

CONTACT INFORMATION

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Canada

POSITIONS HELD

- Professor:* July 2015 - present
 - Department of Pure Mathematics, University of Waterloo, Canada.
- Associate Professor:* July 2009 - June 2015
 - Department of Pure Mathematics, University of Waterloo, Canada.
- Assistant Professor:* July 2004 - June 2009
 - Department of Pure Mathematics, University of Waterloo, Canada.
- Postdoctoral Fellow:* January 2004 - June 2004
 - School of Mathematics, University of Edinburgh. Supervisor: Chris Smyth.
- Postdoctoral Fellow:* August 2002 - December 2003
 - Department of Mathematics, University of California, Berkeley. Supervisor: Bjorn Poonen.

EDUCATION

Simon Fraser University

- Department of Mathematics
- May 2002, Ph.D.,
- Thesis: *Pisot numbers and the Spectra of Real numbers.*
- Supervisor: Peter Borwein,

Simon Fraser University

- Department of Mathematics
- April 1999, M.Sc.,
- Thesis: *Multi-sectioning, Rational Poly-exponential Functions and Parallel Computation.*
- Supervisor: Jon Borwein,

University of Waterloo

- April 1997, B. Math.,
- Double major in Pure Mathematics and Computer Science (co-op),

HONOURS AND AWARDS (LAST FIVE YEARS)

- December 2017, Mahony-Neumann-Room Prize for the best paper published in the Bulletin of the Australian Mathematical Society during the period 2011-2016.
- July 2014 to July 2019, NSERC Discovery Grant.
- July 2009 to July 2014, NSERC Discovery Grant.
- June 2007 to June 2012, Infrastructure Operating Fund
- January 2006 to January 2008, New Opportunities Fund.
 - Canadian Foundation for Innovation / Ontario Innovation Trust

SOCIETY MEMBERSHIP

- Canadian Mathematics Society

CONFERENCE ORGANIZATION

- Canadian Mathematics Society, June 2019 – Scientific committee,
- Canadian Mathematics Society, June 2016 – Session organizer,
- Applied Mathematics, Modelling and Computational Sciences Conference, July 2015 – Session organizer.
- Applied Mathematics, Modelling and Computational Sciences Conference, July 2011 – Session organizer.
- Algorithmic Number Theory Symposium, September 2010 – Program Committee
- Canadian Mathematics Society, December 2009 – Session organizer
- Fields workshop on Discovery and Experimentation in Number Theory, September 2009 – Co-organizer
- Canadian Number Theory Association, July 2008 – Co-organizer

PROFESSIONAL ACTIVITIES (LAST FIVE YEARS)

- Book proposal reviewer for *Taylor and Francis*
- Reviewer for *MathSciNet*
- Referee for *Advances in Mathematics*, *Advances in Applied Mathematics*, *American Mathematical Monthly*, *Asian Journal of Mathematics*, *Bulletin of the Korean Mathematical Society*, *Bulletin of the Australian Mathematical Society*, *Combinatorics and Number Theory*, *Discrete and Computational Geometry*, *Dynamical systems*, *Ergodic Theory and Dynamical systems*, *Experimental Mathematics*, *Indagationes Mathematicae*, *International Journal of Number Theory*, *Integers*, *Journal*, *Journal of Algebraic Combinatorics*, *Journal of Integer Sequences*, *Journal of Number Theory*, *Journal of Symbolic Computation*, *Journal de Théorie des Nombres de Bordeaux*, *London Mathematical Society*, *Mathematical and Computational Applications*, *Mathematical Reports of the Academy of Science (The Royal Society of Canada)*, *Mathematics of Computation*, *Monatshefte fuer Mathematik*, *Nonlinearity*, *Notes on Number Theory and Discrete Mathematics*, *Publications Mathematicae Debrecen*, *Punjab University Journal of Mathematics*, *Siam Journal on Discrete Mathematics*, *Theoretical Computer Science*, *Topology and its applications*, *Transactions of the American Mathematical Society*, and *Waterloo Math Reviews*.
- Referee for *American Control Conference*,
- Referee for *NSERC* and *Austrian Science Foundation*

SERVICE WORK

- Mathematics Endowment Fund Board of Directors (September 2006 - Present)
- Mathematics Endowment Fund (September 2005 - Present)
- Pure Math Graduate Committee (July 2013 - June 2014)
- Computing Advisory Committee (July 2011 - June 2014)
- Undergraduate Affairs Committee. (September 2006 - June 2013)
- Standings and Promotion Committee (July 2010 - June 2013)
- Computational Mathematics Steering Committee (January 2005 - June 2011)
- Computational Mathematics Program Committee (September 2005 - June 2010)
- Representative Council (September 2006 - June 2009)

