Sciences (RIMS), Kyoto, Japan, 2008 – speaker at the workshop *Crystals and Tropical Combinatorics*.
- Mathematical Sciences Research Institute, Berkeley, CA, 2008 – speaker in the semester program *Combinatorial Representation Theory*.
- Centre de Recherches Mathématiques, Montréal, Canada, 2007 – speaker at the workshop *Combinatorial Hopf Algebras and Macdonald Polynomials*
- American Institute of Mathematics, 2007 – speaker at the workshop *Buildings and Combinatorial Representation Theory*.
- Banff International Research Station, Canada, 2007 – speaker at the workshop *Contemporary Schubert Calculus and Schubert Geometry*.
- Newton Institute, Cambridge, UK, 2001 – speaker in the NATO Advanced Study Institute *Symmetric Functions 2001: Surveys of Developments and Perspectives*.
- Institute for Mathematical Research, ETH Zürich, Switzerland, 1999.
- Mathematical Sciences Research Institute, Berkeley, CA, 1997 – speaker at the workshop *Representation Theory and Symmetric Functions*.
- Rutgers Center for Operations Research, NJ, 1992, 1998 – research in clustering.

Research Grants (amounts included below total $1,045,536)

2024–2027	National Science Foundation grant DMS-2401755, PI, *New Perspectives in Combinatorics for Lie Algebra Representations and Schubert Calculus*, award amount: $180,000.
2023–2024	National Science Foundation grant DMS-2305413, PI, *Conference: Women in Algebra and Combinatorics. Northeast Conference Celebrating the Association for Women in Mathematics: 50 Years and Counting*, Co-PIs: L. Colmenarejo, K. Reinhold, L. Rose, and C. Zhong, award amount: $43,309.00.
2019–2024	National Science Foundation grant DMS-1855592, PI, *New Applications of Combinatorics to Representation Theory and Schubert Calculus* (Combinatorics Program, co-funded by Algebra and Number Theory Program), award amount: $227,612; includes one-year support for two Postdoctoral Associates.
2018	Raymond and Beverly Sackler Foundation fellow at Institut des Hautes Études Scientifiques (IHÉS), France.
2018–2019	Simons Foundation Collaboration Grant for Mathematicians, PI, award amount: $8,400.
2014–2018	National Science Foundation grant DMS-1362627, PI, *Representation Theory and Schubert Calculus: Combinatorics and Interactions* (Combinatorics Program), award amount: $160,000; includes support for a Postdoctoral Associate, and 20 weeks summer support for a graduate student in 2016 and 2017.

2011–2014 National Science Foundation grant DMS-1101264, PI, *Combinatorics of Crystals, Macdonald Polynomials, and Schubert Calculus* (Combinatorics Program), award amount: $150,000; includes two-year support for graduate students.

2007–2010 National Science Foundation grant DMS-0701044, PI, *Combinatorial Studies in Algebra, Geometry, and Topology* (Algebra, Number Theory, and Combinatorics Program), award amount: $168,807; includes three-year support for graduate students.

2004–2007 National Science Foundation grant DMS-0403029, PI, *Combinatorial Models in Algebra, Geometry, and Topology* (Algebra, Number Theory, and Combinatorics Program), award amount: $107,408; includes summer support for a graduate student in 2006.

2004–2005 Faculty Research Award, SUNY Albany.

2003–2004 Faculty Research Award, SUNY Albany.

2001–2011 Individual Development Awards Program, 4 grants, SUNY Albany.

2000–2005 Travel awards, SUNY Albany.

Awards and Other Honors

- State University of New York Chancellor's Award for Excellence in Scholarship and Creative Activities, 2014.
- President's Excellence Award for Research and Creative Activities, SUNY Albany, 2013.
- Magdalene College Prize in Mathematics, Magdalene College, Cambridge, UK, 1993.
- 2nd prizes at the national competition of undergraduate students in mathematics in Romania (freshman and sophomore years).
- 1st prizes in the Romanian National Mathematical Olympiad in 8th, 9th, and 12th grades; member of the national team for the International Mathematical Olympiad in the 10th, 11th, and 12th grades.
- Inclusion in "Who is Who in America" and "Who is Who in the World" (multiple years).

Publications (719 citations in 388 publications by 357 authors on *MathSciNet*, 1522 citations on *Google Scholar*, h-index 22, i10-index 47, as of June 23, 2025)

- Refereed research publications

1. C. Lenart and S. Spellman, A combinatorial model for affine Demazure crystals of levels zero and one, 37th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2025), to appear in *Sém. Lothar. Combin.*, 2025.

