

Combinatorics

Enumerative Combinatorics

05Axx

- [1] Peter J. Cameron. Partitions and permutations. *Discrete Math.*, 291(1-3):45–54, 2005.
- [2] Philippe Cara, Serge Lehman, and Dmitrii V. Pasechnik. On the number of inductively minimal geometries. *Theoret. Comput. Sci.*, 263(1-2):31–35, 2001.
- [3] Ken Ono. *The Web of Modularity: Arithmetic of the Coefficients of Modular Forms and q -series*, volume 102 of *CBMS Regional Conference Series in Mathematics*. Published for the Conference Board of the Mathematical Sciences, Washington, DC, 2004.
- [4] Kevin T. Phelps. An enumeration of 1-perfect binary codes. *Australas. J. Combin.*, 21:287–298, 2000.
- [5] H. A. Verrill. Sums of squares of binomial coefficients, with applications to Picard-Fuchs equations. [arXiv:math.CO/0407327](https://arxiv.org/abs/math/0407327), 20 pages, 2004.

Combinatorics

Designs and Configurations

05Bxx

- [1] David Applegate, E. M. Rains, and N. J. A. Sloane. On asymmetric coverings and covering numbers. *J. Combin. Des.*, 11(3):218–228, 2003.
- [2] Makoto Araya, Masaaki Harada, and Hadi Kharaghani. Some Hadamard matrices of order 32 and their binary codes. *J. Combin. Des.*, 12(2):142–146, 2004.
- [3] Eiichi Bannai and Etsuko Bannai. On Euclidean tight 4-designs. *J. Math. Soc. Japan*, 58(3):775–804, 2006.
- [4] L. M. Batten and J. M. Dover. Some sets of type (m, n) in cubic order planes. *Des. Codes Cryptogr.*, 16(3):211–213, 1999.
- [5] Thomas Beth, Christopher Charnes, Markus Grassl, Gernot Alber, Aldo Delgado, and Michael Mussinger. A new class of designs which protect against quantum jumps. *Des. Codes Cryptogr.*, 29(1-3):51–70, 2003.
- [6] Anton Betten, Adalbert Kerber, Reinhard Laue, and Alfred Wassermann. Simple 8-designs with small parameters. *Des. Codes Cryptogr.*, 15(1):5–27, 1998.
- [7] A. Bonnetcaze, E. Rains, and P. Solé. 3-colored 5-designs and Z_4 -codes. *J. Statist. Plann. Inference*, 86(2):349–368, 2000.
- [8] A. Bonnetcaze, P. Solé, and P. Udaya. Tricolore 3-designs in type III codes. *Discrete Math.*, 241(1-3):129–138, 2001.
- [9] Alexis Bonnetcaze, Bernard Mourrain, and Patrick Solé. Jacobi polynomials, type II codes, and designs. *Des. Codes Cryptogr.*, 16(3):215–234, 1999.
- [10] Thomas Britz and Carrie G. Rutherford. Covering radii are not matroid invariants. *Discrete Math.*, 296(1):117–120, 2005.

