CURRICULUM VITAE: RICHARD M. GREEN

University education.

University College, Oxford, October 1989–June 1992.

University of Warwick, October 1992–July 1995.

Degrees.

1992: B.A. (Oxford), mathematics: first class in moderations and finals. M.A. 1996.

1993: M.Sc. (Warwick), Mathematics, with distinction.

1995: Ph.D. (Warwick), Mathematics (under the supervision of Professor R.W. Carter)

Positions held.

EPSRC-funded postdoctoral research assistant, Mathematical Institute, Oxford, October 1995 to September 1997. (The EPSRC, or Engineering and Physical Sciences Research Council, is the equivalent of the NSF for UK mathematics.) Lecturer of University College, Oxford, October 1995 to September 1997. Lecturer in Pure Mathematics, Lancaster University, October 1997 to August 2003. Visiting Assistant Professor, Colorado State University, August to December 2001. Assistant Professor, University of Colorado Boulder, August 2003 to July 2005. Associate Professor, University of Colorado Boulder, August 2005 to July 2009. Professor, University of Colorado Boulder, August 2009 to present.

External grants awarded.

London Mathematical Society: (February 1998, April 1999, September 1999, September 2000, September 2001) Grants totalling 4000 pounds for the North British Quantum Groups Collective, a series of seminars involving universities in the north of England and Scotland.

Nuffield Foundation: (July 1998) 3500 pounds. Award to Newly Appointed Lecturers in Science and Mathematics. The title of the investigation was "Quantum algebras and their relationship with knot theory and physics".

Engineering and Physical Sciences Research Council: (July 2002) 51,482 pounds. Funding for three years for a project student and visiting fellow on the project "Combinatorial methods in Kazhdan–Lusztig theory".

National Science Foundation: (September 2009–August 2012) \$54,417. Summer salary plus travel for the project "Polytopal subcomplexes and homology representations".

Courses taught at CU Boulder.

MATH 2001: Introduction to Discrete Mathematics

MATH 2300: Calculus 2 (Czar, Spring 2008)

MATH 2400: Calculus 3 (Czar, Fall 2005 and Spring 2016)

MATH 3000: Introduction to Abstract Mathematics

MATH 3110: Introduction to Number Theory

MATH 2130/2135/3130/3135: Introduction to Linear Algebra

MATH 3140: Abstract Algebra 1

MATH 3170: Combinatorics 1

MATH 3200: Topology

MATH 4140: Abstract Algebra 2

MATH 5150: Linear Algebra

MATH 6130: Algebra I

MATH 6140: Algebra II

MATH 6250: Theory of Rings

MATH 8174: Topics in Algebra 1

Undergraduate honors theses supervised.

Sergey Lozinsky, "Properties of the \mathfrak{g} -invariant bilinear form on the spin representations of the simple Lie algebras of type D_n and B_n ", University of Colorado Boulder, 2013 (summa cum laude).

Xiaoming Wang, "On simply-laced Coxeter graphs with degenerate bilinear form", University of Colorado Boulder, 2022 (summa cum laude).

Master's theses supervised.

Nicola Austin, "The Twelvefold Way", Lancaster University, 2003.

Robert Barnes, "Table algebras and related structures", Lancaster University, 2000. Samera Ganchi, "Cellular structures of generalized Temperley–Lieb algebras of types B and D", Lancaster University, 2000.

James Grime, "Young tableaux and their application to character theory", Lancaster University, 2003.

Zachary Strider McGregor-Dorsey, "Full heaps over Dynkin diagrams of type \widetilde{A} ", University of Colorado Boulder, 2008.

PhD theses supervised.

Hugh Denoncourt, "Some combinatorial models for reduced expressions in Coxeter groups", Ph.D., University of Colorado, 2009.

Dana C. Ernst, "A diagrammatic representation of an affine C Temperley–Lieb algebra", Ph.D., University of Colorado, 2008.

Tyson C. Gern, "Leading coefficients of Kazhdan–Lusztig polynomials in type D", Ph.D., University of Colorado, 2013.