2. C. Lenart, S. Naito, F. Nomoto, and D. Sagaki, Symmetric and nonsymmetric Macdonald polynomials via a path model with a pseudo-crystal structure, in: Macdonald theory and beyond, *Contemp. Math.*, 815, 25–57. Edited by Daniel Orr and Joshua Wen. American Mathematical Society, Providence, RI, 2025, ISBN: 978-1-4704-7189-7 (MR 4885746).
3. C. Lenart, S. Naito, and D. Sagaki, A general Chevalley formula for semi-infinite flag manifolds and quantum K-theory, *Selecta Math. (N.S.)*, 30 (2024), Paper no. 39, 44 pp. (MR 4725297).
4. T. Kouno, C. Lenart, S. Naito, and D. Sagaki (Appendix B joint with W. Xu), Quantum K-theory Chevalley formulas in the parabolic case, *J. Algebra*, 645 (2024), 1–53 (MR 4705535).
5. T. Kouno, C. Lenart, and S. Naito, New structure on the quantum alcove model with applications to representation theory and Schubert calculus, *J. Combin. Algebra*, 7 (2023), 347–400 (MR 4662316).
6. C. Lenart, S. Naito, D. Orr, and D. Sagaki, Inverse K-Chevalley formulas for semi-infinite flag manifolds, II: Arbitrary weights in ADE type, *Adv. Math.*, 423 (2023), Paper no. 109037, 63 pp. (MR 4577270).
7. C. Lenart, C. Su, K. Zainoulline, and C. Zhong, Geometric properties of the Kazhdan-Lusztig Schubert basis, *Algebra Number Theory*, 17 (2023), 435–464 (MR 4564763).
8. T. Kouno, C. Lenart, and S. Naito, Generalized quantum Yang-Baxter moves and their application to Schubert calculus, 34th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2022), *Sém. Lothar. Combin.*, 86B (2022), Art. #13, 12 pp. (MR 4490854).
9. C. Lecouvey and C. Lenart, Lusztig's t-analogues via crystals, in: Interactions of Quantum Affine Algebras with Current Algebras, Cluster Algebras and Categorification. In Honor of Vyjayanthi Chari on the Occasion of Her 60th Birthday. Based on the conference held at the Catholic University of America, Washington, D.C., June 2-8, 2018. Edited by Jacob Greenstein, David Hernandez, Kailash Misra and Prasad Senesi. Progress in Mathematics, 337. *Birkhäuser/Springer*, 2021. xxii+376 pp. ISBN: 978-3-030-63848-1 (MR 4404361).
10. C. Lenart, S. Naito, and D. Sagaki, A combinatorial Chevalley formula for semi-infinite flag manifolds and its applications, 33rd International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2021), *Sém. Lothar. Combin.*, 85B (2021), Art. #22, 12 pp. (MR 4311903).
11. C. Lenart and A. Schultze, On combinatorial models for affine crystals, 33rd International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2021), *Sém. Lothar. Combin.*, 85B (2021), Art. #20, 13 pp. (MR 4311901).
12. C. Lecouvey and C. Lenart, Atomic decomposition of characters and crystals, *Adv. Math.*, 376 (2021), 51 pp. (MR 4178925); 31st International Conference on

Formal Power Series and Algebraic Combinatorics (FPSAC 2019), *Sém. Lothar. Combin.*, 82B (2019), Art. #40, 12 pp (MR 4098261).

13. C. Lenart, K. Zainoulline, and C. Zhong, Parabolic Kazhdan-Lusztig basis, Schubert classes and equivariant oriented cohomology, *J. Inst. Math. Jussieu*, 19 (2020), 1889–1929 (MR 4166997).
14. C. Lecouvey and C. Lenart, Combinatorics of generalized exponents, *Int. Math. Res. Not.*, no. 16, 2020, 4942–4992 (MR 4139030); 31st International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2019), *Sém. Lothar. Combin.*, 82B (2019), Art. #14, 12 pp (MR 4098235).
15. C. Lenart and T. Scrimshaw, On higher level Kirillov–Reshetikhin crystals, Demazure crystals, and related uniform models, *J. Algebra*, 539 (2019), 285–304 (MR 3996335).
16. K.-H. Lee, C. Lenart, and D. Liu, Whittaker functions and Demazure characters (Appendix by D. Muthiah and A. Puskás), *J. Inst. Math. Jussieu*, 18 (2019), 759–781 (MR 3963518).
17. C. Lenart and A. Lubovsky, A uniform realization of the combinatorial R-matrix for column shape Kirillov-Reshetikhin crystals, *Adv. Math.* 334 (2018), 151–183 (MR 3828735); 27th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2015), 571–582, *Discrete Math. Theor. Comput. Sci. Proc.*, AR, Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2015.
18. C. Lenart, S. Naito, D. Sagaki, A. Schilling, and M. Shimozono, A uniform model for Kirillov-Reshetikhin crystals III: Nonsymmetric Macdonald polynomials at $t = 0$ and Demazure characters, *Transform. Groups* 22 (2017), 1041–1079 (MR 3717224).
19. C. Lenart and K. Zainoulline, Towards generalized cohomology Schubert calculus via formal root polynomials, *Math. Res. Lett.* 24 (2017), 839–877 (MR 3696606).
20. C. Lenart and K. Zainoulline, A Schubert basis in equivariant elliptic cohomology, *New York J. Math.* 23 (2017), 711–737 (MR 3665585).
21. P. Hersh and C. Lenart, From the weak Bruhat order to crystal posets, *Math. Z.* 286 (2017), 1435–1464 (MR 3671583).
22. C. Lenart, S. Naito, D. Sagaki, A. Schilling, and M. Shimozono, A uniform model for Kirillov-Reshetikhin crystals II: Alcove model, path model, and $P = X$, *Int. Math. Res. Not.*, no. 14, 2017, 4259–4319 (MR 3674171); 25th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2013), 57–68, *Discrete Math. Theor. Comput. Sci. Proc.*, AS, Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2013 (MR 3090977).
23. C. Lenart, S. Naito, D. Sagaki, A. Schilling, and M. Shimozono, Quantum Lakshmibai-Seshadri paths and root operators, Proceedings of the 5th Mathematical Society of Japan Seasonal Institute. Schubert Calculus, Osaka, Japan, 2012; *Advanced Studies in Pure Mathematics* 71 (2016), 267–294 (MR 3644827).

24. C. Lenart, S. Naito, D. Sagaki, A. Schilling, and M. Shimozono, A uniform model for Kirillov-Reshetikhin crystals I: Lifting the parabolic quantum Bruhat graph, *Int. Math. Res. Not.*, no. 7, 2015, 1848–1901 (MR 3335235).

25. C. Lenart and A. Lubovsky, A generalization of the alcove model and its applications, *J. Algebraic Combin.* 41 (2015), 751–783 (MR 3328179); 24th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2012), 875–886, *Discrete Math. Theor. Comput. Sci. Proc.*, AR, Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2012 (MR 2958056).

26. C. Lenart, S. Naito, D. Sagaki, A. Schilling, and M. Shimozono, Explicit description of the degree function in terms of quantum Lakshmibai-Seshadri paths, *Proceedings of Tsukuba Workshop on Infinite Dimensional Lie Theory and Related Topics – History and Development*, October 20–23, 2014, University of Tsukuba, Ibaraki, Japan; *Toyama Math. J.* 37 (2015), 107–130 (MR 3468993).

