# Jeremy Lovejoy

# Curriculum Vitae

CNRS, Université Paris Cité
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## Personal

Date of birth March 7, 1972

Place of birth Escanaba, Michigan, USA

Citizenship American

## Education

August 2000 **PhD**, Mathematics, The Pennsylvania State University.

Advisors: George E. Andrews and Ken Ono

# Professional Positions

2006-current **Researcher**, CNRS, Université Paris Cité.

2003–2006 **Researcher**, *Centre National de la Recherche Scientifique (CNRS)*, Université Bordeaux 1.

2000-2003 **VIGRE/Van Vleck Assistant Professor**, *Department of Mathematics*, University of Wisconsin.

# Research interests

- Partitions and q-series
- Combinatorics
- o Modular forms and number theory
- Quantum knot theory

## Publications

- 1. Ramanujan Type Congruences for Three-Colored Frobenius Partitions, *J. Number Theory* 86 (2000), 283-290.
- 2. The Divisibility and Distribution of Partitions into Distinct Parts, *Adv. Math.* 158 (2001), 253-263.
- 3. 3-regular Partitions and a Modular K3 Surface (with David Penniston), *Contemp. Math.* 291 (2001), 177-182.
- 4. The Arithmetic of the Number of Partitions into Distinct Parts (with Scott Ahlgren), *Mathematika* 48 (2001) 203-211.
- 5. Frobenius Partitions and the Combinatorics of Ramanujan's  $_1\psi_1$  summation (with Sylvie Corteel), *J. Combin. Theory Ser. A* 97 (2002), 177-183.

- 6. Extension of Ramanujan's Congruences for the Partition Function Modulo Powers of 5 (with Ken Ono), *J. reine angew. math.* 542 (2002), 123-132.
- 7. Lacunary Partition Functions, Math. Res. Lett. 9 (2002), 191-198.
- 8. Partitions with Designated Summands (with George Andrews and Richard Lewis), *Acta Arithmetica* 105 (2002), 51-66.
- 9. The Number of Partitions into Distinct Parts Modulo Powers of 5, *Bull. London Math. Soc.* 35 (2003), 41-46.
- 10. Hypergeometric Generating Functions for Dirichlet and Other L-Functions (with Ken Ono), *Proc. Nat. Acad. Sci. USA* vol. 100 no. 12 (2003), 6904-6909.
- 11. Gordon's Theorem for Overpartitions, J. Combin. Theory Ser. A 103 (2003), 393-401.
- 12. More Lacunary Partition Functions, *Illinois J. Math.* 47 (2003), 769-773.
- 13. Overpartitions (with Sylvie Corteel), Trans. Amer. Math. Soc. 356 (2004), 1623-1635.
- 14. A Bailey Lattice, Proc. Amer. Math. Soc. 132 (2004), 1507-1516.
- 15. Overpartitions and Real Quadratic Fields, J. Number Theory 106 (2004), 178-186.
- 16. Overpartition Theorems of the Rogers-Ramanujan Type *J. London Math. Soc.* 69 (2004), 562-574.
- 17. Overpartitions and Generating Functions for Generalized Frobenius Partitions (with Sylvie Corteel and Ae Ja Yee), *Trends in Mathematics, Mathematics and Computer Science III: Algorithms, Trees, Combinatorics, and Probabilities (Birkhauser)* (2004) 15-24.
- 18. Rank and Conjugation for the Frobenius Representation of an Overpartition, *Ann. Comb.* 9 (2005), 321-334.
- 19. A Theorem on Seven-Colored Overpartitions and its Applications, *Int. J. Number Theory.* 1 (2005), 215-224.
- 20. An Iterative-Bijective Approach to Generalizations of Schur's Theorem (with Sylvie Corteel), *Europ. J. Comb.* 27 (2006), 496-512.
- 21. Overpartition Pairs, Ann. Inst. Fourier 56 (2006), 781-794.
- 22. Constant Terms, Jagged Partitions, and Partitions with Difference Two at Distance Two, *Aequationes Math.* 72 (2006), 299-312.
- 23. Partitions and overpartitions with attached parts, *Arch. Math.* 88 (2007), 316-322.
- 24. Dyson's rank, overpartitions, and Maass forms (with Kathrin Bringmann), *Int. Math. Res. Not.* (2007), rnm063.
- 25. Overpartition pairs and two classes of basic hypergeometric series (with Olivier Mallet), *Adv. Math.* 217 (2008), 386-418.
- 26. Rank and conjugation for a second Frobenius representation of an overpartition, *Ann. Comb.* 12 (2008), 101-113.
- 27. Rank and congruences for overpartition pairs (with Kathrin Bringmann), *Int. J. Number Theory* 4 (2008), 303-322.
- 28. An extension to overpartitions of the Rogers-Ramanujan identities for even moduli (with Sylvie Corteel and Olivier Mallet), *J. Number Theory* 128 (2008), 1602-1621.