Jacob T. Harper, "Homology representations arising from a hypersimplex", Ph.D., University of Colorado, 2011.

Zachary Strider McGregor-Dorsey, "Some properties of full heaps", Ph.D., University of Colorado, 2013.

Brent G. Pohlmann, "Structural properties of acyclic heaps with applications to Kazhdan–Lusztig theory", Ph.D., University of Colorado, 2008.

Erica H. Shannon, "Computing invariant forms for Lie algebras using heaps", Ph.D., University of Colorado, 2016.

James R. van Meter, "Universality of swap for qudits: a representation theory approach", Ph.D., University of Colorado, 2021 (co-advised with Emanuel Knill of NIST).

Justin T. Willson, "Vectors of small norm in lattices of 2-roots of simply laced Coxeter groups", Ph.D., University of Colorado, 2023.

Current research student.

Sarah K. Salmon

Examination committees.

January 2004: Served on the committee for the department's Preliminary Examination in algebra.

August 2005, January 2007, August 2010, January 2011, August 2013, January 2015, August 2016, January 2018, January 2020, January 2022, January 2023: Chaired or co-chaired the committee for the department's Preliminary Examination in algebra.

Member/Chair of PhD final examination committee:

Erich McAlister (March 2005)

Jason Shaw (April 2008)

Dana Ernst (May 2008, chair)

Brent Pohlmann (May 2008, chair)

Hugh Denoncourt (October 2008 and May 2009, chair)

Ilia Mishev (March 2009, second reader)

Michael Roy (May 2011, second reader)

Jacob Harper (June 2011, chair)

Tyson Gern (March 2013, chair)

Strider McGregor-Dorsey (April 2013, chair)

Scott Andrews (April 2014, second reader)

Justin Keller (April 2014, second reader)

Erica Shannon (May 2016, chair)

Jonathan Lamar (April 2018, second reader)

Megan Ly (May 2018, second reader)

Shawn Burkett (June 2018, second reader)

James van Meter (February 2021, co-advisor/second reader)

Lucas Gagnon (May 2022, second reader)

Justin Willson (April 2023, chair)

Member/Chair of Comprehensive Examination committee:

Hugh Denoncourt (October 2005, chair)

Dana Ernst (November 2005, chair)

Jason Shaw (January 2006)

Topaz Dent (April 2007)

Joshua Wiscons (May 2007)

Joshua Sanders (April 2008)

Jacob Harper (September 2009, chair)

Michael Roy (December 2009)

Strider McGregor-Dorsey (December 2009, chair)

Justin Keller (August 2010)

Tyson Gern (April 2011, chair)

Scott Andrews (March 2012)

Erica Shannon (April 2013, chair)

Shawn Burkett (February 2015)

Jonathan Lamar (April 2015)

Megan Ly (April 2015)

Sarah Salmon (April 2017, chair)

Christopher Eblen (April 2021)

Hunter Davenport (May 2021)

Justin Willson (November 2021, chair)

Breeann Wilson (March 2022, chair)

Jennifer Gensler (April 2023)

Member/Chair of Masters Examination committee:

Emily Cilli-Turner (April 2006)

James Johanson (July 2006)

Strider McGregor-Dorsey (September 2008, chair)

Ryan Grover (April 2009)

Rachel Krieger (April 2009, second reader)

Matthew Jones (March 2010, chair)

Member/Chair of Undergraduate Honors Examination committee:

Duff Baker-Jarvis (March 2013, second reader)

Daniel Bragg (April 2013, second reader)

Sergey Lozinsky (April 2013, chair)

Brandon Korb, Department of Physics (October 2021)

Gage Harmon, Department of Physics (April 2022)

Xiaoming Wang (April 2022, chair)

Theodore Gonzales (April 2022)

Zhuochen Wang (April 2022)

Selected administrative service.

August 2003–December 2009: Chair of Kempner Colloquium, Department of Mathematics.

August 2003–May 2011: Chair of DeLong lectures, Department of Mathematics.

This series of lectures is given for one week each year by a distinguished mathematician.

