Matilde N. Lalín

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EDUCATION

2001-2005	Ph.D., Mathematics, University of Texas at Austin, USA
2000-2001	Graduate Student, Department of Mathematics, Princeton University, USA
1996-1999	Licenciada en Ciencias Matemáticas, Universidad de Buenos Aires, Argentina

POSITIONS

2018-present	Full Professor, Dépt. de mathématiques et de statistique, Université de Montréal
2013-present	Member, Centre de recherches mathématiques
2012-2018	Associate Professor, Dépt. de mathématiques et de statistique, Université de Montréal
2010-2012	Assistant Professor (tenure-track), Dépt. de mathématiques et de statistique, Université de Montréal
2007-2010	Assistant Professor (tenure-track), Dept. of Mathematical and Statistical Sciences, University of Alberta
2006-2007	Postdoctoral Fellow, Pacific Institute for the Mathematical Sciences and University of British Columbia, Vancouver, Canada
2005-2006	Member, Institute for Advanced Study, Princeton, USA
	Short term visits at MSRI (April-May 2006), IHES (May-July 2006), MPI (July-August 2006, May-July 2007)

AWARDS, DISTINCTIONS, AND FELLOWSHIPS

2024-2026	CRM Distinguished Research Scholar
2024	Fellow, Association for Women in Mathematics
2023	Fellow, American Mathematical Society
2022	Fellow, Canadian Mathematical Society
2022	Krieger–Nelson Prize, Canadian Mathematical Society, prize recognizing outstanding research by a female mathematician
2006-2007	Postdoctoral Fellowship, Pacific Institute for the Mathematical Sciences
2005	Liftoff Fellowship, Clay Mathematics Institute (postponed until 2006)
2005	Frank Gerth III Dissertation Award, Department of Mathematics, University of Texas at Austin
2001-2003	Harrington Fellowship, University of Texas at Austin

SELECTED RECENT RESEARCH FUNDING

2024-2027	Projet de recherche en équipe (PI: A. Koukoulopoulos, co-PIs: C. Bujold, C. David, A. Granville, M. Lalín, and C. Pagano), Fonds de recherche du Québec – Nature et technologies (FRQNT) (CAD$ 50,000 per year)
2022-2027	Discovery Grant, Natural Sciences and Engineering Research Council of Canada (NSERC), (CAD$ 31,000 per year)
2021-2024	Projet de recherche en équipe (PI: M. Lalín, co-PIs: C. David, A. Granville, and D. Koukoulopoulos) Fonds de recherche du Québec – Nature et technologies (FRQNT) (CAD$ 50,000 per year)

PUBLICATIONS[1]

74. *Joint with Alberto Alfarano, Pablo Bianucci, and Berend Ringeling,* Machine learning the arithmetic of Boyd's Mahler measure conjectures. *J. Math. Artif. Intell.*, **1** (2026), Art. 2, pp. 1 – 39.

73. *Joint with Habib Jaber*,* Dirichlet convolutions and divisor problems over B-free polynomials over function fields. *Integers*, **26** (2026), Paper No. A80, 31 pp.

72. *Joint with Alexandra Florea, Amita Malik, and Anurag Sahay,* The shifted convolution problem in function fields. *Math. Ann.* **395** (2026), no. 1, 6.

71. *Joint with Siva Sankar Nair*, Berend Ringeling*, and Subham Roy*,* Random walks through the areal Mahler measure: steps in the complex plane. *Q. J. Math.* **76** (2025), no. 4, 1315 – 1353.

[1] Asterisks indicate students and postdoctoral fellows working under my supervision or co-supervision.

70. *Joint with Vivian Kuperberg,* Arithmetic constants for symplectic variances of the divisor function. *Mathematika* **71** (2025), no. 3, Paper No. e70029.

69. *Joint with Olha Zhur*,* The distribution of prime independent multiplicative functions over function fields. *Finite Fields Appl.* **107** (2025), Paper No. 102657.