ADMINISTRATIVE APPOINTMENTS

- Associate Dean Operations and Academics, Faculty of Mathematics (July 2020 - December 2021)
- Interim Dean, Faculty of Mathematics (January 2020 - June 2020)
- Vice Dean, Faculty of Mathematics (January 2018 - January 2020)
- Director of the Centre for Computational Mathematics, Industry and Commerce (July 2015 - December 2017)
- Associate Chair Pure Mathematic, Undergraduate Studies, (July 2010 - June 2013)
- Associate Director Computational Mathematics, Undergraduate Studies (September 2005 - June 2010)

MATHEMATICS COMMUNITY SERVICE WORK

- Canadian Mathematics Society - Electronic Services Committee. (January 2010 - December 2013)

OTHER

- Marking for high school math contests, Centre for Education in Mathematics and Computing

TRAINING OF HIGHLY QUALIFIED PERSONAL

POSTDOCTORAL SUPERVISION

- September 2020 - present, Tomas Vavra (Pure Math)
- May 2017 - April 2019, Sascha Troscheit (Pure Math) - Co-supervised with Kathryn Hare
- January 2014 - December 2014, Jonas Jankauskas (Pure Math) - co-supervised with Cam Stewart
- December 2009 - June 2011, Michael Coons (Pure Math) - co-supervised with Cam Stewart
- January 2007 - June 2008, Young Hee Geum (Pure Math)

PHD SUPERVISION

- January 2022 - present, Joaco Prandi (Pure Math)
- September 2021 - present, Liam Orovec (Pure Math)
- September 2013 - June 2018, J.C. Saunders (Pure Math) - Co-supervised with Yu-Ru Liu
- September 2007 - December 2012, Timothy Caley (Pure Math) *The Prouhet Tarry Escott Problem*

MASTERS SUPERVISION

- September 2021 - present, Leon Yao (Computational Math)
- January 2021 - December 2021, Joaco Prandi (Pure Math)
- September 2020 - August 2021, Liam Orovec (Pure Math)
- September 2020 - August 2021, Isaac Lee (Pure Math)
- September 2018 - August 2020, Eric Chirtel (Computational Math)
- September 2017 - August 2018, Jiangyan Feng (Computational Math) - Co-supervised with Marius Hofert)
- September 2015 - August 2016, Dennis Stauffer (Pure Math) *Additive properties of β -integers for Quadratic Pisot numbers*
- September 2014 - December 2015, Ikenna Ezike (Pure Math) *On the Greedy and Lazy Beta-expansions*

- September 2011 - August 2012, Theodore Heung Shan Hui (Pure Math) *The ω function and generalizations*
- September 2011 - August 2012, Jennifer Smith (Computational Math) *Quadratic Sieve*
- January 2011 - December 2011, Vasukie Mahathanthila (Pure Math) *Elliptic Curve Cryptography*
- September 2008 - August 2009, Curtis Bright (Computational Math)
- Co-supervised with Arne Storjohann *Vector Rational Number Reconstruction*
- January 2008 - April 2009, Eitan Pechenick (Pure Math) *Equality of Number-Theoretic Functions over Consecutive Integers*
- May 2007 - December 2008, Justin Rowsell (Pure Math) *Pisot and Salem numbers*
- January 2006 - December 2007, David Tweedle (Pure Math) *Coefficients of Ternary Cyclotomic polynomials*