- 29. Rank differences for overpartitions (with Robert Osburn), *Quart. J. Math. (Oxford)* 59 (2008) 257-273.
- 30. *n*-color overpartitions, twisted divisor functions, and Rogers-Ramanujan identities (with Olivier Mallet) (G.E. Andrews' 70th birthday issue) 6 (2008), 23-36.
- 31. Overpartitions and class numbers of binary quadratic forms (with Kathrin Bringmann), *Proc. Nat. Acad. Sci. USA* 106 no. 14 (2009), 5513-5516.
- 32. Rank and crank moments for overpartitions (with Kathrin Bringmann and Robert Osburn), *J. Number Theory* 129 no. 7 (2009), 1758-1772.
- 33. Overpartitions and the q-Bailey identity (with Sylvie Corteel), *Proc. Edinburgh Math. Soc.* 52 (2009), 297-306 .
- 34. Partitions weighted by the parity of the crank (with Dohoon Choi and Soon-Yi Kang), *J. Combin. Theory Ser. A* 116 (2009), 1034-1046.
- 35.  $M_2$ -rank differences for partitions without repeated odd parts (with Robert Osburn), J. Théor. Nombres Bordeaux 21 no. 2 (2009), 313-334.
- 36. Automorphic properties of generating functions for generalized rank moments and Durfee symbols (with Kathrin Bringmann and Robert Osburn), *Int. Math. Res. Not.* (2010), rnp131.
- 37. On identities involving sixth order mock theta functions, *Proc. Amer. Math. Soc.* 138 (2010), 2547-2552.
- 38. M2-rank differences for overpartitions (with Robert Osburn), *Acta Arithemtica* 144 (2010), 193-212.
- 39. Partitions with rounded occurrences and attached parts, *Ramanujan J.* 23 (2010), 307-313.
- 40. Quadratic forms and four partition functions modulo 3 (with Robert Osburn), *Integers* 11 (2011), 47-53.
- 41. On the modularity of the unified WRT invariants of certain Seifert manifolds (with Kathrin Bringmann and Kazuhiro Hikami), *Adv. Appl. Math.* 46 (2011), 86-93.
- 42. Automorphic properties of generating functions for generalized odd rank moments and odd Durfee symbols (with Claudia Alfes and Kathrin Bringmann), *Math. Proc. Cambridge Phil. Soc* 151 (2011), 385-406.
- 43. ℓ-adic properties of smallest parts functions (with Scott Ahlgren and Kathrin Bringmann), *Adv. Math.* 228 (2011), 629-645.
- 44. Ramanujan-type partial theta functions and conjugate Bailey pairs, *Ramanujan J.* 29 (2012), 51-67.
- 45. The Bailey chain and mock theta functions, Adv. Math. 238 (2013), 442–458.
- 46. q-hypergeometric double sums as mock theta functions (with Robert Osburn), *Pacific J. Math.* 264 (2013), 151–162.
- 47. On q-difference equations for partitions without k-sequences (with Kathrin Bringmann and Karl Mahlburg), Legacy Of Ramanujan, Ramanujan Mathematical Society Lecture Notes 20 (2013), 129–137.