68. *Joint with Juan Arévalo Gómez*,* Prime factors with given multiplicity in h-free and h-full polynomials over function fields. *Integers* **25** (2025), Paper No. A9, 37 pp.

67. *Joint with Vivian Kuperberg,* Symplectic conjectures for sums of divisor functions and explorations of an orthogonal regime. *Trans. Amer. Math. Soc. Ser. B.* **12** (2025), 323 – 370.

66. *Joint with Alexandra Florea and Edna Jones,* Moments of Artin–Schreier L–functions. *Q. J. Math.* **75** (2024), no. 4, 1255 – 1284.

65. *Joint with Anwesh Ray*,* On the distribution of eigenvalues in families of Cayley graphs. *Eur. J. Math.* **10** (2024), no. 3, Paper No. 49, 20 pp.

64. *Joint with Pranendu Darbar, Chantal David, and Allysa Lumley*,* Asymmetric distribution of extreme values of cubic L-functions at $s = 1$. *J. Lond. Math. Soc. (2)* **110** (2024), no. 4, Paper No. e12996.

63. *Joint with Siva Sankar Nair* and Subham Roy*,* The Mahler measure of an n-variable family with non-linear degree. *Acta Arith.* **216** (2024), no. 1, 35 -– 61.

62. *Joint with Subham Roy*,* The areal Mahler measure under a power change of variables. *Illinois J. Math.* **68** (2024), no. 2, 309 – 330.

61. *Joint with Xavier Généreux*,* On the Northcott property of Dedekind zeta functions, *Ramanujan J.* **63** (2024), no. 4, 1135 – 1178.

60. *Joint with Subham Roy*,* Evaluations of the areal Mahler measure of multivariable polynomials, *J. Number Theory* **254** (2024), 103 – 145.

59. *Joint with Zhexing Zhang*,* The number of prime factors in h-free and h-full polynomials over function fields. *Publ. Math. Debrecen* **104** (2024), no. 3-4, 377 – 421.

58. *Joint with Annie Carter, Michelle Manes, and Alison Beth Miller*, Dynamical Mahler Measure: A Survey and Some Recent Results. *Proceedings of Women in Numbers 5 (WIN 5). Research Directions in Number Theory*, 219 – 252, Assoc. Women Math. Ser., **33**, Springer, Cham, 2024. (refereed)

57. *Joint with Tinghao Huang* and Olivier Mila*,* Spherical Heron triangles and elliptic curves, *J. Théor. Nombres Bordeaux* **35** (2023), no. 1, 219 – 246.

56. *Joint with Siva Sankar Nair*,* An invariant property of Mahler measure. *Bull. Lond. Math. Soc.* **55** (2023), no. 3, 1129 – 1142.

55. *Joint with Alina Bucur, Alina Carmen Cojocaru, and Lillian B. Pierce,* Geometric generalizations of the square sieve, with an application to cyclic covers (with an appendix by Joseph Rabinoff). *Mathematika* **69** (2023), no 1, 106 – 154.

54. *Joint with Rafael Jakimczuk,* Sums of $\omega(n)$ and $\Omega(n)$ over the k-free parts and k-full parts of some particular sequences. *Integers* **22** (2022), Paper No. A113, 22 pp.

53. *Joint with Rafael Jakimczuk,* Asymptotics of sums of divisor functions over sequences with restricted factorization structure. *Notes Number Theory Discrete Math.* **28** (2022), no. 4, 617 – 634.

52. *Joint with Antoine Comeau-Lapointe, Chantal David, and Wanlin Li**, On the vanishing of twisted L-functions of elliptic curves over function fields. *Proceedings of the Fifteenth Algorithmic Number Theory Symposium. Res. Number Theory* **8** (2022), no. 4, Paper No. 76, 28 pp. (refereed)

51. *Joint with Xavier Généreux* and Wanlin Li*,* On the Northcott property of zeta functions over function fields. *Finite Fields Appl.* **83** (2022), Paper No. 102080, 27 pp.