UNDERGRADUATE RESEARCH ASSISTANTS

- May 2021 - August 2021, Jeffrey Tse – University of Waterloo - Co-supervised with Tomas Vavra
- January 2021 - April 2021, Joshua Caldwell – University of Waterloo - Co-supervised with Tomas Vavra
- January 2020 - August 2020, Alex Rutar – University of Waterloo - Co-supervised with Kathryn Hare
- Sept 2019 - December 2019, Gavin Orok – University of Waterloo - Co-supervised with Kathryn Hare
- Sept 2019 - December 2019, Jacob Stockton – University of Waterloo
- Sept 2019 - December 2019, Laidon Burnett – University of Waterloo
- May 2019 - August 2019, Wanchun Shen – University of Waterloo - Co-supervised with Kathryn Hare **Winner of the Pure Math Department Silver Metal (2019/2020), Pure Math Department Research Award (2018/2019), Mathematics Faculty Jessie Zhou Award for Undergraduate Reserch (2020)**
- May 2019 - August 2019, Alex Rutar – University of Waterloo - Co-supervised with Kathryn Hare **Winner of the Pure Math Department Research Award (2019/2020)**
- May 2019 - August 2019, Chin Ho (Brian) Cheung – Chinese University of Hong Kong - Co-supervised with Yu-Ru Liu
- May 2019 - August 2019, Noah Slavitch – University of Waterloo - Co-supervised with Yu-Ru Liu
- May 2019 - August 2019, Valerie Bustos – University of Waterloo
- January 2019 - April 2019, Doeon (Andrew) Cha – University of Waterloo
- May 2018 - August 2018, Wanchun Shen – University of Waterloo - Co-supervised with Kathryn Hare
- Jan 2018 - April 2018, Sina Abbasi – University of Waterloo - Co-supervised with Kathryn Hare
- Sept 2017 - April 2018, Philip Hodges – University of Waterloo
- May 2017 - August 2017, Brian Morris – Stanford University - Co-supervised with Kathryn Hare
- May 2017 - August 2017, Grant Simms – University of Waterloo - Co-supervised with Kathryn Hare
- January 2017 - April 2017, Jarry Gu – University of Waterloo
- September 2016 - December 2016, Grant Simms – University of Waterloo - Co-supervised with Kathryn Hare
- May 2016 - August 2016, Emilio Verdugo Paredes – University of Waterloo - Co-supervised with Andu Nica
- January 2016 - April 2016, Sally Dong – University of Waterloo, - Co-supervised with Jon Borwein
- January 2016 - April 2016, Jason Lynch – University of Waterloo, - Co-supervised with Jon Borwein
- May 2015 - August 2015, Kevin Matthews - University of Waterloo - Co-supervised with Kathryn Hare
- May 2015 - August 2015, Anthony McCormick - University of Waterloo

- May 2015 - August 2015, Albert Li - Chinese University of Hong Kong - Co-supervised with David McKinnon
- May 2015 - August 2015, Siu Fung Wong - Chinese University of Hong Kong - Co-supervised with David McKinnon
- January 2015 - April 2015, Corey Sinnamon - University of Waterloo - Co-supervised with Jon Borwein
- January 2015 - April 2015, Ghislain McKay - University of Waterloo - Co-supervised with Jon Borwein
- May 2014 - August 2014, Kevin Matthews - University of Waterloo - Co-supervised with Kathryn Hare
- May 2014 - August 2014, Ritvik Ramkumar - University of Waterloo - Co-supervised with Cam Steward and Jason Bell
- May 2013 - August 2013, Michael Baker - University of Waterloo *Finite Beta-expansions*
- May 2013 - August 2013, Linqi Guo - Chinese University of Hong Kong *Finite Beta-expansions*
- January 2013 - April 2013, Matt Olechnowicz, - University of Waterloo *Orbits, periodic points, and cubic polynomials*
- May 2011 - August 2011, Saifuddin Syed, - University of Waterloo *Fractals*
- May 2011 - August 2011, Davy Chan, - Chinese University of Hong Kong *A multidimensional analog of Cobham's Theorem for fractals*
- January 2011 - April 2011, Maysum Panju - University of Waterloo *Beta expansions of Pisot numbers*
- May 2010 - August 2010, Aurora Huang - University of Waterloo
- Co-supervised with Patrick Ingram *Rational Periodic Points of cubic polynomials*
- May 2010 - August 2010, Theodore Heung Shan Hui, - Chinese University of Hong Kong
- Co-supervised with Patrick Ingram *Rational Periodic Points of cubic polynomials*
- May 2009 - August 2009, Max Tabord-Meehan - University of Waterloo *Pisot and Salem numbers from graphs*
- May 2009 - August 2009, Danny Kwan - Chinese University of Hong Kong *Pisot and Salem numbers from graphs*
- May 2007 - August 2007, Curtis Bright - University of Waterloo
- May 2006 - August 2006, Lloyd Elliot - USRA NSERC Award, University of Waterloo
- May 2006 - August, 2006, Shaun White - USRA NSERC Award, University of Waterloo
- June - August, 2005, Shuk-Ying Yeung - University of Waterloo
- January - April, 2005, David Tweedle - University of Waterloo,
- Co-supervised with David McKinnon
- June - August, 2003, Sonny Mohammadzadeh - UC LEADS Summer Research Award
- June - August, 2003, Christine Liu - UC LEADS Summer Research Award
- June - August, 2003, Juan Carlos Trujillo - UC LEADS Summer Research Award