2004–5: Served on the hiring subcommittee for the department's successful tenure-track search in Number Theory.

August 2005–May 2007; August 2017–May 2018: Served on the department's Undergraduate Committee.

2006–7: Chaired the hiring subcommittee for the department's successful tenure-track search in Algebra.

2006–7: Served on the hiring subcommittee for the department's successful postdoc search.

2007–8: Served on the department's ad hoc hiring committee.

2007–8: Served on the department's Computer Committee.

June 2008–May 2015; Fall 2016; August 2018–present: Served on the department's Graduate Committee.

Fall 2010: Chair of the Primary Unit Evaluation Committee for the reappointment of Dr Nathaniel Thiem.

Fall 2010: Member of the Primary Unit Evaluation Committee for the promotion to Full Professor of Dr Carla Farsi.

2010–1: Interim mentor for Assistant Professor Su-Ion Ih.

Fall 2010–Spring 2020: served on the GPTI Teaching Awards Committee for the Graduate School.

Fall 2020—present: served on the Dissertation Completion Fellowship Committee for the Graduate School.

Fall 2011: Chair of the Primary Unit Evaluation Committee for the promotion and tenure of Dr Nathaniel Thiem.

Fall 2011–Fall 2012: Co-mentor (with Nathaniel Thiem) for Meyer Instructor Rahbar Virk.

Fall 2011–Spring 2013: Served on the department's Executive Committee.

Fall 2013: Member of the Primary Unit Evaluation Committee for the promotion to Full Professor of Dr Jeanne Clelland.

Fall 2014: Member of the Primary Unit Evaluation Committee for the promotion and tenure of Dr Sebastian Casalaina-Martin.

2015–2016: Served on the department's Diversity Committee.

Fall 2018: Chair of the Primary Unit Evaluation Committee for the reappointment as Instructor of Dr Joseph Timmer.

Fall 2019–Spring 2022: Mentor for Meyer Instructor Tianyuan Xu.

Fall 2019: Member of the Primary Unit Evaluation Committee for the promotion and tenure of Dr Jonathan Wise.

Fall 2020: Chair of the Primary Unit Evaluation Committee for the promotion to Full Professor of Dr Nathaniel Thiem.

Fall 2021: Chair of the Primary Unit Evaluation Committee for the promotion to Full Professor of Dr Su-Ion Ih.

Service to profession and discipline.

2002–2004: Honorary editor of Bulletin of the London Mathematical Society (with G. Blower). The Bulletin, which is published six times annually (at the time by Cambridge University Press), is an international journal that principally publishes peer reviewed research articles, but also publishes survey articles, obituaries and book reviews. My main task was to accept or reject papers, based on the opinions of the editorial advisers and referees. The issues were fixed in length and we received far more good papers than there was space for.

December 2011: Served on a Combinatorics panel for the National Science Foundation, Arlington, VA.

Fall 2013 (outreach): Volunteered one hour per week helping fourth and fifth graders at Eagle Crest Elementary School (Longmont, Colorado) to prepare for the Math Olympiad competition.

2013–2018 (outreach): Posts on social media about new and historically interesting mathematical topics, aimed at a general audience. (My most successful posts each received over 100,000 views.)

2023—present (outreach): Posts on apieceofthepi.substack.com about new and historically interesting mathematical topics, aimed at a general audience.

I have served as a letter writer for seven cases for tenure and promotion to Associate Professor or Professor at other universities: five in the US, one in Malaysia and one in Jordan.

Refereeing.