- [11] S. Allen Broughton, Robert M. Dirks, Maria T. Slougher, and C. Ryan Vinroot. Triangular surface tiling groups for low genus. *Preprint*.
- [12] I. Cardinali, N. Durante, T. Penttila, and R. Trombetti. Bruen chains over fields of small order. *Discrete Math.*, 282(1-3):245–247, 2004.
- [13] L. L. Carpenter and J. D. Key. On Hadamard matrices from resolvable Steiner designs. In *Proceedings of the Twenty-sixth Southeastern International Conference on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 1995)*, volume 108, pages 53–63, 1995.
- [14] David B. Chandler and Qing Xiang. Cyclic relative difference sets and their p -ranks. *Des. Codes Cryptogr.*, 30(3):325–343, 2003.
- [15] Chris Charney, Martin Rötteler, and Thomas Beth. Homogeneous bent functions, invariants, and designs. *Des. Codes Cryptogr.*, 26(1-3):139–154, 2002.
- [16] D. Combe, W. D. Palmer, and W. R. Unger. Bhaskar Rao designs and the alternating group A_4 . *Australas. J. Combin.*, 24:275–283, 2001.
- [17] Marston Conder and John McKay. Markings of the Golay code. *New Zealand J. Math.*, 25(2):133–139, 1996.
- [18] Antonio Cossidente and Sam K. J. Vereecke. Some geometry of the isomorphism $\text{Sp}(4, q) \cong \text{O}(5, q)$, q even. *J. Geom.*, 70(1-2):28–37, 2001.
- [19] Warwick de Launey and Richard M. Stafford. On cocyclic weighing matrices and the regular group actions of certain Paley matrices. *Discrete Appl. Math.*, 102(1-2):63–101, 2000.
- [20] U. Dempwolff. Automorphisms and equivalence of bent functions and of difference sets in elementary abelian 2-groups. *Comm. Algebra*, 34(3):1077–1131, 2006.
- [21] Cunsheng Ding, Zeying Wang, and Qing Xiang. Skew Hadamard difference sets from the Ree-Tits slice symplectic spreads in $\text{PG}(3, 3^{2h+1})$. [arXiv:math/0609586](https://arxiv.org/abs/math/0609586), 18 pages, 2006.
- [22] G. L. Ebert. Quasimultiples of geometric designs. *Discrete Math.*, 284(1-3):123–129, 2004.

- [23] Ronald Evans, Henk D. L. Hollmann, Christian Krattenthaler, and Qing Xiang. Gauss sums, Jacobi sums, and p -ranks of cyclic difference sets. *J. Combin. Theory Ser. A*, 87(1):74–119, 1999.
- [24] D. L. Flannery. Cocyclic Hadamard matrices and Hadamard groups are equivalent. *J. Algebra*, 192(2):749–779, 1997.
- [25] Anna Fukshansky and Corinna Wiedorn. C -extensions of the Petersen geometry for M_{22} . *European J. Combin.*, 20(3):233–238, 1999.
- [26] S. Georgiou and C. Koukouvinos. Some results on orthogonal designs and Hadamard matrices. *Int. J. Appl. Math.*, 17(4):433–443, 2005.
- [27] Claudia Gohlisch, Helmut Koch, and Gabriele Nebe. Block squares. *Math. Nachr.*, 241:73–102, 2002.
- [28] Masaaki Harada. On the self-dual F_5 -codes constructed from Hadamard matrices of order 24. *J. Combin. Des.*, 13(2):152–156, 2005.
- [29] Masaaki Harada. Self-orthogonal 3-(56, 12, 65) designs and extremal doubly-even self-dual codes of length 56. *Des. Codes Cryptogr.*, 38(1):5–16, 2006.
- [30] Masaaki Harada, Clement Lam, and Vladimir D. Tonchev. Symmetric (4, 4)-nets and generalized Hadamard matrices over groups of order 4. *Des. Codes Cryptogr.*, 34(1):71–87, 2005.
- [31] Masaaki Harada and Akihiro Munemasa. A quasi-symmetric 2-(49, 9, 6) design. *J. Combin. Des.*, 10(3):173–179, 2002.
- [32] Masaaki Harada and Vladimir D. Tonchev. Self-orthogonal codes from symmetric designs with fixed-point-free automorphisms. *Discrete Math.*, 264(1-3):81–90, 2003.
- [33] K. J. Horadam. An introduction to cocyclic generalised Hadamard matrices. *Discrete Appl. Math.*, 102(1-2):115–131, 2000.
- [34] K. J. Horadam and P. Udaya. A new class of ternary cocyclic Hadamard codes. *Appl. Algebra Engrg. Comm. Comput.*, 14(1):65–73, 2003.