50. *Joint with Annie Carter, Michelle Manes, Alison Beth Miller, and Lucia Mocz,* Two-variable polynomials with dynamical Mahler measure zero. *Res. Number Theory* **8** (2022), no. 2, Paper No. 25, 22 pp.

49. *Joint with Vivian Kuperberg,* Sums of divisor functions and von Mangoldt convolutions in $\mathbb{F}_q[T]$ leading to symplectic distributions. *Forum Math.* **34** (2022), no. 3, 711 – 747.

48. *Joint with Olivier Mila*,* Hyperbolic Heron triangles and elliptic curves. *J. Number Theory* **240** (2022), 272 – 295.

47. *Joint with Rafael Jakimczuk,* The number of prime factors on average in certain integer sequences. *J. Integer Seq.* **25** (2022), no. 2, Art. 22.2.3, 15 pp.

46. *Joint with Chantal David and Alexandra Florea,* Non-vanishing for cubic L–functions. *Forum Math. Sigma.* **9** (2021), Paper No. e69, 58 pp.

45. *Joint with Chantal David and Alexandra Florea,* The mean values of cubic L-functions over function fields. *Algebra Number Theory* **16** (2022), no. 5, 1259 – 1326.

44. *Joint with Mikhail Belolipetsky, Plinio G. P. Murillo, and Lola Thompson,* Counting Salem numbers of arithmetic hyperbolic 3–orbifolds. *Bull. Braz. Math. Soc. (N.S.)* **53** (2022), no. 2, 553 – 569.

43. *Joint with Jarry Gu*,* The Mahler measure of a three-variable family and an application to the Boyd–Lawton formula. *Res. Number Theory* **7** (2021), no. 1, Paper 13, 23 pp.

42. *Joint with Jeanne Laflamme*,* On Ceva points of (almost) equilateral triangles. *J. Number Theory* **222** (2021), 48 – 74.

41. *Joint with Chantal David and Jungbae Nam*,* Conjectures for moments associated with cubic twists of elliptic curves. *Exp. Math.* **32** (2023), no 1, 105 – 132.

40. *Joint with Gang Wu*,* The Mahler measure of a genus 3 family. *Ramanujan J.* **55** (2021), no. 1, 309 – 326.

39. *Joint with Debmalya Basak* and Nicolas Degré-Pelletier*,* Multiple zeta functions and polylogarithms over global function fields. *J. Théor. Nombres Bordeaux* **32** (2020), no. 2, 403 – 438.

38. *Joint with Xinchun Ma*,* θ-triangle and ω-parallelogram pairs with common area and common perimeter. *J. Number Theory* **202** (2019), 1 – 26.

37. *Joint with Gang Wu*,* Regulator proofs for Boyd's identities on genus 2 curves. *Int. J. Number Theory* **15** (2019), no. 5, 945 – 967.

36. *Joint with Abhijit Champanerkar and Ilya Kofman,* Mahler measure and the Vol-Det conjecture. *J. Lond. Math. Soc. (2)* **99** (2019), no. 3, 872 – 900.

35. *Joint with Tushant Mittal*,* The Mahler measure for arbitrary tori. *Res. Number Theory* **4** (2018), no. 2, Paper 16, 23 pp.

34. *Joint with Jean-Sébastien Lechasseur*,* A reduction formula for length-two polylogarithms and some applications. *Rev. Un. Mat. Argentina* **59** (2018), no. 2, 285 – 309.

33. *Joint with Vincent Girard* and Sivasankar C. Nair*,* Families of non-θ-congruent numbers with arbitrarily many prime factors. *Colloq. Math.* **152** (2018), no. 2, 255 – 271.

32. *Joint with Frank Ramamonjisoa*,* The Mahler measure of a Weierstrass form. *Int. J. Number Theory* **13** (2017), no. 8, 2195 – 2214.