Since January 2007, I have referred papers, books, and book chapters for the following journals and publishers: Oxford University Press; Cambridge University Press; W.H. Freeman Publishing; the Journal of Algebra; Communications in Algebra; the Rocky Mountain Journal of Mathematics; Compositio Mathematica; Algebras and Representation Theory; Representation Theory (an electronic journal of the American Mathematical Society); the Electronic Journal of Combinatorics; the Journal of Algebraic Combinatorics; the Proceedings of the London Mathematical Society; RIMS Kôkyûroku Bessatsu; the Pacific Journal of Mathematics; Acta Mathematica; Manuscripta Mathematica; the Journal of Pure and Applied Algebra; the Journal of Combinatorial Theory (series A); the International Electronic Journal of Algebra; the Annals of Combinatorics; Monatshefte für Mathematik; the Bulletin of the Institute of Mathematics (Academica Sinica); the International Journal of Mathematics and Mathematical Sciences; Involve; the Journal of Combinatorics; Integers; Mathematics; Mathematische Zeitschrift; Transactions of the American Mathematical Society; Results in Mathematics; the Australasian Journal of Combinatorics; Annali di Matematica Pura ed Applicata; and Discrete Mathematics and Theoretical Computer Science.

I have also refereed proposals for the National Science Foundation and National Security Agency, as well as for the UK's Engineering and Physical Sciences Research Council, the Netherlands Organisation for Scientific Research, the Kuwait Foundation for the Advancement of Sciences, and the French National Research Agency.

I have reviewed papers for the international mathematical reviewing service Mathematical Reviews and for the equivalent German publication, Zentralblatt für Mathematik. I have also reviewed two books for mathematical journals.

Presentations given.

The following is a list of invited talks I have given at seminars and conferences since 1998, excluding presentations at my home universities.

- 25 Feb 1998 The affine q-Schur algebra, University of Edinburgh.
- 14 May 1998 Indecomposable representations of affine Temperley–Lieb algebras, University of Leicester.
- 11 Jun 1998 Procellular algebras, University of Bristol.
- 6 Feb 1999 Canonical Bases for Hecke algebra quotients, North British Quantum Groups Collective seminar, University of Glasgow.
- 14 May 1999 Kazhdan–Lusztig theory for generalized Temperley–Lieb algebras, University of Warwick.
 - 5 Jun 1999 Dihedral Temperley-Lieb algebras and tilting modules at roots of unity, North British Quantum Groups Collective seminar, University of York.
- 22 Jun 1999 Canonical Bases for Hecke algebra quotients, Mathematical Research Institute, Oberwolfach, Germany.
- 20 Oct 1999 Quantum algebras at $v = \infty$, University of Sheffield.
- 22 Oct 1999 Quantum algebras at $v = \infty$, University of Birmingham.
- 1 Feb 2000 Table algebras and tabular algebras, University of Oxford algebra seminar.
- 11 May 2000 Tabular algebras, University of Leicester.
- 9 Nov 2000 Fully Commutative Kazhdan-Lusztig Cells, London Algebra Colloquium.
- 30 Jan 2001 Fully Commutative Kazhdan–Lusztig Cells, University of Manchester algebra seminar.
 - Feb 2001 Gave three lectures at the workshop on "Schur algebras and quantum groups", Mathematical Research Institute, Oberwolfach, Germany, February 25–March 3.
- 29 Mar 2001 321-avoiding permutations in affine Weyl groups, Isaac Newton Institute.
- 24 Apr 2001 321-avoiding permutations in affine Weyl groups, Colorado State University Colloquium.
 - Jun 2001 Based rings and IC bases, talk at conference "The heritage of I. Schur's 1901 Dissertation", University of Wales, Gregynog, June 2–5.
 - Sep 2001 *Homological properties of heaps*, two talks at the Colorado State University algebra seminar, September 13 and 27.
- 7 Nov 2001 321-avoiding permutations in affine Weyl groups, University of Wyoming Colloquium.
- 30 Nov 2001 Tabular algebras, Rocky Mountain Algebraic Combinatorics Seminar.
- 6 Dec 2001 "Intersection Cohomology" bases, Colorado State University algebra seminar.