- [35] Naoyuki Horiguchi, Hiroyuki Nakasora, and Takehisa Wakabayashi. On the strongly regular graphs obtained from quasi-symmetric 2-(31, 7, 7) designs. *Bull. Yamagata Univ. Natur. Sci.*, 16(1):1–6, 2005.
- [36] J. D. Key and M. J. de Resmini. Small sets of even type and codewords. *J. Geom.*, 61(1-2):83–104, 1998.
- [37] J. D. Key and K. Mackenzie-Fleming. Rigidity theorems for a class of affine resolvable designs. *J. Combin. Math. Combin. Comput.*, 35:147–160, 2000.
- [38] J. D. Key, T. P. McDonough, and V. C. Mavron. Partial permutation decoding for codes from finite planes. *European J. Combin.*, 26(5):665–682, 2005.
- [39] J. D. Key and J. Moori. Codes, designs and graphs from the Janko groups J_1 and J_2 . *J. Combin. Math. Combin. Comput.*, 40:143–159, 2002.
- [40] J. D. Key and F. D. Shobe. Some transitive Steiner triple systems of Bagchi and Bagchi. *J. Statist. Plann. Inference*, 58(1):79–86, 1997.
- [41] J. D. Key and F. E. Sullivan. Steiner triple systems with many affine hyperplanes. In *Proceedings of the Twenty-sixth Southeastern International Conference on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 1995)*, volume 107, pages 105–112, 1995.
- [42] Jon-Lark Kim and Vera Pless. Designs in additive codes over GF(4). *Des. Codes Cryptogr.*, 30(2):187–199, 2003.
- [43] Ilias S. Kotsireas and Christos Koukouvinos. Orthogonal designs via computational algebra. *J. Combin. Des.*, 14(5):351–362, 2006.
- [44] Ilias S. Kotsireas, Christos Koukouvinos, and Jennifer Seberry. Hadamard ideals and Hadamard matrices with circulant core. *J. Combin. Math. Combin. Comput.*, 57:47–63, 2006.
- [45] Ilias S. Kotsireas, Christos Koukouvinos, and Jennifer Seberry. Hadamard ideals and Hadamard matrices with two circulant cores. *European J. Combin.*, 27(5):658–668, 2006.

- [46] Wolfgang Lempken. Two new symmetric 2 -(144, 66, 30) designs. *Preprint*.
- [47] Akihiro Munemasa and Vladimir D. Tonchev. A new quasi-symmetric 2 -(56, 16, 6) design obtained from codes. *Discrete Math.*, 284(1-3):231–234, 2004.
- [48] Christopher Parker and Vladimir D. Tonchev. Linear codes and doubly transitive symmetric designs. *Linear Algebra Appl.*, 226/228:237–246, 1995.
- [49] E. M. Rains, N. J. A. Sloane, and John Stufken. The lattice of N -run orthogonal arrays. *J. Statist. Plann. Inference*, 102(2):477–500, 2002.
- [50] Michel Seville. On a result of Cameron and Praeger on block-transitive point-imprimitive t -designs. In *Algebraic Combinatorics and Applications (Gößweinstein, 1999)*, pages 316–323. Springer, Berlin, 2001.
- [51] Pawel Wocjan. Efficient decoupling schemes with bounded controls based on Eulerian orthogonal arrays. *Phy. Rev. A.*, 73(6):7, 2006.