27. C. Lenart and M. Shimozono, Equivariant K-Chevalley rules for Kac-Moody flag manifolds, *Amer. J. Math.* 136 (2014), 1175–1213 (MR 3263896).

28. C. Lenart and A. Schilling, Crystal energy via the charge in types A and C, *Math. Z.* 273 (2013), 401–426 (MR 3010167); 24th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2012), 9–20, *Discrete Math. Theor. Comput. Sci. Proc.*, AR, Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2012.

29. C. Lenart, From Macdonald polynomials to a charge statistic beyond type A, *J. Combin. Theory Ser. A* 119 (2012), 683–712 (MR 2871757).

30. C. Lenart, Hall-Littlewood polynomials, alcove walks, and fillings of Young diagrams (Appendix with A. Lubovsky), *Discrete Math.* 311 (2011), 258–275 (MR 2739912).

31. C. Lenart, Haglund-Haiman-Loehr type formulas for Hall-Littlewood polynomials of type B and C, *Algebra Number Theory* 4 (2010), 887–917 (MR 2776877).

32. C. Lenart, Growth diagrams for the Schubert multiplication, *J. Combin. Theory Ser. A* 117 (2010), 842–856 (MR 2652098).

33. P. Hersh and C. Lenart, Combinatorial constructions of weight bases. The Gelfand-Tsetlin basis, *Electron. J. Combin.* 17 (2010), #R33 (MR 2595493).

34. C. Lecouvey and C. Lenart, On q-analogues of weight multiplicities for the Lie superalgebras $\mathfrak{gl}(n,m)$ and $\mathfrak{spo}(2n,M)$, *J. Algebraic Combin.* 30 (2009), 141–163 (MR 2525055).

35. C. Lenart, On combinatorial formulas for Macdonald polynomials, *Adv. Math.* 220 (2009), 324–340 (MR 2462843).

36. C. Lenart and A. Postnikov, A combinatorial model for crystals of Kac-Moody algebras, *Trans. Amer. Math. Soc.* 360 (2008), 4349–4381 (MR 2395176).

37. C. Lenart, On the combinatorics of crystal graphs, II. The crystal commutor, *Proc. Amer. Math. Soc.* 136 (2008), 825–837 (MR 2361854).

38. C. Lenart and A. Postnikov, Affine Weyl groups in K-theory and representation theory, *Int. Math. Res. Not.*, Art. ID rnm038, 2007, 1–65 (MR 2344548).

39. C. Lenart, On the combinatorics of crystal graphs, I. Lusztig's involution, *Adv. Math.* 211 (2007), 204–243 (MR 2313533).

40. C. Lenart and F. Sottile, A Pieri-type formula for the K-theory of a flag manifold, *Trans. Amer. Math. Soc.* 359 (2007), 2317–2342 (MR 2276622).

41. C. Lenart and T. Maeno, Alcove path and Nichols-Woronowicz model of the equivariant K-theory of generalized flag varieties, *Int. Math. Res. Not.*, Article ID 78356, 2006, 1–14 (MR 2264711).

42. C. Lenart, S. Robinson, and F. Sottile, Grothendieck polynomials via permutation patterns and chains in the Bruhat order, *Amer. J. Math.* 128 (2006), 805–848 (MR 2251587).

43. C. Lenart, The K-theory of the flag variety and the Fomin-Kirillov quadratic algebra, *J. Algebra* 285 (2005), 120–135 (MR 2119107).

44. C. Lenart, A unified approach to combinatorial formulas for Schubert polynomials, *J. Algebraic Combin.* 20 (2004), 263–299 (MR 2106961).

45. C. Lenart and F. Sottile, Skew Schubert polynomials, *Proc. Amer. Math. Soc.* 131 (2003), 3319–3328 (MR 1990619).

46. C. Lenart, A K-theory version of Monk's formula and related multiplication formulas, *J. Pure Appl. Algebra* 179 (2003), 137–158 (MR 1958380).

47. C. Lenart, Combinatorial aspects of the K-theory of Grassmannians, *Ann. Combin.* 4 (2000), 67–82 (MR 1763950).

48. C. Lenart, Lagrange inversion and Schur functions, *J. Algebraic Combin.* 11 (2000), 69–78 (MR 1747063).

49. C. Lenart, A Robinson-Schensted-Knuth type correspondence in Schubert calculus and its applications, in *Proceedings of the 11th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 1999)*, Marc Noy and Oriol Serra, editors, Universitat Politècnica de Catalunya, Barcelona, 1999, 287–298.

50. C. Lenart, Noncommutative Schubert calculus and Grothendieck polynomials, *Adv. Math.* 143 (1999), 159–183 (MR 1680646).

51. C. Lenart, The combinatorics of Steenrod operations on the cohomology of Grassmannians, *Adv. Math.* 136 (1998), 251–283 (MR 1626852).

52. C. Lenart, Symmetric functions, formal group laws, and Lazard's theorem, *Adv. Math.* 134 (1998), 219–239 (MR 1617813).

53. C. Lenart, Formal group-theoretic generalizations of the necklace algebra, including a q-deformation, *J. Algebra* 199 (1998), 703–732 (MR 1489933).