THESIS COMMITTEE MEMBERSHIP

PHD THESIS COMMITTEES

- 2020 Seda Albayrak – PhD Thesis – Internal Examiner
- 2019 Sylvie David – PhD Thesis – Internal Examiner
- 2019 Anton Musunov – PhD Thesis – Internal Examiner
- 2017 Mustafa Elsheikh – PhD Thesis – Internal External Examiner
- 2016 Andrew Arnold – PhD Thesis – Internal External Examiner
- 2015 Shuntaro Yamagishi – PhD Thesis – Internal Examiner
- 2014 Ka-Shing Ng – PhD Thesis – Internal Examiner
- 2011 David Tweedle – PhD Thesis – Internal Examiner
- 2011 Dan Rouche (Computer Science) – PhD Thesis – Internal External Examiner
- 2010 Veronika Shelestunova – PhD Thesis – Internal Examiner

- 2010 Rishi Rishikey – PhD Thesis – Internal Examiner
- 2007 Narad Rampersad (Computer Science) – PhD Thesis – Internal External Examiner
- 2007 Jeongsoo Kim – PhD Thesis Committee – Internal Examiner
- 2005 Jason Lucier – PhD Thesis Committee – Internal Examiner

MASTERS COMMITTEES

- 2022 Zishen Qu – Masters Thesis – Reader
- 2017 Jessica Crawford-Brown – Masters Project – Reader
- 2017 Sajed Haque – Masters Thesis – Reader
- 2016 Ce Ju (Computational Math) – Masters Project – Reader
- 2016 Shuming Jia – Masters Project – Reader
- 2015 John Campbell – Masters Project – Reader
- 2015 Samin Riasat – Masters Project – Reader
- 2013 Tai Zhang – Masters Project – Reader
- 2013 Daniel Goc (Computer Science) – Masters Thesis – Reader
- 2013 Boyu Li – Masters Thesis – Reader
- 2012 Baiyu Li (Computer Science) – Masters Thesis – Reader
- 2012 Burcu Karabina – Masters Project – Reader
- 2011 Stanely Xiao – Masters Thesis – Reader
- 2011 Alex Leong (Computer Science) – Masters Thesis – Reader
- 2011 Yu Nishizawa – Masters Thesis – Reader
- 2010 Leo Kwong – Masters Project – Reader
- 2010 Matthew Alderson – Masters Thesis – Reader
- 2008 Shuntaro Yamagishi – Masters Thesis – Reader
- 2008 Patrice Camire – Masters Thesis – Reader
- 2008 Sourav Sen Gupta – Masters Thesis – Reader
- 2007 Chao Li (Computer Science) – Masters Thesis – Reader
- 2006 Patrick Allen – Masters Thesis – Reader
- 2005 Veronika Shelestunova – Masters Thesis – Reader

ARTICLES PUBLISHED OR ACCEPTED

- Kevin Hare and J. C. Saunders. Generalised Fibonacci sequences constructed from balanced words. *J. Number Theory*, 231:349–377, 2022.
- Kevin G. Hare and P. W. Hodges. Applications of integer and semi-infintie programming to the integer Chebyshev problem. *Experiment. Math.*, (2):694–700, 2022.
- Kathryn E. Hare, Kevin G. Hare, and Wanchun Shen. The L^q -spectrum for a class of self-similar measures with overlap. *Asian J. Math.*, 25(2):195–228, 2021. (<https://dx.doi.org/10.4310/AJM.2021.v25.n2>).
- Kathryn E. Hare, Kevin G. Hare, and Alex Rutar. When the weak separation condition implies the generalized finite type condition. *Proc. Amer. Math. Soc.*, 149(4):1555–1568, 2021.
- Kevin G. Hare and Nikita Sidorov. Conjugates of Pisot numbers. *Int. J. Number Theory*, 17(6):1307–1321, 2021.
- Kevin G. Hare and Nikita Sidorov. On a family of self-affine IFS whose attractors have non-fractal top. *Fractals*, 29(6), 2021.
- K. G. Hare, T. Kempton, Persson T., and Sidorov N. Computing garsia entorpy for bernoulli convolutions with algebraic parameters. *Nonlinearity*, 34(7):4744–4763, 2021.
- Kevin G. Hare and Jonas Jankauskas. On Newman and Littlewood polynomials with prescribed number of zeros inside the unit disk. *Math. Comp.*, 90(328):831–870, 2021.
- Kathryn E. Hare and Kevin G. Hare. Intermediate Assouad-like dimensions for measures. *Fractals*, 28(7), 2020.
- Kathryn E. Hare, Kevin G. Hare, and Sascha Troscheit. Quasi-doubling of self-similar measures