- 48. Mixed mock modular *q*-series (with Robert Osburn), *J. Indian Math. Soc.*, Special Volume to commemorate the 125th Birth Anniversary of Srinivasa Ramanujan and the National Mathematics Year 2012 (2013), 45–61.
- 49. Bailey pairs and indefinite quadratic forms, *J. Math. Anal. Appl.* 410 (2014), 1002–1013.
- 50. The rank of a unimodal sequence and a partial theta identity of Ramanujan (with Byungchan Kim), *Int J. Number Theory* 10 (2014), 1081–1098.
- 51. Torus knots and quantum modular forms (with Kazuhiro Hikami), *Res. Math. Sci.* 2:2, 2014.
- 52. On two tenth order mock theta identities, *Ramanujan J.* 36 (2015), 117–121.
- 53. Anti-lecture hall compositions and Andrews' generalization of the Watson-Whipple transformation (with Sylvie Corteel and Carla Savage), *J. Combin. Theory Ser. A* 134 (2015), 188–195.
- 54. Overpartitions with restricted odd differences (with Kathrin Bringmann, Jehanne Dousse, and Karl Mahlburg), *Electron. J. Combin* 22 (2015), no.3, paper 3.17.
- 55. Real quadratic double sums (with Robert Osburn), *Indag. Math.* 26 (2015), 697–712.
- 56. Ramanujan-type partial theta identities and rank differences for special unimodal sequences (with Byungchan Kim), *Ann. Comb.* 19 (2015), 705–733.
- 57. A partition identity and the universal mock theta function  $g_2(x;q)$  (with Kathrin Bringmann and Karl Mahlburg), *Math. Res. Lett.* 23 (2016), 67–80.
- 58. Odd-balanced unimodal sequences and related functions: parity and quantum modularity (with Byungchan Kim and Subong Lim), *Proc. Amer. Math. Soc.* 144 (2016), 3687–3700.
- 59. Overpartitions into distinct parts without short sequences (with Youn-Seo Choi and Byungchan Kim), *J. Number Theory* 175 (2017), 117-133.
- 60. Partial indefinite theta identities (with Byungchan Kim), *J. Aust. Math. Soc.* 102 (2017), 255–289.
- 61. Mock theta double sums (with Robert Osburn), Glasgow Math. J. 59 (2017), 323-348.
- 62. Hecke-type formulas for families of unified Witten-Reshetikhin-Turaev invariants (with Kazuhiro Hikami), *Commun. Number Theory Phys.* 11 (2017), 249–272.
- 63. On a Rogers-Ramanujan type identity from crystal base theory (with Jehanne Dousse), *Proc. Amer. Math. Soc.* 146 (2018), 55–67.
- 64. Asymmetric generalizations of Schur's theorem, in: Analytic Number Theory, Modular Forms, and q-Hypergeometric Series, Springer Proceedings in Mathematics and Statistics vol. 221, Springer, Cham, 2017.
- 65. Ramanujan-type partial theta identities and conjugate Bailey pairs, II. Multisums (with Byungchan Kim), *Ramanujan J.* 46 (2018), 743–764.
- 66. Identities for overpartitions with even smallest parts (with Min-Joo Jang), *Int. J. Number Theory* 14 (2018), 2023–2033.
- 67. On some special families of *q*-hypergeometric Maass forms (with Kathrin Bringmann and Larry Rolen), *Int. Math. Res. Not. IMRN* Vol. 2018, No. 18, 5537–5561.