54. C. Lenart and N. Ray, Hopf algebras of set systems, *Discrete Math.* 180 (1998), 255–280 (MR 1603741).

55. C. Lenart and N. Ray, Chromatic polynomials of partition systems, *Discrete Math.* 167/168 (1997), 419–444 (MR 1446762); *Proceedings of the 15th British Combinatorial Conference*, Stirling, England, 1995.
56. C. Lenart, A generalized distance in graphs and centered partitions, *SIAM J. Discrete Math.* 11 (1998), 293–304 (MR 1617159).
57. C. Lenart, Defining separability of two fuzzy clusters by a fuzzy decision hyperplane, *Pattern Recognition* 26 no. 9 (1993), 1351–1356.
58. I. Haidu, I. Lazăr, C. Lenart, and A. Imbroane, Modelling of natural hydroenergy organization of the small basins, in *Energy and the Environment into the 1990s: Proceedings of the 1st World Renewable Energy Congress*, Reading, UK, Pergamon Press, 1990, 3159–3167.
59. C. Lenart, Method for improving the results of certain clustering procedures, *Studia Univ. "Babeş-Bolyai"*, Mathematica 35 (1990), 55–63 (MR 1219054).
60. C. Lenart, Classification with fuzzy relations II, *Studia Univ. "Babeş-Bolyai"*, Mathematica 34 (1989), 63–67 (MR 1073761).
61. C. Lenart, Classification with fuzzy relations I, *Studia Univ. "Babeş-Bolyai"*, Mathematica 33 (1988), 52–55 (MR 1027358).
62. D. Dumitrescu and C. Lenart, Hierarchical classification for linear clusters, *Studia Univ. "Babeş-Bolyai"*, Mathematica 33 (1988), 48–51 (MR 1027357).
63. C. Lenart and D. Dumitrescu, Convex decomposition of fuzzy partitions, *Univ. of Cluj-Napoca Research Seminars*, Preprint no. 5 (1987), 46–54 (MR 1002204).

- Survey papers

64. C. Lenart, S. Naito, D. Sagaki, A. Schilling, and M. Shimozono, Affine crystals, Macdonald polynomials, and combinatorial models, *Rev. Roumaine Math. Pures Appl.* 62 (2017), 113–135 (MR 3626435).
65. C. Lenart, Combinatorial representation theory of Lie algebras. Richard Stanley's work and the way it was continued, in *The Mathematical Legacy of Richard Stanley*, edited by P. Hersh, T. Lam, P. Pylyavskyy, and V. Reiner, 263–277, Amer. Math. Soc., Providence, RI, 2016 (MR 3618038).
66. C. Lenart and K. Zainoulline, On Schubert calculus in elliptic cohomology, 27th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2015), 757–768, *Discrete Math. Theor. Comput. Sci. Proc.*, AR, Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2015 (MR 3470912).
67. C. Lenart, The many faces of modern combinatorics, *Mathematical Advances in Translation* (Chinese Academy of Sciences), 34 (2015), 128–140; `arXiv:1503.04240`.
68. C. Lenart, Combinatorial formulas for Macdonald and Hall-Littlewood polynomials, 21st International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2009), 549–560, *Discrete Math. Theor. Comput. Sci. Proc.*, AR, Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2009 (MR 2721542).

- Papers in the process of refereeing

69. C. Lenart, S. Naito, D. Sagaki, and W. Xu ((Appendix C by L. Mihalcea and W. Xu), Quantum K-theoretic divisor axiom for flag manifolds, `arXiv:2505.16150`.
70. C. Lenart, G. Zhao, and C. Zhong, Elliptic classes via the periodic Hecke module and its Langlands dual, `arXiv:2309.09140`.
71. C. Briggs, C. Lenart, and A. Schultze, On combinatorial models for affine crystals, `arXiv:2109.12199`.
72. C. Lenart and J. Sidoli, Relating three combinatorial formulas for type A Whittaker functions, `arXiv:2109.12908`.
73. C. Lenart and T. Maeno, Quantum Grothendieck polynomials, `arXiv:math.CO/0608232`.

- Work in progress

1. T. Gerber, B. Ion, C. Lecouvey, and C. Lenart, A new duality for Lusztig's q-weight multiplicity.
2. C. Lecouvey, C. Lenart, L. Patimo, and D. Plaza, The positivity conjecture for pre-canonical bases.
3. C. Lenart, R. Xiong, and C. Zhong, Combinatorial models in elliptic Schubert calculus.
4. C. Lenart, K. Zehr, and C. Zhong, A Billey-type formula for Kazhdan-Lusztig-Schubert classes in the hyperbolic cohomology of Grassmannians.
5. C. Lecouvey, C. Lenart, and A. Schultze, Towards a new combinatorial model for q-weight multiplicities of simple Lie algebras, `arXiv:2110.15394`.

- Unpublished work

6. W. Adamczak and C. Lenart, The alcove path model and tableaux, `www.albany.edu/~lenart`, 2009, 25 pp.
7. C. Lenart, A new combinatorial model in representation theory, `www.albany.edu/~lenart`, 2005, 21 pp.
8. C. Lenart and N. Ray, Some applications of incidence Hopf algebras to formal group theory and algebraic topology, `www.albany.edu/~lenart`, 1995, 18 pp.

- Software

9. C. Lenart, Maple package for Hall-Littlewood polynomials of type A and C, 2008, `www.albany.edu/~lenart`.
10. C. Lecouvey and C. Lenart, Maple package for Lusztig's q-analogue of weight multiplicities and its generalization to Lie superalgebras, 2007, `www.albany.edu/~lenart`.

11. C. Lenart, Alcove_path, Maple package for the alcove model, 2006, `www.albany.edu/∼lenart`.
12. C. Lenart, Package for clustering with fuzzy sets, 1989–1992, 1997, available upon request.

Presentations

- Conferences/workshops (since 2004)

1. *Computation in Representation Theory*, Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, Providence, RI, November 2025.
2. *International Workshop on Representation Theory, Schubert Calculus, and Spectral Theory*, Chern Institute of Mathematics, Tianjin (China), May 2025.
3. *Regional AMS Meeting*, Hartford, Connecticut (special session "Advances in Representation Theory, Combinatorics, and Interactions with Machine Learning"), April 2025.
4. *Regional AMS Meeting*, Hartford, Connecticut (special session "Geometric and Algebraic Combinatorics"), April 2025.
5. *Regional AMS Meeting*, University at Albany (special session "Generalized Schubert Calculus and Recent Progress"), October 2024.
6. *Combinatorial Representation Theory and Geometry – In Honor of Satoshi Naito's 60th Birthday*, Tokyo Institute of Technology, June 2024.
7. *Regional AMS Meeting*, SUNY Buffalo (special sessions "Representation Theory and Flag Varieties" and "Building Bridges Between $\mathbb{F}_1$-Geometry, Combinatorics and Representation Theory"), September 2023.
8. *Regional AMS Meeting*, Georgia Institute of Technology (special session "Macdonald Theory at the Intersection of Combinatorics, Algebra, and Geometry"), March 2023.
9. *Regional AMS Meeting*, University of Massachusetts Amherst (special session "Geometric Aspects of Algebraic Combinatorics"), October 2022.
10. *34th International Conference on Formal Power Series and Algebraic Combinatorics*, plenary talk, Bangalore, India, July 2022.
11. *Regional AMS Meeting*, online (special session "Macdonald Theory and Beyond: Combinatorics, Geometry, and Integrable Systems"), March 2022.
12. *33rd International Conference on Formal Power Series and Algebraic Combinatorics*, a plenary talk and a poster, Ramat-Gan, Israel, January 2022.
13. *Geometry and Combinatorics from Root Systems*, Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, Providence, RI, March 2021.