Combinatorics

Graph Theory

05Cxx

- [1] David Abelson, Seok-Hee Hong, and Donald E. Taylor. A group-theoretic method for drawing graphs symmetrically. In *Graph Drawing*, volume 2528 of *Lecture Notes in Comput. Sci.*, pages 86–97. Springer, Berlin, 2002.
- [2] Eiichi Bannai, Osamu Shimabukuro, and Hajime Tanaka. Finite analogues of non-Euclidean spaces and Ramanujan graphs. *European J. Combin.*, 25(2):243–259, 2004.
- [3] Wayne Barrett, Jason Grout, and Raphael Loewy. The minimum rank problem over the finite field of order 2: minimum rank 3. [arXiv:math.CO/0612331](https://arxiv.org/abs/math/0612331), 38 pages, 2006.
- [4] C. Bates, D. Bundy, S. Perkins, and P. Rowley. Commuting involution graphs for symmetric groups. *J. Algebra*, 266(1):133–153, 2003.
- [5] Norman Biggs. Constructions for cubic graphs with large girth. *Electron. J. Combin.*, 5:Article 1, 25 pp. (electronic), 1998.
- [6] John M. Boyer and Wendy J. Myrvold. On the cutting edge: Simplified $O(n)$ planarity by edge addition. *J. Graph Algorithms Appl.*, 8(3):241–273 (electronic), 2004.
- [7] John Bray, Christopher Parker, and Peter Rowley. Cayley type graphs and cubic graphs of large girth. *Discrete Math.*, 214(1-3):113–121, 2000.
- [8] Marston Conder. Constructing symmetric graphs. *Theta*, 3:11–16, 1989.
- [9] Marston Conder. Group actions on graphs, maps and surfaces with maximum symmetry. In *Groups St. Andrews 2001 in Oxford. Vol. I*, volume 304 of *London Math. Soc. Lecture Note Ser.*, pages 63–91. Cambridge Univ. Press, Cambridge, 2003.
- [10] Marston Conder and Peter Dobcsányi. Determination of all regular maps of small genus. *J. Combin. Theory Ser. B*, 81(2):224–242, 2001.

- [11] Marston Conder and Peter Dobcsányi. Trivalent symmetric graphs on up to 768 vertices. *J. Combin. Math. Combin. Comput.*, 40:41–63, 2002.
- [12] Marston Conder and Brent Everitt. Regular maps on non-orientable surfaces. *Geom. Dedicata*, 56(2):209–219, 1995.
- [13] Marston Conder, Robert Jajcay, and Tom Tucker. Regular Cayley maps for finite abelian groups. *J. Algebraic Comb.*, 25:2259–283, 2007.
- [14] Marston Conder and Cai Heng Li. On isomorphisms of finite Cayley graphs. *European J. Combin.*, 19(8):911–919, 1998.
- [15] Marston Conder and Peter Lorimer. Automorphism groups of symmetric graphs of valency 3. *J. Combin. Theory Ser. B*, 47(1):60–72, 1989.
- [16] Marston Conder, Peter Lorimer, and Cheryl Praeger. Constructions for arc-transitive digraphs. *J. Austral. Math. Soc. Ser. A*, 59(1):61–80, 1995.
- [17] Marston Conder, Aleksander Malnič, Dragan Marušič, Tomaž Pisanski, and Primož Potočnik. The edge-transitive but not vertex-transitive cubic graph on 112 vertices. *J. Graph Theory*, 50(1):25–42, 2005.
- [18] Marston Conder, Aleksander Malnič, Dragan Marušič, and Primož Potočnik. A census of semisymmetric cubic graphs on up to 768 vertices. *J. Algebraic Combin.*, 23(3):255–294, 2006.
- [19] Marston Conder and Dragan Marušič. A tetravalent half-arc-transitive graph with non-abelian vertex stabilizer. *J. Combin. Theory Ser. B*, 88(1):67–76, 2003.
- [20] Marston Conder, Margaret Morton, and Cheryl E. Praeger. Partition graphs for finite symmetric groups. *J. Graph Theory*, 25(2):107–117, 1997.
- [21] Marston Conder, Margaret Morton, and Cheryl E. Praeger. Two-arc closed subsets of graphs. *J. Graph Theory*, 42(4):350–364, 2003.
- [22] Marston Conder and Roman Nedela. Symmetric cubic graphs of small girth. *J. Combin. Theory Ser. B*, 97:757–768, 2007.