31. *Joint with Detchat Samart* and Wadim Zudilin,* Further explorations of Boyd's conjectures and a conductor 21 elliptic curve. *J. Lond. Math. Soc. (2)* **93** (2016), no. 2, 341 – 360.

30. *Joint with Alina Bucur, Chantal David, and Brooke Feigon,* Statistics for ordinary Artin–Schreier covers and other p-rank strata. *Trans. Amer. Math. Soc.* **368** (2016), 2371 – 2413.

29. *Joint with Alina Bucur, Chantal David, Brooke Feigon, Nathan Kaplan, Ekin Ozman, and Melanie Matchett Wood,* The distribution of $\mathbb{F}_q$-points on cyclic ℓ-covers of genus g. *Int. Math. Res. Not. IMRN* 2016, no. 14, 4297 – 4340.

28. A new method for obtaining polylogarithmic Mahler measure formulas. *Res. Number Theory* **2** (2016), Paper No. 17, 16 pp.

27. *Joint with Olivier Larocque*,* The number of irreducible polynomials with first two prescribed coefficients over a finite field. *Rocky Mountain J. Math.* **46** (2016), no. 5, 1587 – 1618.

26. *Joint with Jean-Sébastien Lechasseur*,* Higher Mahler measure of an n-variable family. *Acta Arith.* **174** (2016), no. 1, 1 – 30.

25. Mahler measure and elliptic curve L-functions at $s = 3$. *J. Reine Angew. Math.* **709** (2015), 201 – 218.

24. *Joint with Francis Rodrigue* and Mathew Rogers*,* Secant-Zeta Functions. *J. Math. Anal. Appl.* **409** (2014), no. 1, 197 – 204.

23. *Joint with Marie-José Bertin, Amy Feaver, Jenny Fuselier, and Michelle Manes,* Mahler measure of some singular $K3$-surfaces. *Women in numbers 2: research directions in number theory,* 149 – 169, Contemp. Math., **606**, Centre Rech. Math. Proc., Amer. Math. Soc., Providence, RI, 2013. (refereed)

22. *Joint with Marie-José Bertin,* Mahler measure of multivariable polynomials. *Women in numbers 2: research directions in number theory,* 125 – 147, Contemp. Math., **606**, Centre Rech. Math. Proc., Amer. Math. Soc., Providence, RI, 2013. (refereed)

21. Equations for Mahler measure and isogenies. *Proceedings of the "Cuartas jornadas de teoría de números" J. Théor. Nombres Bordeaux* **25** (2013), no. 2, 387 – 399. (refereed)

20. *Joint with Zahraa Issa*,* A generalization of a theorem of Boyd and Lawton. *Canad. Math. Bull.* **56** (2013), no. 4, 759 – 768.

19. *Joint with Chris J. Smyth,* Unimodularity of zeros of self-inversive polynomials. *Acta Math. Hungar.* **138** (2013), no. 1–2, 85 – 101. Addendum, *Acta Math. Hungar.* **147** (2015), no. 1, 255 – 257.

18. *Joint with Mathew D. Rogers*, Variations of the Ramanujan polynomials and remarks on $\zeta(2j+1)/\pi^{2j+1}$. *Funct. Approx. Comment. Math.* **48** (2013), part 1, 91 – 111.

17. *Joint with Alina Bucur, Chantal David, Brooke Feigon, and Kaneenika Sinha,* Distribution of zeta zeroes of Artin–Schreier curves. *Math. Res. Lett.* **19** (2012), no. 6, 1329 – 1356.

16. *Joint with Kaneenika Sinha**, Higher Mahler measure for cyclotomic polynomials and Lehmer's question. *Ramanujan J.* **26** (2011), no. 2, 257 – 294.