- 68. Generalizations of Capparelli's identity (with Jehanne Dousse), *Bull. London Math. Soc.* 51 (2019), 193–206.
- 69. Dissections of strange q-series (with Scott Ahlgren and Byungchan Kim), *Ann. Comb.* 23 (2019), 427–442.
- 70. The colored Jones polynomial and Kontsevich-Zagier functions for double twist knots (with Robert Osburn), *J. Knot Theory Ramifications* 30 (2021), Article 2150031.
- 71. The colored Jones polynomial and Kontsevich-Zagier functions for double twist knots, II (with Robert Osburn), *New York J. Math.* 51 (2019), 1312–1349.
- 72. Parity bias in partitions (with Byungchan Kim and Eunmi Kim), *European J. Combin.* 89 (2020), Article 103159.
- 73. A mock theta identity related to the partition rank modulo 3 and 9 (with Song Heng Chan, Nankun Hong, and Jerry), *Int. J. Number Theory* 17 (2021), 311–327.
- 74. On weighted overpartitions related to some q-series in Ramanujan's lost notebook (with Byungchan Kim and Eunmi Kim), *Int. J. Number Theory* 17 (2021), 603–619.
- 75. Quantum *q*-series identities, *Hardy-Ramanujan J.* 44 (2021), 61–73.
- 76. Arithmetic properties of overpartitions with congruence-restricted differences (with Isaac A. Broudy), *Involve, a Journal of Mathematics* 15-3 (2022), 489–505.
- 77. Bailey pairs and indefinite quadratic forms, II. False indefinite theta functions, *Res. Number Theory* 8:24 (2022).
- 78. Bailey pairs and strange identities, *J. Korean Math. Soc.* 59 (2022), 1015–1045.
- 79. Rank deviations for overpartitions (with Robert Osburn), *Res. Number Theory* 10:67 (2024).
- 80. New congruences modulo 4 and 8 for Ramanujan's  $\phi$  function (with Julia Q. Du and Olivia X.M. Yao), *Proc. Amer. Math. Soc.* 153 (2025), 551–564.
- 81. Bailey pairs, radial limits of q-hypergeometric false theta functions, and a conjecture of Hikami (with Rishabh Sarma), Kyushu J. Math., to appear.
- 82. Overpartitions (with Sylvie Corteel), in: Srinivasa Ramanujan: His Life, Legacy, and Mathematical Influence, K. Alladi et al. (eds.), Springer Nature Switzerland AG, 2024.
- 83. Odd unimodal sequences (with Kathrin Bringmann), submitted.
- 84. Bailey pairs and an identity of Chern-Li-Stanton-Xue-Yee (with Shashank Kanade), submitted.

#### Talks

# Conferences - Invited talks

- October 2000 The Combinatorics of Ramanujan's  $_1\psi_1$  and the q-Gauss  $_2\phi_1$  summation, q-series with Applications to Combinatorics, Number Theory, and Physics, University of Illinois, Urbana, IL.
  - March 2001 The Arithmetic of the Number of Partitions into Distinct Parts, AMS Spring Southeastern Section Meeting, University of South Carolina, Columbia, SC.
- August 2001 *q-series Identities*, The Life and Legacy of Ramanujan, MAA MathFest Short Course, University of Wisconsin, Madison, WI.