- [23] Marston Conder and Steve Wilson. Inner reflectors and non-orientable regular maps. *Discrete Math.*, 307(3-5):367–372, 2007.
- [24] Marston D. E. Conder and Cameron G. Walker. The infinitude of 7-arc-transitive graphs. *J. Algebra*, 208(2):619–629, 1998.
- [25] Italo J. Dejter. On Clique Turan graph-homogeneity. [arXiv:0704.2146](#), 20 pages, 2007.
- [26] Italo J. Dejter. On $(K_4, K_{2,2,2})$ -ultrahomogeneity. [arXiv:0704.1493](#), 16 pages, 2007.
- [27] Xin Gui Fang, George Havas, and Cheryl E. Praeger. On the automorphism groups of quasiprimitive almost simple graphs. *J. Algebra*, 222(1):271–283, 1999.
- [28] Xin Gui Fang, George Havas, and Jie Wang. Automorphism groups of certain non-quasiprimitive almost simple graphs. In *Groups St. Andrews 1997 in Bath, I*, volume 260 of *London Math. Soc. Lecture Note Ser.*, pages 267–274. Cambridge Univ. Press, Cambridge, 1999.
- [29] Yan-Quan Feng, Klavdija Kutnar, Aleksander Malnič, and Dragan Marušič. On 2-fold covers of graphs. [arXiv:math.CO/0701722](#), 18 pages, 2007.
- [30] Louis Ferré and Bertrand Jouve. Vertex partitioning of a class of digraphs. *Math. Sci. Hum.*, (158):59–77, 2002.
- [31] Michael Giudici, Cai Heng Li, Primož Potočnik, and Cheryl E. Praeger. Homogeneous factorisations of complete multipartite graphs. *Discrete Math.*, 307(3-5):415–431, 2007.
- [32] Jason Grout. *Ultraconnected and Critical Graphs*. Master of science, Brigham Young University, 2003.
- [33] Paul R. Hafner. Large Cayley graphs and digraphs with small degree and diameter. In *Computational Algebra and Number Theory (Sydney, 1992)*, volume 325 of *Math. Appl.*, pages 291–302. Kluwer Acad. Publ., Dordrecht, 1995.
- [34] Paul R. Hafner. Geometric realisation of the graphs of McKay-Miller-širáň. *J. Combin. Theory Ser. B*, 90(2):223–232, 2004.

- [35] Paul R. Hafner. On the graphs of Hoffman-Singleton and Higman-Sims. *Electron. J. Combin.*, 11(1):Research Paper 77, 33 pp. (electronic), 2004.
- [36] Robert E. Jamison and Gretchen L. Matthews. Distance k colorings of Hamming graphs. *Preprint*, 10 pages, 2006.
- [37] Peter Keevash and Benny Sudakov. Packing triangles in a graph and its complement. *J. Graph Theory*, 47(3):203–216, 2004.
- [38] Klavdija Kutnar, Aleksander Malnič, Dragan Marušič, and Štefko Miklavič. Distance-balanced graphs: Symmetry conditions. *Discrete Math.*, 306(16):1881–1894, 2006.
- [39] Klavdija Kutnar and Dragan Marušič. Hamiltonicity of vertex-transitive graphs of order $4p$. [arXiv:math.CO/0606585](https://arxiv.org/abs/math/0606585), 17 pages, 2006.
- [40] Klavdija Kutnar and Primož Šparl. Hamilton paths and cycles in vertex-transitive graphs of order $6p$. [arXiv:math/0702182](https://arxiv.org/abs/math/0702182), 21 pages, 2007.
- [41] Felix Lazebnik and Raymond Viglione. An infinite series of regular edge-but not vertex-transitive graphs. *J. Graph Theory*, 41(4):249–258, 2002.
- [42] Paulette Lieby. Colouring planar graphs. In *Discovering Mathematics with Magma*, volume 19 of *Algorithms Comput. Math.*, pages 315–330. Springer, Berlin, 2006.
- [43] Tian Khoon Lim. Edge-transitive homogeneous factorisations of complete graphs. [arXiv:math.CO/0605253](https://arxiv.org/abs/math.CO/0605253), 130 pages, 2004.
- [44] Tian Khoon Lim. Arc-transitive homogeneous factorizations and affine planes. *J. Combin. Des.*, 14(4):290–300, 2006.
- [45] Tian Khoon Lim and Cheryl E. Praeger. On generalised Paley graphs and their automorphism groups. [arXiv:math/0605252](https://arxiv.org/abs/math/0605252), 20 pages, 2006.
- [46] Marko Lovrečič Saražin, Walter Pacco, and Andrea Previtali. Generalizing the generalized Petersen graphs. *Discrete Math.*, 307(3-5):534–543, 2007.
- [47] Aleksander Malnič, Dragan Marušič, Štefko Miklavič, and Primož Potočnik. Semisymmetric elementary abelian covers of the Möbius-Kantor graph. [arXiv:math.CO/0510383 v1](https://arxiv.org/abs/math.CO/0510383), 22 pages, 2005.