15. *Joint with Alina Bucur, Chantal David, and Brooke Feigon*, Biased statistics for traces of cyclic p-fold covers over finite fields. *WIN—Women in Numbers*, 121 – 143, Fields Institute Communications, **60**, Amer. Math. Soc., Providence, RI, 2011, (refereed)

14. *Joint with Alina Bucur, Chantal David, and Brooke Feigon*, Fluctuations in the number of points on smooth plane curves over finite fields. *J. Number Theory* **130** (2010), no. 11, 2528 – 2541.

13. *Joint with Alina Bucur, Chantal David, and Brooke Feigon*, Statistics for traces of cyclic trigonal curves over finite fields. *Int. Math. Res. Not. IMRN* 2010, no. 5, 932 – 967.

12. On a conjecture by Boyd. *Int. J. Number Theory* **6**, (2010), no. 3, 705 – 711.

11. *Joint with Oliver T. Dasbach,* Mahler measure under variations of the base group. *Forum Math.* **21** (2009), no. 4, 621 – 637.

10. *Joint with N. Kurokawa and H. Ochiai,* Higher Mahler measure and zeta functions. *Acta Arith.* **135** (2008), no. 3, 269 – 297.

9. *Joint with Oliver T. Dasbach,* On the recurrence of coefficients in the Lück–Fuglede–Kadison determinant. *Proceedings of the "Segundas Jornadas de Teoría de Números."* 119 – 134 Bib. Rev. Mat. Iberoam. *Rev. Mat. Iberoamericana, Madrid,* 2008. (refereed)

8. Mahler measures and computations with regulators. *J. Number Theory* **128** (2008), no. 5, 1231 – 1271.

7. *Joint with Mathew D. Rogers,* Functional equations for Mahler measures of genus-one curves. *Algebra Number Theory* **1** (2007), no. 1, 87 – 117.

6. An algebraic integration for Mahler measure. *Duke Math. J.* **138** (2007), no. 3, 391 – 422.

5. *Joint with Carlos A. D'Andrea,* On the Mahler measure of resultants in small dimensions. *J. Pure Appl. Algebra* **209** (2007), no. 2, 393 – 410.

4. Mahler measure of some n-variable polynomial families. *J. Number Theory* **116** (2006), no. 1, 102 – 139.

3. On certain combination of colored multizeta values. *J. Ramanujan Math. Soc.* **21** (2006), no. 1, 115 – 127.

2. Mahler measure and volumes in hyperbolic space. *Geom. Dedicata* **107** (2004), 211 – 234.

1. Some examples of Mahler measures as multiple polylogarithms. *J. Number Theory* **103** (2003), no. 1, 85 – 108.

SUBMITTED WORK

- *Joint with Jesse Allen*, Olivier Beaudry-Ogden*, Théophane Bouchard*, Matéo Frély*, Abel-Jimmy Oyono-Montoki*, and Berend Ringeling** Beyond the unique pair: a two-parameter family of rational triangles with equal perimeter and area. Submitted September 2026.
- *Joint with Juan Arévalo** Irreducible polynomials with restricted digits in base $b(T)$. Submitted September 2026.
- *Joint with Kyu-Hwan Lee, Thomas Oliver, and Alexey Pozdnyakov,* Murmurations of quadratic and cubic characters over function fields. Submitted August 2026.
- *Joint with Vivian Kuperberg,* Distributions of left prime truncations. Submitted March 2026.
- *Joint with Chantal David and Alexandra Florea,* Nonvanishing of L–functions associated to fixed order characters over function fields. Submitted July 2025.

SELECTED RECENT INVITED RESEARCH PRESENTATIONS[2]