- with overlaps. *J. Fractal Geom.*, 7(3):233–270, 2020.
- Kathryn E. Hare and Kevin G. Hare. Local dimensions of overlapping self-similar measures. *Real Anal. Exchange*, 44(2):247–265, 2019.
 - Jonathan M. Fraser, Kathryn E. Hare, Kevin G. Hare, Sascha Troscheit, and Han Yu. The Assouad spectrum and the quasi-Assouad dimension: a tale of two spectra. *Ann. Acad. Sci. Fenn. Math.*, 44(1):379–387, 2019.
 - Kathryn E. Hare, Kevin G. Hare, Brian B. P. Morris, and Wanchun Shen. Entropy of Cantor-like measures. *Acta Math. Hungar.*, 159(2):563–588, 2019.
 - Kathryn E. Hare, Kevin G. Hare, and Kevin R. Matthews. Local dimensions of measures of finite type on the torus. *Asian J. Math.*, 23(1):127–156, 2019.
 - Kevin G. Hare and Michael J. Mossinghoff. Most Reinhardt polygons are sporadic. *Geom. Dedicata*, 198(1):1–18, 2019.
 - Kevin G. Hare and Nikita Sidorov. A lower bound for the dimension of Bernoulli convolutions. *Exp. Math.*, 27(4):414–418, 2018.
 - Kevin G. Hare and Nikita Sidorov. Open maps: small and large holes with unusual properties. *Discrete Contin. Dyn. Syst.*, 38(11):5883–5895, 2018.
 - Kevin G. Hare and J. C. Saunders. On (a, b) pairs in random Fibonacci sequences. *J. Number Theory*, 190:352–366, 2018.
 - Kathryn E. Hare, Kevin G. Hare, and Sascha Troscheit. Local dimensions of random homogeneous self-similar measures: strong separation and finite type. *Math. Nachr.*, 291(16):2397–2426, 2018.
 - Lyndsey Clark, Kevin G. Hare, and Nikita Sidorov. The baker’s map with a convex hole. *Nonlinearity*, 31(7):3174–3202, 2018.
 - Kevin G. Hare, Zuzana Masáková, and Tomáš Vávra. On the spectra of Pisot-cyclotomic numbers. *Lett. Math. Phys.*, 108(7):1729–1756, 2018.
 - Kathryn E. Hare, Kevin G. Hare, and Grant Simms. Local dimensions of measures of finite type III—measures that are not equicontractive. *J. Math. Anal. Appl.*, 458(2):1653–1677, 2018.
 - Kathryn E. Hare, Kevin G. Hare, and Michael Ka Shing Ng. Local dimensions of measures of finite type II: Measures without full support and with non-regular probabilities. *Canad. J. Math.*, 70(4):824–867, 2018.
 - Jonathan M. Borwein, Kevin G. Hare, and Jason G. Lynch. Generalized continued logarithms and related continued fractions. *J. Integer Seq.*, 20(5):Art. 17.5.7, 51, 2017.
 - Kevin G. Hare and Nikita Sidorov. On a family of self-affine sets: Topology, uniqueness, simultaneous expansions. *Ergodic Theory Dynam. Systems*, 37(1):193–227, 2017.
 - Artūras Dubickas, Kevin G. Hare, and Jonas Jankauskas. No two non-real conjugates of a Pisot number have the same imaginary part. *Math. Comp.*, 86(304):935–950, 2017.
 - Kevin G. Hare and Ghislain McKay. Some properties of even moments of uniform random walks. *Integers*, 16:Paper No. A64, 13, 2016.
 - Kevin G. Hare and Nikita Sidorov. Two-dimensional self-affine sets with interior points, and the set of uniqueness. *Nonlinearity*, 29(1):1–26, 2016.
 - Kathryn E. Hare, Kevin G. Hare, and Kevin R. Matthews. Local dimensions of measures of finite type. *J. Fractal Geom.*, 3(4):331–376, 2016.
 - Jason P. Bell, Michael Coons, and Kevin G. Hare. Growth degree classification for finitely generated semigroups of integer matrices. *Semigroup Forum*, 92(1):23–44, 2016.
 - Kevin G. Hare and Nikita Sidorov. Multidimensional self-affine sets: non-empty interior and the set of uniqueness. *Studia Math.*, 229(3):223–232, 2015.
 - Kevin G. Hare. Base- d expansions with digits 0 to $q - 1$. *Exp. Math.*, 24(3):295–303, 2015.
 - Kevin G. Hare and Michael J. Mossinghoff. Negative Pisot and Salem numbers as roots of Newman polynomials. *Rocky Mountain J. Math.*, 44(1):113–138, 2014.
 - Kevin G. Hare and Nikita Sidorov. On cycles for the doubling map which are disjoint from an interval. *Monatsh. Math.*, 175:347–365, 2014.
 - Kevin G. Hare, Helmut Prodinger, and Jeffrey Shallit. Three series for generalized golden mean. *Fibonacci Quart.*, 52(4):307–313, 2014.
 - Jason P. Bell, Michael Coons, and Kevin G. Hare. The minimal growth of a k -regular sequence.