- [48] Aleksander Malnič, Dragan Marušič, and Primož Potočnik. Elementary abelian covers of graphs. *J. Algebraic Combin.*, 20(1):71–97, 2004.
- [49] Aleksander Malnič, Dragan Marušič, and Primož Potočnik. On cubic graphs admitting an edge-transitive solvable group. *J. Algebraic Combin.*, 20(1):99–113, 2004.
- [50] Aleksander Malnič, Dragan Marušič, and Primož Šparl. On strongly regular bicirculants. *European J. Combin.*, 28(3):891–900, 2007.
- [51] Aleksander Malnič and Primož Potočnik. Invariant subspaces, duality, and covers of the Petersen graph. *European J. Combin.*, 27(6):971–989, 2006.
- [52] Dragan Marušič. On 2-arc-transitivity of Cayley graphs. *J. Combin. Theory Ser. B*, 87(1):162–196, 2003.
- [53] Dragan Marušič and Primož Potočnik. Bridging semisymmetric and half-arc-transitive actions on graphs. *European J. Combin.*, 23(6):719–732, 2002.
- [54] Margaret Morton. A note on arc-transitive circulants. *Bull. Inst. Combin. Appl.*, 23:63–68, 1998.
- [55] Alen Orbančić. Parallel-product decomposition of edge-transitive maps. arXiv:math.CO/0510428, 30 pages, 2005.
- [56] Michael E. O’Sullivan. Algebraic construction of sparse matrices with large girth. *IEEE Trans. Inform. Theory*, 52(2):718–727, 2006.
- [57] C. W. Parker. Semisymmetric cubic graphs of twice odd order. *European J. Combin.*, 28(2):572–591, 2007.
- [58] Christopher Parker and Peter Rowley. Ω -covers of graphs. *Bull. London Math. Soc.*, 32(6):658–662, 2000.
- [59] Christopher Parker and Peter Rowley. Subgroup-chain graphs. *Graphs Combin.*, 19(4):537–545, 2003.
- [60] Manley Perkel and Cheryl E. Praeger. Polygonal graphs: New families and an approach to their analysis. In *Proceedings of the Twenty-eighth Southeastern International Conference on Combinatorics, Graph Theory*

and Computing (Boca Raton, FL, 1997), volume 124, pages 161–173, 1997.

- [61] Manley Perkel, Cheryl E. Praeger, and Richard Weiss. On narrow hexagonal graphs with a 3-homogeneous suborbit. *J. Algebraic Combin.*, 13(3):257–273, 2001.
- [62] Cheryl E. Praeger and Leonard H. Soicher. *Low Rank Representations and Graphs for Sporadic Groups*, volume 8 of *Australian Mathematical Society Lecture Series*. Cambridge University Press, Cambridge, 1997.
- [63] Nicolas M. Thiéry. Algebraic invariants of graphs; A study based on computer exploration. *SIGSAM Bulletin*, 34(3):9–20, 2000.
- [64] Libero Verardi. Matrices, graphs and equivalence relations. *Ann. Mat. Pura Appl. (4)*, 180(4):413–428, 2002.
- [65] Yan Wang, Xin Gui Fang, and D. F. Hsu. On the edge-forwarding indices of Frobenius graphs. *Acta Math. Sin. (Engl. Ser.)*, 22(6):1735–1744, 2006.
- [66] Doug Wiedemann and Michael Zieve. Equivalence of sparse circulants: The bipartite Adam problem. [arXiv:0706.1567](https://arxiv.org/abs/0706.1567), 20 pages, 2007.

Combinatorics

Extremal Combinatorics

05Dxx

- [1] Leonid Brailovsky, Dmitrii V. Pasechnik, and Cheryl E. Praeger. Classification of 2-quasi-invariant subsets. *Ars Combin.*, 42:65–76, 1996.