- Non-vanishing of L-functions of fixed order characters over function fields. Arithmetic Statistics for Algebraic Objects. Mathematisches Forschungsinstitut Oberwolfach, Oberwolfach, Germany, November 2025.
- Nonvanishing of L-functions: a story with character, MCA Invited Speaker. Mathematical Congress of the Americas 2025, Miami, Florida, USA, July 2025.
- A moment with L-functions, ADVANCE Distinguished Lecture Series, Department of Mathematics, Kansas State University, Manhattan, Kansas, USA, April 2025.
- The many distributions of divisor functions, Department of Mathematics Colloquium, Washington University in St. Louis, St. Louis, Missouri, USA, February 2025.
- Moments of Artin–Schreier L-functions. Analytic and Explicit results of zeros of L-functions, Banach International Center, Institute of Mathematics of the Polish Academy of Sciences, Będlewo, Poland, September 2024.
- Special values of L-functions up close and from afar. Plenary Speaker. Math for all in Boulder, University of Colorado, Boulder, Colorado, USA, April 2024.
- Sums of the divisor function and random matrix distributions, Department of Mathematics and Statistics Colloquium, Queen's University, Kingston, Ontario, Canada, February 2024.
- A moment with L-functions. School of Mathematical and Statistical Sciences Colloquium, Arizona State University, Tempe, Arizona, USA, February 2024.
- A moment with L-functions. Department of Mathematics Colloquium, Oklahoma State University, Stillwater, Oklahoma, USA, August 2023.
- A moment with L-functions. PIMS Mathematical and Statistical Sciences Colloquium, University of Alberta, Edmonton, Alberta, Canada, April 2023.
- Sums of the divisor function and random matrix distributions. Colloque des sciences mathématiques du Québec, Centre de recherches mathématiques, Montréal, Québec, Canada, March 2023.
- Distributions of sums of the divisor function over function fields. Zeta functions and their representations. Research Institute for Mathematical Sciences (RIMS), Kyoto University, Kyoto, Japan, March 2023.
- A moment with L-functions. Women in Math (WiM) Winter Colloquium, University of Waterloo, Waterloo, Ontario, Canada, February 2023.
- Sums of the divisor function and random matrix distributions. Pure Math Colloquium, University of Waterloo, Waterloo, Ontario, Canada, February 2023.
- Sums of the divisor function associated to symplectic and orthogonal regimes. Number Theory Web Seminar, February 2023 (remote talk).
- A moment with L-functions. Plenary Speaker. The Second Conference on Mathematics and Applications of Mathematics (CMAM'2022). Laboratory of Mathematics and Applications of Mathematics (LMAM), Université de Jijel, Jijel, Algeria, September 2022 (remote talk).
- A moment with L-functions. Plenary Speaker. Conferencia González Domínguez. Annual meeting of the Unión Matématica Argentina, Neuquén, Argentina, September 2022 (remote talk).

[2]Selected over more than 200 invited research presentations

- Sums of the divisor function over $\mathbb{F}_q[T]$ and symplectic distributions. 50 Years of Number Theory and Random Matrix Theory Conference, Institute for Advanced Study, Princeton, New Jersey, USA, June 2022.
- Special values of L-functions up close and from afar. Krieger–Nelson Prize Lecture. 2022 CMS Summer Meeting, St. Johns, Newfoundland, Canada, June 2022.
- A moment with L-functions. PIMS Network-Wide Colloquium, University of British Columbia, Vancouver, British Columbia, Canada, May 2022. (Part of the 2022 Celebration of Women in Mathematics.)
- Sums of certain arithmetic functions over $\mathbb{F}_q[T]$ and symplectic distributions. Plenary Speaker. PAlmetto Joint Arithmetic, Modularity, and Analysis Series (PAJAMAS III), South Carolina, USA, September 2021 (remote talk due to COVID-19).
- L-functions and Mahler measure: Number Theory and beyond. Plenary Speaker. XXIII Coloquio Latinoamericano de Álgebra, Mexico City, Mexico, August 2019.