- Bull. Aust. Math. Soc.*, 90(2):195–203, 2014.
- Davy Ho-Yuen Chan and Kevin G. Hare. A multi-dimensional analogue of Cobham’s theorem for fractals. *Proc. Amer. Math. Soc.*, 142(2):449–456, 2014.
 - Kevin G. Hare and Michael J. Mossinghoff. Sporadic Reinhardt polygons. *Discrete Comput. Geom.*, 49(3):540–557, 2013.
 - Kevin G. Hare and Maysum Panju. Some comments on Garsia numbers. *Math. Comp.*, 82(282):1197–1221, 2013.
 - Kevin G. Hare, Ian D. Morris, and Nikita Sidorov. Extremal sequences of polynomial complexity. *Math. Proc. Cambridge Philos. Soc.*, 155(2):191–205, 2013.
 - Kevin G. Hare. Gorshkov-Wirsing type polynomials, and the Integer Chebyshev problems. *Experiment. Math.*, 20(2):189–200, 2011.
 - Kevin G. Hare, Shanta Laishram, and Thomas Stoll. The sum of digits of n and n^2 . *Int. J. Number Theory*, 7(7):1737–1752, 2011.
 - Kevin G. Hare, Shanta Laishram, and Thomas Stoll. Stolarsky’s conjecture and the sum of digits of polynomial values. *Proc. Amer. Math. Soc.*, 139(1):39–49, 2011.
 - Kevin G. Hare, Ian D. Morris, Nikita Sidorov, and Jacques Theys. An explicit counterexample to the Lagarias-Wang finiteness conjecture. *Adv. Math.*, 226(6):4667–4701, 2011.
 - Kevin G. Hare and Nikita Sidorov. A lower bound for Garsia’s entropy for certain Bernoulli convolutions. *LMS J. Comput. Math.*, 13:130–143, 2010.
 - Kevin G. Hare and Soroosh Yazdani. Fekete-like polynomials. *J. Number Theory*, 130(10):2198–2213, 2010.
 - Kevin G. Hare. More variations on the Sierpiński sieve. *Canad. J. Math.*, 62(3):543–562, 2010.
 - Jason P. Bell and Kevin G. Hare. On \mathbb{Z} -modules of algebraic integers. *Canad. J. Math.*, 61(2):264–281, 2009.
 - Kevin G. Hare. Infinite Barker series. *J. Number Theory*, 129(12):2991–2999, 2009.
 - Young Hee Geum and Kevin G. Hare. Groebner basis, resultants and the generalized mandelbrot set. *Chaos Solitons Fractals*, 42(2):1016–1023, 2009.
 - Kevin G. Hare, David McKinnon, and Chris Sinclair. Patterns and periodicity in a family of resultants. *J. Théor. Nombres Bordeaux*, 21(1):215–234, 2009.
 - Kevin G. Hare. Tiles in quasicrystals with quartic irrationality. *Math. Comp.*, 78(265):405–420, 2009.
 - Kevin G. Hare and David Tweedle. Beta-expansions for infinite families of Pisot and Salem numbers. *J. Number Theory*, 128(9):2756–2765, 2008.
 - Jean-Paul Allouche, Christiane Frougny, and Kevin G. Hare. On univoque Pisot numbers. *Math. Comp.*, 76(259):1639–1660 (electronic), 2007.
 - Kevin G. Hare. New techniques for bounds on the total number of prime factors of an odd perfect number. *Math. Comp.*, 76:2241–2248 (electronic), 2007.
 - Kevin G. Hare. Beta-expansions of Pisot and Salem numbers. In *Computer algebra 2006*, pages 67–84. World Sci. Publ., Hackensack, NJ, 2007.
 - David Garth and Kevin G. Hare. Comments on the spectra of Pisot numbers. *J. Number Theory*, 121(2):187–203, 2006.
 - Kevin G. Hare and Chris J. Smyth. The monic integer transfinite diameter. *Math. Comp.*, 75(256):1997–2019 (electronic), 2006. *Corrigendum to "The monic integer transfinite diameter"*, *Math. Comp.* (2008).
 - Jason P. Bell and Kevin G. Hare. A classification of (some) Pisot-cyclotomic numbers. *J. Number Theory*, 115(2):215–229, 2005.
 - Kevin G. Hare. More on the total number of prime factors of an odd perfect number. *Math. Comp.*, 74(250):1003–1008 (electronic), 2005.
 - Peter Borwein, Kevin G. Hare, and Michael J. Mossinghoff. The Mahler measure of polynomials with odd coefficients. *Bull. London Math. Soc.*, 36(3):332–338, 2004.
 - Carlos D’Andrea and Kevin G. Hare. On the height of the Sylvester resultant. *Experiment. Math.*, 13(3):331–341, 2004.
 - Kevin G. Hare. The structure of the spectra of Pisot numbers. *J. Number Theory*, 105(2):262–274, 2004.