14. *AMS-MAA Joint Mathematics Meetings*, Denver, CO (special session "Geometric Representation Theory and Equivariant Elliptic Cohomology"), January 2020.
15. *Regional AMS Meeting*, University of Florida, Gainesville, FL (special session "Combinatorial Lie Theory"), November 2019.
16. *31st International Conference on Formal Power Series and Algebraic Combinatorics*, a plenary talk and a poster, Ljubljana, Slovenia, July 2019.
17. *Forms, Flags, Graphs and Beyond*, University of Ottawa, Ottawa, Canada, May 2019.
18. *Regional AMS Meeting*, University of Michigan, Ann Arbor, MI (special session "Combinatorics in Algebra and Algebraic Geometry"), October 2018.
19. *Interactions of Quantum Affine Algebras with Cluster Algebras, Current Algebras and Categorification*, dedicated to Professor Vyjayanthi Chari on her 60th birthday, Catholic University of America, Washington DC, June 2018.
20. *Regional AMS Meeting*, Northeastern University, Boston, MA (special session "Combinatorial Representation Theory"), April 2018.
21. *Regional AMS Meeting*, Vanderbilt University, Nashville, TN (special session "Macdonald Polynomials and Related Structures"), April 2018.
22. *Regional AMS Meeting*, Hunter College, New York, NY (special session "Cohomologies and Combinatorics"), May 2017.
23. *AMS-MAA Joint Mathematics Meetings*, Atlanta, GA (special session "Combinatorial and Cohomological Invariants of Flag Manifolds and Related Varieties"), January 2017.
24. *Regional AMS Meeting*, University of St. Thomas, Minneapolis, MN (special session "Combinatorial Representation Theory"), October 2016.
25. *Whittaker Functions: Number Theory, Geometry, and Physics*, Banff International Research Station, Canada, July 2016.
26. *Categorical Representation Theory and Combinatorics*, KIAS, Seoul, South Korea, December 2015.
27. *Regional AMS Meeting*, Rutgers University, New Brunswick, NJ (special session "Modern Schubert calculus"), November 2015.
28. *27th International Conference on Formal Power Series and Algebraic Combinatorics*, two posters, Daejeon, South Korea, July 2015.
29. *The Eighth Congress of Romanian Mathematicians*, Iaşi, Romania, June 2015.
30. *Representation Theory XIV*, Dubrovnik, Croatia, June 2015.
31. *Representation Theory and Related Topics*, University of Connecticut, Storrs, CT, May 2015 (follow-up of the 2014 ICM Satellite Conference, Daegu, South Korea).
32. *Regional AMS Meeting*, Georgetown University, Washington, DC (special session "Quantum Algebras, Representations, and Categorifications"), March 2015.

33. *Combinatorial Algebra Meets Algebraic Combinatorics*, Queen's University, Kingston, Canada, January 2015.
34. *AMS-MAA Joint Mathematics Meetings*, San Antonio, TX (special session "Algebraic Combinatorics and Representation Theory"), January 2015.
35. *Regional AMS Meeting*, Dalhousie University, Halifax, Canada (special session "Combinatorial Representation Theory"), October 2014.
36. *47th Seminar Sophus Lie*, Castle Rauischholzhausen, Marburg, Germany, May 2014.
37. *Whittaker Functions: Number Theory, Geometry, and Physics*, Banff International Research Station, Canada, October 2013.
38. *25th International Conference on Formal Power Series and Algebraic Combinatorics*, plenary talk, Paris, France, June 2013.
39. *Representation Theory XIII*, Dubrovnik, Croatia, June 2013.
40. *Whittaker Functions, Schubert Calculus and Crystals*, two-hour tutorial at the Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, `http://icerm.brown.edu/video_archive`, February-March 2013.
41. *24th International Conference on Formal Power Series and Algebraic Combinatorics*, two plenary talks, Nagoya, Japan, July 2012.
42. *Regional AMS Meeting*, Wake Forest University, Winston-Salem, NC (special session "Symmetric Functions, Symmetric Group Characters, and Their Generalizations"), September 2011.
43. *Regional AMS Meeting*, College of the Holy Cross, Worcester, MA (special session "Combinatorial Representation Theory"), April 2011.
44. *Regional AMS Meeting*, Syracuse University, Syracuse, NY (special session on "Lie Algebras and Representation Theory"), October 2010.
45. *SIAM Conference on Discrete Mathematics*, Austin, TX (minisymposium on "Schubert Calculus"), June 2010.
46. *SIAM Conference on Discrete Mathematics*, Austin, TX (minisymposium on "Combinatorial Representation Theory"), June 2010.
47. *Regional AMS Meeting*, Macalester College, St. Paul, MN (special session "Partition Theory and the Combinatorics of Symmetric Functions"), April 2010.
48. *Combinatorial Representation Theory*, Mathematisches Forschungsinstitut Oberwolfach, Germany, March 2010.
49. *21st International Conference on Formal Power Series and Algebraic Combinatorics*, plenary talk, Linz, Austria, July 2009.
50. *Regional AMS Meeting*, North Carolina State University, Raleigh, NC (special session "Enumerative Geometry and Related Topics"), April 2009.
51. *Crystals and Tropical Combinatorics*, Kyoto, Japan, August 2008.