STUDENTS AND POSTDOCTORAL FELLOWS

- 4 PhD students supervised or in progress: Juan Arévalo Gómez (2025-present), Subham Roy (2019-2024), Siva Sankar Nair (2019-2024), Gang Wu (2016-2022).
- 14 Master's students supervised or in progress: Khanh Huynh (2025-present), Baland Omar (2025-present), Éliane Cody (2024-2026), Habib Jaber (2024-2025), Xavier Généreux (2021-2023), Jarry Gu (2019-2020), Youcef Mokrani (2018-2020), Subham Roy (2017-2019), Antoine Giard (2017-2019), Gabriel Beauchamp Houde (2014-2016), Nicolas Bouchard (2012-2014), Olivier Larocque (2011-2014), Jean-Sébastien Lechasseur (2011-2012), Zahraa Issa (2010-2012).
- 10 Undergraduate honor theses (or equivalent) supervised: Théophane Bouchard (2026, M1, École Normale Supérieure de Lyon), Matéo Frély Théophane Bouchard (2026, M1, École Normale Supérieure de Lyon), Jesse Allen (2026), Élisabeth Séguin (2024), Damien LeBlanc (2023), Mathilde Côté-Toulgoat (2022), Juan Pablo De Rasis (2019-2020, licenciatura, Universidad de Buenos Aires), Youcef Mokrani (2017), Alexis Leroux-Lapierre (2017), Nicolas Bouchard (2011), Nicolas Simard (2011).
- 37 Undergraduate summer research experiences supervised since 2007.
- 13 Postdoctoral fellows supervised or cosupervised since 2008.

SELECTED LEADERSHIP POSITIONS

- Member. NSERC Mathematics and Statistics Liaison Committee. Natural Sciences and Engineering Research Council of Canada, since August 2026.
- Member at Large. Council. American Mathematical Society (AMS), 2024-2027.
- Vice-President - Québec. Canadian Mathematical Society (CMS), 2019-2023.
- Member. Board of Directors. Banff International Research Station for Mathematical Innovation and Discovery (BIRS), since October 2019.
- Co-chair - Pure Math. Discovery Grants Program, 1508 - Mathematics and Statistics Evaluation Group (EG). Natural Sciences and Engineering Research Council of Canada (NSERC), 2019-2020.

SELECTED SERVICE FOR INSTITUTES, GRANTING AGENCIES, AND PROFESSIONAL SOCIETIES

- Member. NSERC Mathematics & Statistics Liaison Committee. Natural Sciences and Engineering Research Council of Canada, since August 2026.
- Ad Hoc Human Resources Committee. Canadian Mathematical Society (CMS), Member, 2025-2026.
- Committee on Meetings and Conferences. American Mathematical Society (AMS), Council Representative, 2024-2027.
- Nominating Committee. Canadian Mathematical Society (CMS), Member, 2024-2027.
- IMU Committee for Women in Mathematics (CWM), International Mathematical Union (IMU), Member 2023-2026, Ambassador for Canada since 2016.
- Reconciliation in Mathematics Committee. Canadian Mathematical Society (CMS), President's Delegate, 2020-2023.

- Women in Mathematics Committee. Canadian Mathematical Society (CMS), President's Delegate, 2019-2023.
- Member. Local Scientific Committee. Centre de recherches mathématiques (CRM), 2018-2023.
- Member. Equity, Diversity, and Inclusion Committee. Centre de recherches mathématiques (CRM), 2020-2022.
- Member. Discovery Grants Program, 1508 - Mathematics and Statistics Evaluation Group (EG). Natural Sciences and Engineering Research Council of Canada (NSERC), 2017-2020.
- Board of Directors. Canadian Mahematical Society (CMS), Director - Québec 2017-2019, Director-VP - Québec 2019-2023, Director - Québec 2023-2027.
- Joint Mathematics Meetings Committee. Association for Women in Mathematics (AWM), Member 2016-2018, Chair 2018-2019.
- Program Committee member and Scientific Advisory Board member. Banff International Research Station for Mathematical Innovation and Discovery (BIRS), 2015, 2016, 2017 (three consecutive years).
- Steering Committee member. Women in Numbers, since 2011.