- May 2003 *Gordon's Theorem for Overpartitions*, AMS Spring Sectional Meeting, San Francisco State University, San Francisco, CA.
- February Overpartition Analogues of Classical Families of Partition Theorems, Conference on
  - 2004 Paths, Permutations, and Trees, Nankai University, Tianjin, China.
- November Extending Partition Theorems of Schur and Göllnitz to Overpartitions, Additive Number 2004 Theory, Gainesville, FL.
- January 2006 Constant terms, jagged partitions, and partitions with distance two at distance two, Workshop of Combinatorics on q-series and Partitions, Lyon, France.
  - June 2006 Overpartition pairs, lattice paths, and Andrews' well-poised basic hypergeometric series, International conference on number theory, KIAS, Seoul, Korea.
  - December Andrews' generalization of Selberg's q-difference equations, Combinatory Analysis 2008: Partitions, q-series, and Applications.
  - May 2009 *q-series and class numbers, Mock theta functions and applications in combinatorics*, algebraic geometry, and mathematical physics, Max Planck Institute, Bonn, Germany.
  - March 2011 Congruences for smallest parts functions, Modular Forms and Mock Modular Forms and their Applications in Arithmetic, Geometry and Physics, Trieste, Italy.
  - March 2012 Ramanujan's identities for the sixth order mock theta functions, Symposium on Modular Forms, Mock Theta Functions, and Applications, Cologne, Germany.
  - August 2013 The Bailey chain and mock theta functions, The Combinatorics of q-Series and Partitions in honor of Professor George Andrews' 75th birthday, Tianjin, China.
    - February Torus knots and quantum modular forms, Functional equations and special functions:
      - 2015 from combinatorics to model theory, Grenoble, France.
    - December The colored Jones polynomial and Kontsevich-Zagier series for torus and double twist 2017 knots, Trends in Modular Forms, Daejon, South Korea.
    - June 2018 *Colored Jones polynomials, q-series, and modular forms*, Combinatory Analysis 2018 A conference in honor of George Andrews' 80th birthday, Penn State University.
- October 2019 Identities for partitions and overpartitions with even smallest parts, q-day 2019, Seoul Tech, Korea.
- October 2020 Quantum q-series identities, q2020, online workshop on q-series, quantum modular forms, and representation theory, hosted by Kyoto University.
  - December Parity bias in partitions, International Conference on Special Functions & Applications 2020 (ICSFA-2020), online conference hosted by Babu Banarasi Das University, Lucknow, India.
  - April 2022 *Mini-course on Bailey pairs in combinatorics, number theory, and knot theory*, Séminaire Lotharingien de Combinatoire 87, hosted by Université de Lyon I.
  - May 2022 Bailey pairs and strange identities, special session on "q-series, Number Theory and Quantum Topology", AMS Spring Western Sectional Meeting, online.
  - July 2022 *Bailey pairs and strange identities*, Ramanunan and Euler: Partitions, Mock Theta Functions, and *q*-series, online.
  - March 2024 Bailey pairs and strange identities, International Conference on Modular Forms and q-Series, University of Cologne, Germany.

## Conferences - Contributed talks

- November Divisibility and Distribution of Partitions into Distinct Parts, Conference on q-series, symbolic computation, number theory, special functions, physics and combinatorics, University of Florida, Gainsville, FL.
- April 2000 Extension of Ramanujan's Congruences for the Partition Function Modulo Powers of 5, SERMON (Southeast Regional Meeting on Numbers) 2000, Virginia Tech, Blacksburg, VA.
- May 2000 Extension of Ramanujan's Congruences for the Partition Function Modulo Powers of 5, Millenial Conference on Number Theory, University of Illinois, Urbana, IL.
- June 2000 Extension of Ramanujan's Congruences for the Partition Function Modulo Powers of 5, NATO Advanced Study Institute: Special Functions 2000, Arizona State University, Tempe, AZ.
- December The Divisibility of the Number of Partitions into Distinct Parts, Western Number Theory 2000 Conference, University of San Diego, CA.
- May 2001 Summing the Tails of Modular Forms, q-series, and the Arithmetic of Quadratic Number Fields, Fifth International Joint Meeting of the AMS and the Sociedad Matematica Mexicana (SMM), UNAM, Morelia, Mexico.
- May 2002 Lacunary Partition Functions, CNTA, Université de Montreal, Montreal, Quebec.
- July 2005 *A Theorem on Seven-colored Overpartitions and its Applications*, XXIVièmes Journèes Arithmétiques, Marseille, France.
- July 2007 Rank differences for overpartitions, XXVièmes Journèes Arithmétiques, Edinburgh, Scotland.
- August 2012 *The Bailey chain and mock theta functions*, Building Bridges: 1st EU-US conference on Automorphic Forms and related topics, Aachen, Germany.
  - July 2014 Rank differences for unimodal sequences, Building Bridges: 2nd EU-US workshop on Automorphic Forms and related topics, Bristol, United Kingdom.
  - April 2018 *The modularity of certain WRT invariants*, AMS Spring Western Sectional Meeting, Portland State University.
- January 2020 *The colored Jones Polynomial of the odd double twist knots*, AMS-MAA Joint Mathematics Meetings, Denver.