- 7 Feb 2002 *Homological properties of heaps*, University of Leicester pure mathematics seminar.
- 2 Mar 2002 Categorifying bases for quantum algebras, North British Quantum Groups Collective seminar, University of Glasgow.
- 13 Mar 2002 Decorated tangles and canonical bases, University of Nottingham Mathematical Physics seminar.
- 27 Jan 2003 Homological properties of heaps, University of Leeds algebra seminar.
- 7 Feb 2003 Freely braided elements in Coxeter groups, University of Colorado Boulder interview lecture.
- 18 Feb 2003 Freely braided elements in Coxeter groups, University of Oxford algebra seminar.
- 20 Feb 2003 *Homological properties of heaps*, University of Oxford representation theory seminar.
- 23 Apr 2003 Acyclic heaps of pieces, University of Glasgow algebra seminar.
- 6 Sep 2003 Freely braided elements in Coxeter groups, Rocky Mountain Algebraic Combinatorics seminar.
- 14 Nov 2003 Schubert varieties and free braidedness, Rocky Mountain Algebraic Combinatorics seminar.
- 5 Nov 2004 Acyclic heaps of pieces, Rocky Mountain Algebraic Combinatorics seminar.
 - Apr 2005 I was one of the main speakers at the international workshop "Cellular and diagram algebras in mathematics and physics", held at the University of Oxford, UK. I gave two 50-minute talks entitled "Constructing cell data for diagram algebras".
- 16 Sep 2005 Star reducible Coxeter groups, Rocky Mountain Algebraic Combinatorics seminar.
- 15 Sep 2006 Full heaps and the 27 lines on a cubic surface, Rocky Mountain Algebraic Combinatorics seminar.
 - Dec 2006 I was one of the main speakers at the international conference "Themes in the interface of representation theory and physics", City University, London, UK. The title of my talk was "Applications of full heaps to representation theory and physics".
- 24 Jan 2007 I gave two talks in the Combinatorics Seminar at the University of Washington, Seattle, entitled "Fully commutative elements and the Temperley–Lieb algebra" and "Traces, diagram algebras and Kazhdan–Lusztig polynomials".
- 9 Mar 2007 Representations arising from the Gosset graph, Rocky Mountain Algebraic Combinatorics seminar.
- 22 Apr 2007 Representations arising from the Gosset graph, 20 minute talk at American Mathematical Society meeting, Tucson, AZ.

- Aug 2007 I was one of the three main speakers at the Rocky Mountain Discrete Mathematics Days, Colorado State University. The title of my talk was "Some combinatorial aspects of simple Lie algebras".
- 9 Nov 2007 Some remarks on a famous configuration of 56 lines, Rocky Mountain Algebraic Combinatorics seminar.
- 7 Mar 2008 Combinatorial constructions of two-graphs and related structures, Rocky Mountain Algebraic Combinatorics seminar.
- 2 May 2008 Cliques in the half cube graph and not-Pascal's triangle, Rocky Mountain Algebraic Combinatorics seminar.
- 21 Nov 2008 Combinatorial homology representations of Coxeter groups, Rocky Mountain Algebraic Combinatorics seminar.
- 24 Apr 2009 Veldkamp spaces, the universe, and everything, Rocky Mountain Algebraic Combinatorics seminar.
 - Jun 2009 I was one of the main speakers at the 2nd Mile High Conference on Nonassociative Mathematics at the University of Denver, which was an international conference. The title of my talk was "Chevalley bases for Lie algebras and the combinatorics of Kac's asymmetry function".
- 16 Oct 2009 Near hexagons and Veldkamp spaces, Rocky Mountain Algebraic Combinatorics seminar.
- 17 Apr 2010 Polytopal subcomplexes and homology representations, Rocky Mountain Mathematical Association of America meeting.
- 23 Apr 2010 Morse matchings on polytopes, Rocky Mountain Algebraic Combinatorics seminar.
- 14 Oct 2010 Regular polytopes and their relatives, University of Wyoming colloquium.
- 3 Dec 2010 Gaussian posets, Rocky Mountain Algebraic Combinatorics seminar.
- 2 Mar 2011 Regular polytopes and their relatives, CU Denver Discrete Mathematics Seminar.
- 9 Apr 2011 Polytopal subcomplexes and homology representations of Coxeter groups, 45 minute invited talk at American Mathematical Society sectional meeting in the session "Combinatorics of Coxeter groups", Worcester, MA.
- 28 Oct 2011 Morse matchings on polytopes and their subcomplexes, College of William and Mary Colloquium.
- 11 Nov 2011 Morse matchings on polytopes and their subcomplexes, University of Nebraska-Lincoln Colloquium.
- 9 Mar 2012 *Lie algebras and invariant forms*, Rocky Mountain Algebraic Combinatorics seminar.
- 11 Oct 2013 Some combinatorial aspects of the numbers game, Rocky Mountain Algebraic Combinatorics seminar.