EDITORIAL SERVICE

- Editor. Annales mathématiques du Québec, since 2024.
- Associate Editor. Canadian Mathematical Communications, 2024-2026.
- Associate Editor. Canadian Journal of Mathematics and Canadian Mathematical Bulletin, 2022-2026.
- Associate Editor. La Matematica, since 2021.
- Editor. Revista de la Unión Matemática Argentina, since 2021.
- Editor. International Journal of Number Theory, since 2020.
- Editor. Publications Mathématiques de Besançon - Algèbre et Théorie des Nombres, since 2019.
- Editor (with J. Balakrishnan, A. Folsom, and M. Manes). Proceedings of WIN4–Women in Number Theory, 2017-2019.
- Editor (with C. David and M. Manes). Proceedings of WIN2–Women in Number Theory, 2012-2013.

SELECTED RECENT CONFERENCE ORGANIZATION AND SCIENTIFIC COMMITTEES

- Co-organizer (with D. van Straten and W. Zudilin). Mahler measures and L-functions. Mathematisches Forschungsinstitut Oberwolfach, Germany, February 2027.
- Co-organizer (with A. Granville and D. Koukoulopoulos). Probability in Number Theory: a workshop on the distribution of L-functions and of multiplicative functions. Centre de recherches mathématiques, Montréal, Québec, Canada, June 2026.
- Co-organizer (with L.-P. Arguin, A. Granville, D. Koukoulopoulos, C. Pagano, E. Paquette, and F. Thorne). Séminaire de mathématiques supérieures 2026: Universal Statistics in Number Theory. Centre de recherches mathématiques, Montréal, Québec, Canada, May 2026.
- Co-organizer (with J. Ellenberg and A. Granville). Using AI to find examples. Centre de recherches mathématiques and IVADO, Montréal, Québec, Canada, April 2026.
- Co-organizer (with A. Granville, D. Koukoulopoulos, and C. Pagano). Thematic Program 2026: Universal Statistics in Number Theory. Centre de recherches mathématiques, Montréal, Québec, Canada, March-July 2026.
- Scientific Organizing Committee member. 2025 CMS Summer Meeting, Québec, Québec, Canada, June 2025.
- Co-organizer (with L. Devin, A. Granville, and D. Koukoulopoulos). Analytic Number Theory and Arithmetic Statistics, celebrating the mathematical contributions of Chantal David. Centre de recherches mathématiques, Montréal, Québec, Canada, August 2024.
- Co-organizer (with T. Abdelgadir, A. Pacetti, and A. Salerno). Arithmetic Geometry and Applications (a conference in honor of Fernando Rodríguez-Villegas). The Abdus Salam International Centre of Theoretical Physics (ICTP), Trieste, Italy, July 2024.

- Co-organizer (with B. Conrey, G. Mussardo, and G. Sierra). Number Theory and Physics. Workshop and Program. Simons Center for Geometry and Physics, State University of New York, Stony Brook, New York, USA, October-November 2022.
- Co-organizer (with C. David, D. Koukoulopoulos, J. Maynard, K. Ono, and K. Soundararajan). A celebration of Analytic Number Theory, a conference in honor of Andrew Granville's 60th birthday. Centre de recherches mathématiques, Montréal, Québec, Canada, September 2022.
- Co-organizer (with R. Choksi, J. Lin, and A. Stancu). Women in Mathematics during the time of COVID. Centre de recherches mathématiques, Montréal, Québec, Canada, March 2021 (remote one-day workshop organized in response to COVID-19).
- Co-organizer (with L. Campbell, A. Fraser, K. Meagher, and L. Moura). CWiMAC 2021 (Connecting Women in Mathematics Across Canada), Ottawa, Ontario, Canada, (planned for June 2020 but delayed to June 2021 due to COVID-19).
- Steering Committee member. Two Weeks at WATERLOO II - A Summer School for Women in Math. University of Waterloo, Waterloo, Ontario, Canada, August 2014.
- Co-organizer (with C. David and M. Manes). Women in Numbers 2. Banff International Research Station for Mathematical Innovation and Discovery (BIRS), Banff, Alberta, Canada, November 2011.