## **Conferences - Competitive submissions**

- November Frobenius Partitions and Basic Hypergeometric Series, GasCOM 2001, University of 2001 Siena, Siena, Italy.
- June 2003 Overpartitions (with Sylvie Corteel), FPSAC, Sweden.
- September Overpartitions and Generating Functions for Generalized Frobenius Partitions, Third 2004 Colloquium on Mathematics and Computer Science, Vienna, Austria.
- September An extension to overpartitions of the Rogers-Ramanujan identities for even moduli (with Sylvie Corteel and Olivier Mallet), Fourth Colloquium on Mathematics and Computer Science, Nancy, France.

#### **Seminars**

October 1999 Pennsylvania State University (USA).

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October 2000 University of Wisconsin (USA) (3 seminars).
  November Institut Girard Desargues, Université Lyon I (France).
        2000
  March 2001 University of Wisconsin (USA).
   April 2001 University of Illinois (USA).
  March 2002 Institut Henri Poincaré (France).
   April 2002 Institut Girard Desargues, Université Lyon I (France).
   April 2002 Sussex University (UK).
   June 2002 LaBRI, Université Bordeaux I (France).
  November University of Illinois (USA).
        2002
  March 2003 University of Wisconsin (USA) (2 seminars)
   December Max Planck Institute (Germany).
        2003
   April 2004 University of Melbourne (Australia).
  November University of Wisconsin (USA).
        2004
  March 2005 Institut Camille Jordan, Université Lyon I (France).
   April 2005 LIAFA, Université Paris 7 (France).
  March 2006 University College, Dublin (Ireland).
    February Institut Camille Jordan, Université Lyon I (France).
        2007
   April 2007 Pohang University of Science and Technology (Korea) (3 seminars).
   April 2007 Korea Institute for Advanced Study (Korea) (2 seminars).
   April 2007 Korea Advanced Institute of Science and Technology (Korea).
   June 2007 Institut Henri Poincaré (France).
  March 2008 IECN, Université Nancy (France).
  November University of Cologne (Germany).
        2009
October 2011 University College Dublin (Ireland).
   December Institut Joseph Fourier, Grenoble (France).
        2012
   December Institut Camille Jordan, Lyon (France).
        2012
October 2013 CALIN, Université Paris XIII (France).
    February University College Dublin (Ireland).
        2014
October 2015 Korea Institute for Advanced Study (Korea).
October 2016 University of Zurich (Switzerland).
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November 2016	University College Dublin (Ireland).
April 2017	Nanyang Technological University (Singapore).
December 2017	BAANTAG 15, University of California, Berkeley (USA).
February 2018	University of California, Davis (USA).
April 2018	University of Illinois (USA).
April 2018	University of California, Berkeley (USA).
May 2019	Oregon State University (USA).
June 2019	University of California, Los Angeles (USA).
October 2020	Euler International Mathematical Institute, Saint Petersburg State University (Russia) - online.
April 2021	Vanderbilt University (USA) - online
July 2021	University of Cologne (Germany) - online
June 2022	University of Cologne (Germany)
November 2022	University of Central Florida (USA) - online
November 2024	Seminar Series: Topics in Special Functions and Number Theory (India) - online
June 2025	Séminaire Darboux, Université Pierre et Marie Curie (France)
	Professional Awards and Grants
2001–2002	Chateaubriand Fellowship.
2004-2007	Principal Investigator (PI), Partitions d'entiers à l'interface de la combinatoire, des $q$ -séries, et de la théorie des nombres, ACI Jeunes Chercheuses et Jeunes Chercheurs, 40.000 Euros.
2007-2010	Member, <i>GAMMA</i> , ANR Projet Blanc.
2008–2009	Co-PI, <i>Ramanujan-type congruences for overpartitions and overpartition pairs</i> , Ulysses - PHC Franco-Irlandais, 5.000 Euros.
2008-2011	Member, <i>Arithmetic Properties of Coefficients of Modular Forms</i> , Science Foundation Ireland Research Frontiers Programme, 117.000 euros.
2008-2013	Member, IComb, ANR Jeunes Chercheuses et Jeunes Chercheurs, 340.000 euros
2014-2015	Co-PI, <i>Partial theta functions in Ramanujan's lost notebook and beyond</i> , STAR - PHC Franco-Coréen, 10.880 euros.
2019–2025	Member, <i>Combiné</i> , ANR PRC, 250.000 euros
	Organizing and Program Committees

# Organizing and Program Committees

July 2008 Program Committee, Formal Power Series and Algebraic Combinatorics, Talca University, Chile.