- 12 May 2015 Coxeter groups and pancake sorting, Archimedean Society, University of Cambridge, UK.
- 13 May 2015 Invariant forms on minuscule representations, Algebra Seminar, University of Cambridge, UK.
- 25 Oct 2015 Invariant forms on minuscule representations, American Mathematical Society meeting, California State University Fullerton.
- 8 Oct 2016 Coxeter group actions on hypergeometric series, American Mathematical Society meeting, University of Denver.
- 2 May 2017 The nil Temperley–Lieb algebra of type affine C, Algebra, Combinatorics and Number Theory seminar, University of Wyoming.
- 12–14 May 2017 Invited panelist on Workshop for Graduate Advisors in Mathematics, University of Michigan.
 - 30 May 2017 The nil Temperley–Lieb algebra of type affine C, Algebra seminar, University of Oregon.
 - 5 Nov 2017 The nil Temperley–Lieb algebra of type affine C, American Mathematical Society meeting, University of California Riverside.
 - 23 Mar 2018 The classification of a(2)-finite Coxeter groups, Rocky Mountain Algebraic Combinatorics seminar.
 - 28 Oct 2018 The classification of a(2)-finite Coxeter groups, American Mathematical Society meeting, San Francisco State University.
 - 10 Nov 2019 Some finite dimensional representations of Y-groups, American Mathematical Society meeting, University of California Riverside.
 - 17 Jan 2020 Generalized nil Temperley–Lieb algebras and particle configurations, Joint Mathematics Meetings, Denver.
 - 5 May 2020 Left cells of a-value 2, University of Wyoming Algebra Seminar.
 - 14 May 2022 Sign-coherent representations of simply laced Weyl groups, virtual American Mathematical Society meeting.
 - 3 Feb 2023 Gelfand pairs and finite metric spaces, Rocky Mountain Algebraic Combinatorics seminar.
 - 3 Feb 2023 A tale of two bases, Rocky Mountain Algebraic Combinatorics seminar.
 - 29 Mar 2023 Positivity properties and maximal Young subgroups, special seminar, University of Hawaii at Manoa.
 - 9 Sep 2023 Systems of symmetrized orthogonal roots, American Mathematical Society meeting, University at Buffalo.

Publications.

Apart from my PhD thesis (reference [0]), all publications below were fully peer reviewed, including reference [9], which appeared in the proceedings of a conference. Since there is usually no concept of senior and junior author in pure mathematics, my contribution to all joint publications listed with n authors listed should be taken to be 1/n. The authors are listed alphabetically, except in references [33, 47], which follow the physics conventions for author names.