Combinatorics

Algebraic Combinatorics

05Exx

- [1] Christine Bachoc. Harmonic weight enumerators of nonbinary codes and MacWilliams identities. In *Codes and Association Schemes (Piscataway, NJ, 1999)*, volume 56 of *DIMACS Ser. Discrete Math. Theoret. Comput. Sci.*, pages 1–23. Amer. Math. Soc., Providence, RI, 2001.
- [2] J. Buhler and Z. Reichstein. Symmetric functions and the phase problem in crystallography. *Trans. Amer. Math. Soc.*, 357(6):2353–2377 (electronic), 2005.
- [3] Marston Conder. Group actions on graphs, maps and surfaces with maximum symmetry. In *Groups St. Andrews 2001 in Oxford. Vol. I*, volume 304 of *London Math. Soc. Lecture Note Ser.*, pages 63–91. Cambridge Univ. Press, Cambridge, 2003.
- [4] Steven T. Dougherty, Jon-Lark Kim, and Patrick Solé. Double circulant codes from two class association schemes. *Adv. Math. Commun.*, 1(1):45–64, 2007.
- [5] Anna Fukshansky and Corinna Wiedorn. C -extensions of the Petersen geometry for M_{22} . *European J. Combin.*, 20(3):233–238, 1999.
- [6] Naoyuki Horiguchi, Hiroyuki Nakasora, and Takehisa Wakabayashi. On the strongly regular graphs obtained from quasi-symmetric 2 -(31, 7, 7) designs. *Bull. Yamagata Univ. Natur. Sci.*, 16(1):1–6, 2005.
- [7] M. Kasatani, T. Miwa, A. N. Sergeev, and A. P. Veselov. Coincident root loci and Jack and Macdonald polynomials for special values of the parameters. In *Jack, Hall-Littlewood and Macdonald Polynomials*, volume 417 of *Contemp. Math.*, pages 207–225. Amer. Math. Soc., Providence, RI, 2006.
- [8] J. D. Key and J. Moori. Codes, designs and graphs from the Janko groups J_1 and J_2 . *J. Combin. Math. Combin. Comput.*, 40:143–159, 2002.

- [9] J. D. Key, J. Moori, and B. G. Rodrigues. On some designs and codes from primitive representations of some finite simple groups. *J. Combin. Math. Combin. Comput.*, 45:3–19, 2003.
- [10] Jamshid Moori and B. G. Rodrigues. A self-orthogonal doubly even code invariant under $McL : 2$. *J. Combin. Theory Ser. A*, 110(1):53–69, 2005.
- [11] Patric R. J. Östergård. Classifying subspaces of Hamming spaces. *Des. Codes Cryptogr.*, 27(3):297–305, 2002.

Combinatorics

Computational Methods

05-04

- [1] David Abelson, Seok-Hee Hong, and Donald E. Taylor. A group-theoretic method for drawing graphs symmetrically. In *Graph Drawing*, volume 2528 of *Lecture Notes in Comput. Sci.*, pages 86–97. Springer, Berlin, 2002.
- [2] John M. Boyer and Wendy J. Myrvold. On the cutting edge: Simplified $O(n)$ planarity by edge addition. *J. Graph Algorithms Appl.*, 8(3):241–273 (electronic), 2004.
- [3] Florent Hivert and Nicolas M. Thiéry. MuPAD-Combinat, an open-source package for research in algebraic combinatorics. *Sém. Lothar. Combin.*, 51:Art. B51z, 70 pp. (electronic), 2004/05.
- [4] Paulette Lieby. Colouring planar graphs. In *Discovering Mathematics with Magma*, volume 19 of *Algorithms Comput. Math.*, pages 315–330. Springer, Berlin, 2006.
- [5] Kozo Sugiyama, Seok-Hee Hong, and Atsuhiko Maeda. The puzzle layout problem. In Giuseppe Liotta, editor, *Graph Drawing, Perugia, 2003*, pages 500–501. Springer, 2004.