- July 2010 Co-organizer, *Prospects in q-series and modular forms* University College Dublin, Ireland.
- May 2012 Co-organizer, *Hypergeometric series and their generalizations in algebra, geometry, number theory and physics*, Institut Henri Poincaré, Paris, France.
- March 2013 Co-organizer, Automorphic forms workshop, University College Dublin, Ireland.
- June 2013 Organizing Committee, *Formal Power Series and Algebraic Combinatorics*, Paris, France.
- May 2015 Co-organizer, *Automorphic forms: advances and applications*, CIRM Luminy, France.
- March 2018 Co-organizer, Modular forms and quantum knot invariants, BIRS, Banff, Canada.
- October 2026 Co-organizer, *Modularity and Quantum Topology*, American Institute of Mathematics, California Institute of Technology, USA

# Teaching

#### **Graduate courses**

- o Master Parisien de Recherche en Informatique (MPRI)
- The Theory of Partitions

# Undergraduate courses

- o College Algebra
- Quantitative Reasoning
- o Calculus I, Calculus II
- Differential Equations
- o Linear Algebra, Advanced Linear Algebra
- Combinatorics
- o Introduction to Analysis
- Introduction to Abstract Algebra

# Advising

# Undergraduate

- 2003 Team leader, Research Experience for Undergraduates, University of Wisconsin.
- 2020 Research advisor, Isaac Broudy, University of California, Berkeley

#### Master

- 2011 M1 research advisor, Jehanne Dousse, ENS Lyon
- 2016 M2 research advisor, Isaac Konan, Université Paris Sud
- 2023 M2 research advisor, Younès Yahi, Université Pierre et Marie Curie
- 2023 M2 research advisor, Nicolas Martinez, Université Paris Cité

#### PhD

2006–2008 Olivier Mallet, Université Paris Diderot. Current position: Maître de conférences, Université de Rouen.

- 2012–2015 Jehanne Dousse, Université Paris Diderot. Current position: CNRS researcher, Université Lyon I.
- 2017–2020 Isaac Konan, Université Paris Diderot. Current position: Post-doc, Université Lyon I.

# Thesis evaluation

## Thesis examiner

- University of Mysore (India)
- Nanyang Technological University (Singapore)
- Thapar University (India)
- Simon Fraser University (Canada)
- Saint Petersburg State University (Russia)
- Sabanci University (Turkey)

## **Habilitation Committee**

o Frédéric Jouhet, Université Lyon I, 2010

## **Editorial**

- 2018 Editorial Board, International Journal of Number Theory
- 2019 Editorial Board, Ramanujan Journal
- 2021 Editorial Board, South East Asian Journal of Mathematics and Mathematical Sciences
- 2021 Editorial Board, *Journal of Ramanujan Society of Mathematics and Mathematical Sciences*
- 2022 Editorial Board, Annals of Combinatorics

# Refereeing

## **Journals**

- o Abhandlungen aus dem Mathematischen Seminar der Universität Hamburg
- Acta Arithmetica
- Acta Mathematica Sinica
- o Acta Mathematica Scientia
- Advances in Applied Mathematics
- Advances in Difference Equations
- Advances in Mathematics
- American Journal of Mathematics
- American Mathematical Monthly
- Annales de l'Institut Fourier
- Annales Polonici Mathematici
- o Annali dell'Università di Ferrara
- Annals of Combinatorics
- Applicable Analysis and Discrete Mathematics