52. *Topics in Combinatorial Representation Theory*, Mathematical Sciences Research Institute, Berkeley, CA, March 2008.
53. *Combinatorial Hopf Algebras and Macdonald Polynomials*, Centre de Recherches Mathématiques, Montréal, Canada, May 2007.
54. *Buildings and Combinatorial Representation Theory*, American Institute of Mathematics, Palo Alto, CA, March 2007.
55. *Schubert Calculus and Schubert Geometry*, Banff International Research Station, Canada, March 2007.
56. *Regional AMS Meeting*, Fayetteville, AR (special session "Combinatorial Representation Theory"), November 2006.
57. *18th International Conference on Formal Power Series and Algebraic Combinatorics*, plenary talk, San Diego, CA, June 2006.
58. *Regional AMS Meeting*, San Francisco State University, San Francisco, CA (special session "Homological and K-theoretical Trends in Algebraic Combinatorics"), April 2006.
59. *Joint Meeting of the American, German, and Austrian Mathematical Societies*, Mainz, Germany (special session "Algebraic Combinatorics"), June 2005.
60. *17th International Conference on Formal Power Series and Algebraic Combinatorics*, poster presentation, Taormina, Italy, June 2005.
61. *Regional AMS Meeting*, Northwestern University, Evanston, IL (special session "Modern Schubert Calculus"), October 2004.
62. *16th International Conference on Formal Power Series and Algebraic Combinatorics*, plenary talk, University of British Columbia, Vancouver, Canada, June 2004.

- Seminars and colloquia (since 2004)

63. Special Year Seminar, Institute for Advanced Study, Princeton, May 2025.
64. Algebra Seminar, University of Arkansas, March 2025.
65. Algebra Seminar, *University of Buenos Aires*, Argentina, July 2024.
66. Schubert Seminar, online (Zoom), available on YouTube; *Rutgers University*, *Virginia Polytechnic*, and *University of North Carolina*, April 2024.
67. Combinatorics and Algebraic Geometry Seminar, *University of Pennsylvania* and *Drexel University*, April 2024.
68. Algebra Seminar, *University of Pittsburgh*, March 2024.
69. Algebra Seminar, *Georgia Institute of Technology*, October 2023.
70. Center for Applied Mathematics, *Tianjin University*, Tianjin, China, June 2023.
71. Colloquium, *University of British Columbia*, Vancouver, Canada, October 2022.
72. Representation Theory Seminar, *City University of New York*, April 2022.

73. Geometric Methods in Representation Theory Seminar, *University of North Carolina Chapel Hill*, February 2022.
74. Lie Group/Quantum Mathematics Seminar, *Rutgers University*, October 2021.
75. Algebra Seminar, *University of Georgia*, December 2019.
76. MIT-Harvard-MSR Combinatorics Seminar, *MIT*, November 2019.
77. Algebra, Geometry and Combinatorics Seminar, *University of Illinois at Urbana-Champaign*, August 2019.
78. Series of 6 lectures entitled "Macdonald Polynomials: Representation Theory and Combinatorics," Seoul National University, January 2019.
79. Algebra Seminar, *Virginia Polytechnic Institute*, November 2018.
80. Representation Theory Seminar, *University of Massachusetts Amherst*, April 2018.
81. Geometry, Combinatorics, and Integrable Systems Seminar, *Ohio State University*, October 2017.
82. Representation Theory Seminar, *City University of New York*, October 2017.
83. Algebra Seminar, *Rutgers University*, April 2017.
84. Algebra Seminar, *University of Connecticut*, April 2017.
85. Algebra and Topology Seminar, *SUNY Albany*, March 2017.
86. Colloquium, *University of Notre Dame*, November 2016.
87. Algebra and Topology Seminar, *SUNY Albany*, November 2016.
88. Colloquium, *University of Southern California*, November 2016.
89. Representation Theory Seminar, *City University of New York*, September 2016.
90. Combinatorics Seminar, *University of California San Diego*, June 2016.
91. Algebra Seminar, *University of Pittsburgh*, January 2016.
92. Algebra Seminar, *Virginia Polytechnic Institute*, October 2015.
93. Colloquium, *University of Ottawa*, Canada, May 2015.
94. Colloquium, *University of Connecticut*, March 2015.
95. Algebra, Geometry and Combinatorics Seminar, *University of Illinois at Urbana-Champaign*, March 2015.
96. Colloquium, *Syracuse University*, January 2015.
97. Séminaire "Combinatoire énumérative et analytique", LIAFA, *University of Paris 7*, France, June 2014.
98. Representation Theory Seminar, *University of Amsterdam*, The Netherlands, May 2014.
99. Séminaire d'algèbre et de géometrie, *University of Caen*, France, April 2014.
100. Séminaire Caen-Cergy-Clermont-Paris. Théorie des Représentations, *University of Paris 7*, France, April 2014.

