# List C: Recent and forthcoming publications

This list contains combinatorial books and papers that have been published, accepted or submitted for publication since the last issue of the *Bulletin*—i.e., during (approximately) the calendar year 2004. This should not be taken as a complete record of all such publications during the period, and absence of listed papers for any individual should not be taken to imply absence of research activities.

# Abraham, D.J., Irving, R.W. and Manlove, D.F.

Two algorithms for the student-project allocation problem, submitted.

# Abraham, D.J., Irving, R.W., Mehlhorn, K. and Telikepalli, K.

Popular matchings, Proc. SODA 2005, 16th ACM/SIAM Symposium on Discrete Algorithms, Vancouver, to appear.

# Abreu, M., Aldred, R. E., Funk, M., Jackson, B. and Sheehan, J.

Graphs and digraphs with all 2-factors isomorphic, *J. Combinatorial Theory (Ser. B)* 92 (2004), 395-404.

# Adams, P., Bryant, D.E., Grannell, M.J. and Griggs, T.S.

Diagonally switchable 4-cycle systems, Australas. J. Combin. (to appear).

# Al-Kenani, A. N. and Mavron, V. C.

Maximal arc partitions of designs. To appear in Discrete Mathematics.

# Alon, N., Brightwell, G., Kierstead, H. A., Kostochka, A. V. and Winkler, P.

Dominating sets in k-majority tournaments. Submitted. *CDAM Research Report,* 2004-11.

Allen, S. M. [see also: Montemanni]

### Alpern, S. and Baston, V.

Rendezvous in Higher Dimensions. CDAM Research Report, 2004-06.

# Alpern, S. and Baston, V.

A common notion of clockwise can help in planar rendezvous. *CDAM Research Report,* 2004-07.

# Alpern, S. and Baston, V.

Rendezvous on a planar lattice. CDAM Research Report, 2004-08.

# Alpern, S.

Bilateral street searching in Manhattan. CDAM Research Report, 2004-09.

# Amaldi, E., Belotti, P. and Hauser, R.

A Randomized Algorithm for the MaxFS Problem. Technical Report.

# Amaldi, E. and Hauser, R.

Boundedness theorems for the relaxation method. Accepted for publication in Math. of OR.

# Anderson, I., van Asch, B. and van Lint, J. H.

Discrete mathematics in the high school curriculum, Zentralblatt fur Didaktit der Mathematik, 36 (2004), 105-116.

# Anderson, I. and Ellison, L.

Z-cyclic ordered triple whist tournaments on p elements where p=5 (mod 8), Discrete Math., to appear.

# Anderson, I. and Ellison, L.

Z-cyclic ordered triplewhist and directed triplewhist tournaments on p elements where p=9 (mod 16), J. Comb. Math. Comb. Computing, to appear.

# Anderson, I. and Ellison, L.

Z-cyclic directed moore (2,6) generalised whist tournament designs on p elements where p=7 (mod 12), Ars Combinatoria, to appear.

# Anderson, I. and Finizio, N.

Some new Z-cyclic whist tournament designs, Discrete Math., to appear.

# Anderson, I. and Preece, D.A.

Narcissistic half-and-half power-sequence terraces for Zn with n = pqt, *Discrete Math.* 279 (2004), 33-60.

# Anderson, I. and Preece, D.A.

Logarithmic terraces, Bull. Inst. Combinatorics Appl., to appear.

# Anderson, I. and Preece, D.A.

Some power-sequence terraces for Zpq with as few segments as possible, *Discrete Math.,* to appear.

### Anderson, I. and Preece, D.A.

Some Z (n-1) terraces from Zn power-sequences, n being an odd prime power, *Proc. Edin. Math.* Soc., to appear.

### Anthony, M.

On data classification by iterative linear partitioning. *Discrete Applied Mathematics*, 144 (1-2): 2-16, 2004.

### Anthony, M.

Partitioning points by parallel planes. *Discrete Mathematics*, 282 (1-3): 17-21, 2004.

### Anthony, M.

Generalization error bounds for threshold decision lists. *Journal of Machine Learning Research*, 5: 189-217, 2004.

# Anthony, M. and Hammer, P. L.

A Boolean measure of similarity. *RUTCOR Research Report RRR-27-2004*, RUTCOR, Rutgers Center for Operations Research, Rutgers University, New Jersey, USA, 2004.

# Anthony, M.

On learning a function of perceptrons. *Proceedings of the IEEE 2004 International Joint Conference on Neural Networks*, IEEE Press, 2004.

# Anthony, M. and Franco, L.

On a generalization complexity measure for Boolean functions. Proceedings of the IEEE 2004 International Joint Conference on Neural Networks, IEEE Press, 2004.

# Anthony, M.

Some connections between learning and optimization. *Discrete Applied Mathematics*, 144 (1-2): 17-26, 2004.