- Arabian Journal of Mathematics
- Arkiv för Matematik
- Armenian Journal of Mathematics
- Ars Combinatoria
- Ars Mathematica Contemporanea
- Australasian Journal of Combinatorics
- o Boletín de la Sociedad Matemática Mexicana
- o Bulletin of the Australian Mathematical Society
- Bulletin of the Brazilian Mathematical Society
- Bulletin of the London Mathematical Society
- Bulletin of the Polish Academy of Sciences, Mathematics
- Canadian Journal of Mathematics
- o Canadian Mathematical Bulletin
- Carpathian Journal of Mathematics
- Central European Journal of Mathematics
- o Colloquium Mathematicum
- o Compositio Mathematica
- Combinatorial Theory
- Combinatorica
- Comptes Rendus Mathématiques
- Complex Analysis and Operator Theory
- Constructive Approximation
- Contributions to Discete Mathematics
- Discrete Mathematics
- Discrete Mathematics and Theoretical Computer Science
- Duke Mathematical Journal
- Electronic Journal of Combinatorics
- o Electronic Research Archive
- European Journal of Combinatorics
- European Journal of Mathematics
- Formal Power Series and Algebraic Combinatorics
- o Forum Mathematicum
- o Functional Analysis, Approximation, and Computation
- o Functiones et Approximatio, Commentarii Mathematici
- Funkcialaj Ekvacioj
- Graphs and Combinatorics
- Hardy-Ramanujan Journal
- Houston Journal of Mathematics
- Integers

- International Journal of Mathematics and Mathematical Sciences
- o International Journal of Number Theory
- International Mathematical Research Notices
- o JP Journal of Algebra, Number Theory and Applications
- o Journal de Théorie de Nombres de Bordeaux
- Journal of Analysis
- Journal of Analysis and Number Theory
- o Journal of the Australian Mathematical Society
- Journal of Combinatorial Theory Series A
- Journal of Combinatorics and Number Theory
- Journal of the Indian Mathematical Society
- Journal of Integer Sequences
- o Journal of the London Mathematical Society
- Journal of Mathematical Analysis and Applications
- Journal of Number Theory
- o Journal of the Ramanujan Mathematical Society
- o Journal of Ramanujan Society of Mathematics and Mathematical Sciences
- Kragujevac Journal of Mathematics
- o Mathematica Bohemica
- Mathematica Slovaca
- Mathematical Communications
- Mathematical Notes
- Mathematics (MDPI)
- Mathematics of Computation
- Mathematika
- Mediterranean Journal of Mathematics
- Miskolc Mathematical Notes
- Monatshefte für Mathematik
- New Zealand Journal of Mathematics
- Note di Matematica
- Notes on Number Theory and Discrete Mathematics
- Osaka Journal of Mathematics
- Pacific Journal of Mathematics
- o Periodica Mathematica Hungarica
- Proceedings of the American Mathematical Society
- Proceedings of the Edinburgh Mathematical Society
- Proceedings of the Estonian Academy of Sciences
- o Proceedings of the Indian Academy of Sciences Mathematical Sciences
- Proceedings of the London Mathematical Society

- Proceedings of the National Academy of Sciences (USA)
- o Publicationes Mathematicae Debrecen
- Quaestiones Mathematicae
- Quarterly Journal of Mathematics
- Ramanujan Journal
- o Rendiconti Lincei: Matematica e Applicazioni
- Research in the Mathematical Sciences
- Rocky Mountain Journal of Mathematics
- SIAM Journal on Discrete Mathematics
- o SIGMA (Symmetry, Integrability and Geometry: Methods and Applications)
- Sarajevo Journal of Mathematics
- South East Asian Journal of Mathematics and Mathematical Sciences
- o Tamsui Oxford Journal of Information and Mathematical Sciences
- Transactions on Combinatorics
- Turkish Journal of Mathematics
- Vietnam Journal of Mathematics

# **Funding agencies**

- Austrian Science Fund
- National Science Foundation
- National Security Agency

# Reviewing

- AMS Mathematical Reviews (341 reviews)
- Zentralblatt MATH (173 reviews)
- o Book manuscript reviewer for Prentice-Hall, Cambridge University Press, Springer

# References

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