101. Algebra Seminar, Institut Camille Jordan, *University of Lyon*, France, March 2014.
102. Geometry Seminar, *École Polytechnique Fédérale de Lausanne*, Switzerland, March 2014.
103. Séminaire Quantique, *IRMA Strasbourg*, France, February 2014.
104. Oberseminar Algebra, *Köln University*, Germany, February 2014.
105. Oberseminar "Lie-Theorie", *Paderborn University*, Germany, November 2013.
106. Noon Seminar, *Charles University*, Department of Applied Mathematics, Prague, Czech Republic, November 2013.
107. Oberseminar Darstellungstheorie, *Bonn University*, Germany, November 2013.
108. Oberseminar, *Max-Planck-Institut für Mathematik*, Bonn, Germany, October 2013.
109. Seminar on Algebra, Geometry, and Physics, *Max-Planck-Institut für Mathematik*, Bonn, Germany, June 2013.
110. Combinatorics seminar, LaCIM (Laboratoire de combinatoire et d'informatique mathématique), *Université du Québec à Montréal*, Canada, December 2012.
111. Representation Theory Seminar at *City University of New York*, March 2012.
112. Combinatorics Seminar, *University of Michigan*, December 2011.
113. Combinatorics Seminar, *MIT*, November 2011.
114. Seminar on Algebra, Geometry, and Physics, *Max-Planck-Institut für Mathematik*, Bonn, Germany, August 2011.
115. Algebra and Topology Seminar, *SUNY Albany*, April 2011.
116. Combinatorics Seminar, *University of Washington*, December 2010.
117. Discrete Geometry and Combinatorics Seminar, *Cornell University*, November 2010.
118. Lie Groups and Representation Theory Seminar, *University of Maryland at College Park*, April 2010.
119. Group Theory Seminar, *University of Chicago*, October 2009.
120. Algebra and Lie Groups Seminar, *Yale University*, October 2009.
121. Algebra, Geometry and Combinatorics Seminar, *University of Illinois at Urbana-Champaign*, April 2009.
122. Capital Region Algebra and Number Theory Seminar, *SUNY Albany*, February 2009.
123. Combinatorics Seminar, *University of Michigan*, Ann Arbor, October 2008.
124. Algebra Seminar, *Binghamton University*, October 2008.
125. Combinatorics Seminar, *Université de Marne-la-Vallée*, Paris, France, July 2008.
126. Combinatorics Seminar, *Université du Québec à Montréal*, Canada, June 2008.

127. Capital Region Algebra and Number Theory Seminar, *Skidmore College*, Saratoga Springs, NY, April 2008.
128. Capital Region Algebra and Number Theory Seminar, *SUNY Albany*, April 2007.
129. Combinatorics seminar, *University of Minnesota at Minneapolis*, April 2007.
130. Colloquium, *Queen's University*, Kingston, Canada, March 2007.
131. Séminaire du LMPA "Joseph Liouville", *University of Calais*, France, January 2007.
132. Algebra and Geometry Seminar, *University of Rome I "La Sapienza"*, Italy, November 2006.
133. Combinatorics Seminar, *MIT*, April 2006.
134. Combinatorics Seminar, *University of Michigan*, Ann Arbor, March 2006.
135. Combinatorics Seminar, *Ohio State University*, November 2005.
136. Algebraic Combinatorics Seminar, *Fields Institute*, Toronto, Canada, April 2005.
137. Capital Region Algebra and Number Theory Seminar, *SUNY Albany*, April 2005.
138. Capital Region Algebra and Number Theory Seminar, *SUNY Albany*, November 2004.
139. Combinatorics and Geometry Seminar, *University of Washington*, April 2004.
140. Colloquium, *Dartmouth College*, March 2004.

Students and Postdoctoral Associates advised

- Fang Ji (Ph.D. student, 2023–present); jointly advised with Changlong Zhong.
- Krista Zehr (Ph.D. student, 2022–present); jointly advised with Changlong Zhong.
- Sam Spellman (Ph.D. student, 2021–2024).
- Khanh Duc Nguyen (Postdoctoral Associate supported from my NSF grant, Spring 2022 and Spring 2023).
- Krishanu Roy (Postdoctoral Associate supported from my NSF grant, 2021-2022).
- Kechen Li Russell (undergraduate research, co-advised with Khanh Nguyen Duc, 2022-2023).
- Adam Schultze (Ph.D. student, 2016–2021); jointly advised with Cédric Lecouvey, University of Tours, since May 2018; spent 4 months (09-12/2019) at the University of Tours, funded by the Chateaubriand fellowship of the Emabassy of France in the USA.
- James Sidoli (Ph.D. student, 2017–2020).
- Soheli Das (undergraduate research, 2020).

- Daniel Hono (Master's thesis, 2018–2019).
- Hanjoon Choe (undergraduate research, continued as Master's student, 2017–2019).
- Arthur Lubovsky (Postdoctoral Associate supported from my NSF grant, 2015).
- Carly Briggs (Ph.D. student, 2011–2017).
- Kevin Ramer (Ph.D. student, 2012–2016).
- Arthur Lubovsky (Ph.D. student, 2008–2013), received the 2014 SUNY Albany Distinguished Doctoral Dissertation Award.
- William Adamczak (Ph.D. student, 2006–2011).

Service for the profession

- National Science Foundation, member on eight review panels (in 2008, 2010, 2011, 2012, 2014, 2019, 2020, 2025).
- Editor for *Algebras and Representation Theory*, June 2020–present.
- Organizer of the International Workshop on Representation Theory, Schubert Calculus, and Spectral Theory, Chern Institute of Mathematics, Tianjin, China, May 26-30, 2025.
- Member of the Program Committee of the 37th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC, 2025).
- Main organizer of the Fall Eastern Sectional Meeting of the American Mathematical Society, University at Albany, October 2024.
- Organizer of the conference "Women in Algebra and Combinatorics. Northeast Conference Celebrating the Association for Women in Mathematics: 50 Years and Counting," online, November 20-21, 2021; in-person April 28-30, 2023, University at Albany.
- Co-organizer of the special session "Recent advances in Schubert calculus and related topics" at the Eastern Sectional Meeting of the AMS (online), March 20-21, 2021.
- Organizer of an online meeting (originally planned at SUNY Albany) within the series *Discrete Mathematics in the Northeast*, April 25-26, 2020.
- External evaluator for the Ph.D. defense of Sjuvong Chung, Rutgers University, 2017.
- Co-organizer of the Fields Institute workshop "Equivariant generalized Schubert calculus and its applications", University of Ottawa, April 2016.
- Referee for the National Science Foundation, the National Security Agency, the FPSAC conference, and several mathematical journals, including: *Duke Mathematical Journal*, *Advances in Mathematics*, *International Mathematics Research Notices*, *American Journal of Mathematics*, *Compositio Mathematica*, *Transactions of the*