- Peter Borwein and Kevin G. Hare. Non-trivial quadratic approximations to zero of a family of cubic Pisot numbers. *Trans. Amer. Math. Soc.*, 355(12):4767–4779 (electronic), 2003.
- Peter Borwein and Kevin G. Hare. General forms for minimal spectral values for a class of quadratic Pisot numbers. *Bull. London Math. Soc.*, 35(1):47–54, 2003.
- Kevin G. Hare and Soroosh Yazdani. Further results on derived sequences. *J. Integer Seq.*, 6(2):Article 03.2.7, 7 pp. (electronic), 2003.
- Peter Borwein and Kevin G. Hare. Some computations on the spectra of Pisot and Salem numbers. *Math. Comp.*, 71(238):767–780 (electronic), 2002.
- Peter Borwein, Kevin G. Hare, and Alan Meichsner. Reverse symbolic computations, the *identify* function. In *Proceedings from the Maple Summer Workshop, 2002*. Maple Software, Waterloo, 2002.
- Kevin G. Hare. Some applications of the LLL algorithm. In *Proceedings from the Maple Summer Workshop, 2002*. Maple Software, Waterloo, 2002.
- Kevin Hare. Perfect $\langle k, r \rangle$ -Latin squares. *Ars Combin.*, 63:311–318, 2002.

ARTICLES SUBMITTED

- Kevin G. Hare and Nikita Sidorov. The Minkowski sum of linear Cantor sets. (arXiv:2210.07671), 16 pages.
- Kevin G. Hare. Self-similar measures with unusual local dimension properties. (arXiv:2201.12196), 22 pages.
- Joshua W. Caldwell, Kevin G. Hare, and Tomáš Vávra. Non-expansive matrix number systems with bases similar to $j_n(1)$. (arXiv:2110.11937), 14 pages.

EXTERNAL TALKS & SEMINARS

- October 2022, *The Minkowski sum of linear Cantor sets*, One Day Ergodic Theory meeting, University of Manchester, (Invited speaker)
- May 2022, *Non-expansive matrix number systems*, University of Vienna, (Invited speaker)
- December 2019, *Garsia entropy of self-similar measures* CMS (Toronto) (Invited talk)
- June 2019, *Garsia entropy of Cantor-like measures* Numeration (Vienna) (Contributed talk)
- September 2018, *Quasi-doubling and quasi-Assouad dimension of self-similar measures* Manchester (Invited speaker)
- May 2018, *Random homogeneous beta-expansions and self-similar measures* Numeration (Paris) (Contributed talk)
- February 2017, *Continued Logarithms*, York University Number Theory Seminar (Invited speaker)
- December 2016, *Continued Logarithms*, Canadian Math Society (Niagara Falls), (Invited speaker)
- December 2016, *Families of Self Affine Maps*, Canadian Math Society (Niagara Falls), (Invited speaker)
- May 2016, *Representation of integers base d with digits Q* , Numeration (Prague) (Contributed talk)
- May 2016, *Even Moments of Uniform Random Walks*, Computationally Assisted Mathematics Discover and Experimental Mathematics (London Ontario) (Contributed talk)
- February 2016, *Beta-representations and Pisot numbers* University of Oregon (Eugene) (Invited speaker)
- December 2015, *Moments of Uniform Random Walks*, Canadian Math Society Meeting, Montreal (Invited speaker)
- November 2015, *Beta-representations and Pisot numbers*, York University (Invited speaker)
- February 2015, *A simple two parameter family of iterated function systems*, Czech Technical University in Prague (Invited speaker)
- November 2014, *A simple two parameter family of Iterated Function Systems*, University of Windsor (Colloquium)