References

- [0] R.M. Green, q-Schur algebras and quantized enveloping algebras, Ph.D. thesis, Warwick University, 1995.
- [1] R.M. Green, A matrix setting for the q-Schur algebra, Jour. L.M.S. 57 (1998), 289–308.
- [2] R.M. Green, A straightening formula for quantized codeterminants, Comm. Alg. 24 (1996), 2887–2913.
- [3] R.M. Green, q-Schur algebras as quotients of quantized enveloping algebras, J. Algebra 185 (1996), 660–687.
- [4] R.M. Green and R.J. Marsh, Quantized symmetric powers, Quart. J. Math. 48 (1997), 479–492.
- [5] R.M. Green, Positivity properties for q-Schur algebras, Proc. Cam. Phil. Soc. 122 (1997), 401–414.
- [6] C.K. Fan and R.M. Green, Monomials and Temperley-Lieb algebras, J. Algebra 190 (1997), 498-517.
- [7] R.M. Green, A diagram calculus for certain canonical bases, Comm. Math. Phys. 183 (1997), 521–532
- [8] C.K. Fan and R.M. Green, On the affine Temperley-Lieb algebras, Jour. L.M.S. **60** (1999), 366–380.
- [9] R.M. Green, On representations of affine Temperley-Lieb algebras, Algebras and modules II,
 CMS Conference Proceedings 24 (1998), 245–261.
- [10] R.M. Green, Hyperoctahedral Schur algebras, J. Algebra 192 (1997), 418–438.
- [11] R.M. Green, Completions of cellular algebras, Comm. Alg. 27 (1999), 5349–5366.
- [12] R.M. Green, Generalized Temperley–Lieb algebras and decorated tangles, J. Knot Th. Ram. 7 (1998), 155–171.
- [13] R.M. Green, Cellular algebras arising from Hecke algebras of type H_n , Math. Zeit. **229** (1998), 365–383.
- [14] K. Erdmann and R.M. Green, On representations of affine Temperley-Lieb algebras, II, Pacific J. Math. 191 (1999), 243–273.
- [15] R.M. Green, The affine q-Schur algebra, J. Algebra **215** (1999), 379–411.
- [16] R.M. Green and J. Losonczy, Canonical bases for Hecke algebra quotients, Math. Res. Lett. 6 (1999), 213–222.
- [17] R.M. Green and J. Losonczy, A projection property for Kazhdan–Lusztig bases, Int. Math. Res. Not. 1 (2000), 23–34.
- [18] R.M. Green, Decorated tangles and canonical bases, J. Algebra 246 (2001), 594-628.
- [19] R.M. Green, Tabular algebras and their asymptotic versions, J. Algebra 252 (2002), 27–64.
- [20] R.M. Green and J. Losonczy, Fully commutative Kazhdan–Lusztig cells, Ann. Inst. Fourier (Grenoble) **51** (2001), 1025–1045.
- [21] R.M. Green, On planar algebras arising from hypergroups, J. Algebra 263 (2003), 126-150.

- [22] R.M. Green, On 321-avoiding permutations in affine Weyl groups, J. Algebraic Combin. 15 (2002), 241–252.
- [23] R.M. Green, Categories arising from tabular algebras, Glasgow Math. J. 45 (2003), 333–352.
- [24] R.M. Green, Standard modules for tabular algebras, Algebr. Represent. Theory 7 (2004), 419–440.
- [25] R.M. Green, Acyclic heaps of pieces, I, J. Algebraic Combin. 19 (2004), 173–196.
- [26] R.M. Green, Acyclic heaps of pieces, II, Glasgow Math. J. 46 (2004), 459-476.
- [27] R.M. Green, On rank functions for heaps, J. Combin. Theory Ser. A 102 (2003), 411–424.
- [28] R.M. Green and J. Losonczy, Freely braided elements in Coxeter groups, Ann. Comb. 6 (2002), 337–348.
- [29] R.M. Green and J. Losonczy, Freely braided elements in Coxeter groups, II, Adv. Appl. Math. 33 (2004), 26–39.
- [30] R.M. Green and J. Losonczy, Schubert varieties and free braidedness, Transform. Groups 9 (2004), 327–336.
- [31] S.R. Doty and R.M. Green, Presenting affine q-Schur algebras, Math. Zeit. **256** (2007), 311–345
- [32] R.M. Green and P.P. Martin, Constructing cell data for diagram algebras, J. Pure Appl. Alg. **209** (2007), 551–569.
- [33] P.P. Martin, R.M. Green and A.E. Parker, Towers of recollement and bases for diagram algebras: planar diagrams and a little beyond, J. Algebra 316 (2007), 392–452.
- [34] R.M. Green, Generalized Jones traces and Kazhdan-Lusztig bases, J. Pure Appl. Alg. 211 (2007), 744–772.
- [35] R.M. Green, Star reducible Coxeter groups, Glasgow Math. J. 48 (2006), 583-609.
- [36] R.M. Green, Full heaps and representations of affine Kac-Moody algebras, Int. Electron. J. Algebra 2 (2007), 138–188.
- [37] R.M. Green, On the Markov trace for Temperley-Lieb algebras of type E_n , J. Knot Th. Ram. 18 (2009), 237–264.
- [38] R.M. Green, Full heaps and representations of affine Weyl groups, Int. Electron. J. Algebra 3 (2008), 1–42.
- [39] R.M. Green, On the maximally clustered elements of Coxeter groups, Ann. Comb. 14 (2011), 467–478.
- [40] R.M. Green, Representations of Lie algebras arising from polytopes, Internat. Electron. J. Algebra 4 (2008), 27–52.
- [41] R.M. Green, Leading coefficients of Kazhdan-Lusztig polynomials and fully commutative elements, J. Algebraic Combin. **30** (2009), 165–171.
- [42] R.M. Green, P.P. Martin and A.E. Parker, On the non-generic representation theory of the symplectic blob algebra, J. Algebra Appl. 11 (3) (2012) (22 pages).
- [43] R.M. Green, Homology representations arising from the half cube, Adv. Math. **222** (2009), 216–230
- [44] M.A. Formichella, R.M. Green and E. Stade, Coxeter group actions on $_4F_3(1)$ hypergeometric series, Ramanujan J. **24** (2011), 93–128.
- [45] R.M. Green, Combinatorics of minuscule representations, Cambridge Tracts in Mathematics, volume 199, Cambridge University Press, Cambridge, UK, 2013.
- [46] R.M. Green, Homology representations arising from the half cube, II, J. Combin. Theory Ser. A 117 (2010), 1037–1048.
- [47] M. Saniga, R.M. Green, P. Lévay, P. Pracna and P. Vrana, The Veldkamp Space of GQ(4,2), Int. J. Geom. Meth. Mod. Phys. 8 (2011), 39–47.
- [48] R.M. Green and M. Saniga, The Veldkamp Space of the Smallest Slim Dense Near Hexagon, Int. J. Geom. Methods Mod. Phys. 10 (2) (2013).
- [49] T. Boothby, J. Burkett, M. Eichwald, D.C. Ernst, R.M. Green and M. Macauley, On the cyclically fully commutative elements of Coxeter Groups, J. Algebraic Combin. **36** (2012), 123–148.