American Mathematical Society, *Proceedings of the American Mathematical Society*, *Selecta Mathematica*, *Transformation Groups*, *Journal of Algebra*, *Algebras and Representation Theory*, *Algebra and Number Theory*, *Canadian Journal of Mathematics*, *Journal of Pure and Applied Algebra*, *Mathematical Research Letters*, *Matematische Zeitschrift*, *Forum of Mathematics − Sigma*, *Advances in Applied Mathematics*, *Pure and Applied Mathematics Quarterly*, *Journal of Algebraic Combinatorics*, *Algebraic Combinatorics*, *Journal of Combinatorial Theory Series A*, *Electronic Journal of Combinatorics*, *European Journal of Combinatorics*, *Journal of Combinatorics*, *Discrete Mathematics*, *Annals of Combinatorics*,*SIAM Journal on Discrete Mathematics*, *Communications in Algebra*, *Pacific Journal of Mathematics*, *Journal of Symbolic Computation*, *International Journal for Mathematics and Mathematical Sciences*, *Séminaire Lotharingien de Combinatoire*, *Journal of Mathematics of Kyoto University*, *Houston Journal of Mathematics*.

- Co-organizer of the workshop "Whittaker Functions, Schubert Calculus and Crystals" (March 4-8, 2013) within the Semester Program "Automorphic Forms, Combinatorial Representation Theory and Multiple Dirichlet Series" at the Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, Providence.

- Co-organizer of the special session "Rings, Algebras, and Varieties in Combinatorics" at the Southeastern Sectional Meeting of the AMS, April 4-5, 2009, North Carolina State University, Raleigh, NC.

- Co-organizer of the special session "Combinatorial Representation Theory, Topological Combinatorics and Interactions Between Them" at the Central Sectional Meeting of the AMS, April 5-6, 2008, Indiana University, Bloomington, IN.

- Member of the Committee evaluating the HDR thesis (Habilitation à Diriger les Recherches en Mathématiques) of Cédric Lecouvey, University of Calais, France (2007).

- Member of the Program Committee of the 19th International Conference on Formal Power Series and Algebraic Combinatorics (2007).

- External evaluator for the Ph.D. defense of Mihai Beligan, York University, Toronto, 2007.

- Co-organizer of a *Discrete Mathematics and Computer Science Day* at SUNY Albany, September 28, 2002 and March 18, 2006.

- Member of the Steering Committee for the series of conferences *Discrete Mathematics Days in the Northeast* (2003–2009).

- Co-organizer of the special session "Algebraic and Geometric Combinatorics" at the Eastern Sectional Meeting of the AMS, October 8-9, 2005, Bard College, NY.

Service for the University at Albany

- Chair of the Department of Mathematics and Statistics, 2021–2027. Among my most notable achievements: doubled the size of the Master's program in data science, created a new undergraduate program in data science, successfully hired 5 new Assistant Professors (in addition to several other hirings), reorganized the coordination of our calculus courses and started the coordination of the elementary statistics courses, worked closely with Undergraduate Admissions and the Office of Communications and Marketing on enrollment initiatives, established several collaboration agreements with foreign universities, reorganized our tutoring system.

- Panelist on STEM Doctoral Discussion Forums (January 2022, January 2023) and a Discussion Forum on Writing Publishable Research Papers (April 2022).

- Internal Grant Proposal reviewer, University at Albany Seed Funding Program, April 2022.

- Member of the departmental Executive Committee, 2005–2008, 2010–2012, 2014–2020.

- Represented the department in the Graduate Student Fairs at the Joint Mathematics Meetings in 2020 (Denver, CO) and 2015 (San Antonio, TX).

- Member of several departmental hiring search committees and ad hoc committees.

- Member of the Distinguished Doctoral Dissertation Review Committee, College of Arts and Sciences, 2017.

- Faculty representative in the University Senate (2008–2010). Member of the University Planning and Policy Council (UPPC), 2008–2012. Member of the President's 2010 and 2011 Budget Advisory Groups.

- Member of the departmental Graduate Committee, 2009–2011, 2015–2017.

- Member in several departmental examination committees (excluding those for my students): Ph.D. defense (Effie Shani, Michael Muller, James Clark, Joshua Wauchope, Jesse Corradino, Scott Sidoli, Daniel Wood, Michael Penn, Timothy Clark, Joseph McCollum, Amanda Beecher), M.Sc. reader (Kenneth D'Amica, James Lamatina), Ph.D. and M.Sc. oral examinations (20 students).

- Departmental research liaison, 2006–present.

- Faculty member in charge of the French foreign language exam, 2007–2021.

- Member of the departmental Undergraduate Committee, 2002–2005.

- Departmental Colloquium Chair, 2001–2005, 2012–2013. Invited several colleagues to give colloquium talks, as well as talks in our Distinguished Lecture Series in Mathematics (1 speaker, with support from my NSF grant), and our Maheshwari colloquium (2 speakers).

- Student advisement.
- Presented several talks in the departmental graduate student seminar and the SUNY Albany Math Club.
- Affiliate member in the Institute for Informatics, Logics and Security Studies (I have been involved in a project related to the development of the computational and applied sciences at the University).
- Member on panels discussing undergraduate research.
- Participated in the University's general recruiting open houses.
- My work and achievements featured numerous times in the SUNY Albany news (such as: "UAlbany Conference Celebrates Women in Mathematics", 4/25/2023; "5 Questions with Faculty," 11/14/2019).

Public engagement

- Member of panel discussing the work of M. C. Escher, organized by the Fenimore Art Museum, Cooperstown NY, August 2023.
- Speaker at the *Math and Science Career Day* at Shaker High School (one of the top schools in the New York Capital District), December 2017.
- Member on the committee for the selection of the mathematics supervisor at Shaker High School, 2008.
- Participated in meetings with high school students and teachers.
- Interviews on local radio stations.

Membership

American Mathematical Society (since 1997).

Computing skills: Maple, Mathematica, SAGE, C++.

Languages: I read, write, and speak fluently English, French, Hungarian, and Romanian. I can speak German and Italian.

References: Available upon request.