- July 2014, *Three Series for the Generalized Golden Mean*, Canadian Number Theory Association (Contributed talk)
- June 2014, *Simultaneous beta-expansions*, Canadian Math Society (Invited speaker)
- May 2014, *Base d expansions with digits $\{1, 2, \dots, q - 1\}$* , Czech Technical University in Prague Seminar (Invited speaker)
- March 2014, *Base d expansions with digits $\{1, 2, \dots, q - 1\}$* , University of Toronto Number Theory Seminar (Invited speaker)
- February 2014, *Base d expansions with digits $\{1, 2, \dots, q - 1\}$* , UBC Okanagan Seminar (Invited speaker)
- February 2013, *Stolarsky's conjecture and the sum of digits function*, Newcastle Number Theory Seminar (Invited speaker)
- February 2013, *Base d expansions with digits $\{1, 2, \dots, q - 1\}$* , Newcastle Number Theory Seminar (Invited speaker)
- June 2013, *Based q expansions with digits $0, 1, \dots, d - 1$* , CMS Summer meeting, Halifax (Invited speaker)
- December 2013, *Sporadic Reinhardt Polygons*, CMS Summer meeting, Halifax (Invited speaker)
- December 2012, *Garsia Numbers*, Canadian Math Society (Invited speaker).
- June 2012, *Sporadic Reinhardt Polygons*, Canadian Number Theory Association (Contributed talk).
- September 2011, *Fractals in the everyday world*, Georgian Triangle Lifelong Learning Institute (Invite speaker)
- May 2011, *Garsia Numbers and Garsia Entropy*, Jon Borwein Birthday Conference (Invite speaker)
- January 2011, *Pisot and Salem polynomials dividing Newman polynomials*, Joint AMS/MAA meeting, New Orleans (Invite speaker)
- July 2010, *Stolarsky's Conjecture and the Sum of Digits function*, Canadian Number Theory Association, Wolfville NS (Invited speaker)
- June 2010, *Stolarsky's Conjecture and the Sum of Digits function*, Number Theory Seminar, University of Edinburgh (Invited Seminar)
- April 2010, *Stolarsky's Conjecture and the Sum of Digits function*, South East Regional Meeting On Numbers, Davidson College, North Carolina (Plenary talk)
- April 2010 *Odd Perfect Numbers*, Davidson College, North Carolina (invited undergraduate talk)
- March 2010, *Stolarsky's Conjecture and the Sum of Digits function*, Number Theory Seminar, Queens University (Invited Seminar)
- July 2009, *Iterated Function Systems with Overlaps*, University of Manchester, England (Invited seminar)
- July 2009, *Infinite Barker Series*, Journées Arithmétiques, Saint Étienne, France (Contributed talk)
- May 2008, *A history of, and recent result on Beta-expansions*, The Mathematical Interests of Peter Borwein, Vancouver, (plenary)
- July 2007, *Patterns and Periodicity in a Family of Resultants*, Journées Arithmétiques, Edinburgh, Scotland (Contributed talk, Session Chair).
- June 2007, *Iterated Function Systems with Overlaps*, Analysis Seminar, University of Aarhus, Denmark (Invited seminar).
- October 2006, *Variations on $1 = 0.999\dots$* , McMaster Number Theory Seminar (Invited speaker).
- April 2006, *Variations on $1 = 0.999\dots$* , Waterloo workshop on Computer Algebra, Wilfrid Laurier University (Invited speaker).
- April 2006, *Tile set sizes of cut and project quasi-crystals*, Number Theory and Polynomials, Heilbronn Institute, Bristol, UK (Invited speaker).
- January 2006, *Univogue Beta Expansions of Pisot Numbers*, Special Session on "Mahler Measure and Heights", Joint Meeting, San Antonio (Invited speaker).
- August 2005, *The Monic Integer Chebyshev Problem*, CECM Day, Simon Fraser University (Invited speaker)
- January 2005, *The Monic Integer Chebyshev Problem*, Number Theory Seminar, Carleton Uni-

versity (Invited speaker).

- August 2004, *Odd Perfect Numbers*, Workshop on Analytic and Computational Number Theory, Halifax, Canada, (Presented).
- June 2004, *Lattices, Quasilattices and Cyclotomic Pisot numbers*, Canadian Number Theory Association VIII Meeting, Toronto, Canada, (Presented).