- [50] R.M. Green, On the combinatorics of Kac's asymmetry function, Comment. Math. Univ. Carolinae 51 (2010), 217–235.
- [51] R.M. Green and J.T. Harper, Morse matchings on polytopes, Algebr. Geom. Topol. 12 (2012), 2429–2450.
- [52] R.M. Green and M. Saniga, A classification of the Veldkamp lines of the near hexagon $L_3 \times GQ(2,2)$, Ars Math. Contemp. 12 (2017), 287–299.
- [53] R.M. Green, I.D. Mishev and E. Stade, Relations among complementary and supplementary pairings of Saalschützian ${}_{4}F_{3}(1)$ series, Ramanujan J. **39** (2016), 647–679.
- [54] R.M. Green, The nil-Temperley–Lieb algebra of type affine C, J. Pure Appl. Alg. 223 (2019), 4966–4993.
- [55] R.M. Green, I.D. Mishev and E. Stade, Coxeter group actions and limits of hypergeometric series, Ramanujan J. 53 (2020), 607–651.
- [56] R.M. Green and T. Xu, Classification of Coxeter groups with finitely many elements of avalue 2, Algebr. Comb. 3 (2020), 331–364.
- [57] R.M. Green, What is... a minuscule representation?, Not. Amer. Math. Soc. **67** (6) (2020), 850–853.
- [58] R.M. Green and T. Xu, Kazhdan-Lusztig cells of **a**-value 2 in **a**(2)-finite Coxeter systems, Algebr. Comb. **6** (2023), 727–772.
- [59] R.M. Green and T. Xu, 2-roots for simply laced Weyl groups, Transform. Groups (published online; arXiv:2204.09765).
- [60] R.M. Green, Positivity properties for spherical functions of maximal Young subgroups, Ann. Comb. (published online; arXiv:2211.15989).
- [61] R.M. Green and T. Xu, A partial order on antichains of a fixed size (in preparation).