# Babbage, S.

'Stream Ciphers: What does Industry Want?', presented at the ECRYPT 'State of the Art in Stream Ciphers' workshop, October 2004, and available in the workshop record at <u>http://www.isg.rhul.ac.uk/research/projects/ecrypt/stvl/sasc-record.zip</u>

# Babbage, S.

[see also: Maximov]

### Bailey, R. A.

Association Schemes: Designed Experiments, Algebra and Combinatorics, Cambridge Studies in Advanced Mathematics 84, Cambridge University Press, Cambridge, 2004. 387pp. ISBN: 0 521 82446 X.

### Bailey, R. A.

Principles of designed experiments in J. A. Nelder's papers, in Methods and Models in Statistics: In Honour of Professor John Nelder FRS (eds. N. M. Adams, M. J. Crowder, D. J. Hand and D. A. Stephens), Imperial College Press, London, 2004, 171-194.

### Bailey, R. A.

Generalized wreath products of association schemes, *European Journal of Combinatorics,* to appear.

### Bailey, R. A.

Balanced colourings of strongly regular graphs, *Discrete Math.*, to appear.

### Bailey, R. A.

Six families of efficient resolvable designs in three replicates, Metrika, to appear.

### Bailey, R. A. and Cameron, P. J.

Crested products of association schemes, J. London Math. Soc., to appear.

Bailey, R. A., Cameron, P. J., Dobcsányi, P., Morgan, J. P., and Soicher, L. H. Designs on the Web, *Discrete Math.*, to appear.

# Bailey, R. A. and Druilhet, P.

Optimality of neighbor-balanced designs for total effects, *Annals of Statistics*, 32, 2004, 1650-1661.

# Balakrishnan, R., Sethuraman, G. and Wilson, R.J.

(eds), Graph theory and its applications (Proceedings of the Conference on graph theory and its applications, Anna University, Chennai, India, 14-16 March 2001), Narosa Publ. Co., 2004.

# Ball, S. and Hirschfeld, J. W.P.

Bounds on (n,r)-arcs and their application to linear codes, submitted.

# Barat, J., Edel, Y., Hill, R. and Storme, L.

On complete caps in the projective geometries over F<sub>3</sub>. II: New improvements, *Journal of Combinatorial Mathematics and Combinatorial Computing* 49 (2004), 9-31.

# Baston, V.

[see also: Alpern]

# Batty M., Braunstein S.L., Duncan A.J. and Rees S.E.,

Quantum Algorithms in Group Theory, Contemporary Mathematics 2004, 349, 1-62.

# Batty, M., Duncan, A.J. and Braunstein, S. L.,

Extending the Promise of the Deutsch--Jozsa--Hoyer Algorithm for Finite Groups, submitted.

# Beineke, L., Wilson, R. and Cameron, P.J.

Introduction, in Topics in Algebraic Graph Theory (ed. L. W. Beineke and R. J. Wilson), Cambridge Univ. Press, Cambridge, 2004 (ISBN 0521801974), pp.1-29.

### Beineke, L.W. and Wilson, R.J.

(eds.), *Topics in algebraic graph theory*, Encyclopedia of Mathematics and its Applications 102, Cambridge University Press, 2004.

# Bennett, G.K., Grannell, M.J., Griggs, T.S., Korzik, V.P. and Siran, J.

Small surface trades in triangular embeddings, submitted.

# Bennett, G.K., Grannell, M.J. and Griggs, T.S.

Non-orientable biembeddings of Steiner triple systems of order 15, Acta Math. Univ. Comenianae, 73 (2004), 101-106.

### Bennett, G.K., Grannell, M.J. and Griggs, T.S.

Exponential lower bounds for the numbers of Skolem-type sequences, *Ars Combin.*, 73 (2004), 101-106.

# Bell F.K., Li Marzi E. M. and Simic S.K.,

Some new results on graphs with least eigenvalue not less than 2, *Rendiconti del Seminario Matematico di Messina*, Serie II, Tomo XXV, Volume 9 (2003), 11-30.

# Biggs, N., Klin, M. H. and Reinfeld, P.

Algebraic methods for chromatic polynomials. *European Journal of Combinatorics,* 25 : 147-160, 2004.

# Biggs, N.

Specht modules and chromatic polynomials. *Journal of Combinatorial Theory*, (B) 92: 359-377, 2004.

# Bonin, J. and de Mier, A.

T-uniqueness of some families of k-chordal matroids, Adv. Appl. Math. 32 (2004) 10-30.

# Bonin, J. and de Mier, A.

Tutte polynomials of generalized parallel connections, Adv. Appl. Math. 32 (2004) 31-43.

# Bordewich, M., Welsh, D.J.A., Freedman, M. and Lovasz., L.

Approximate Counting and Quantum Computation, to appear in Combinatorics, Probability and Computing 2005.

# Borodin, O. V., Broersma, H. J., Glebov, A. and van den Heuvel, J.

A new upper bound on the cyclic chromatic number. *CDAM Research Report*, 2004-04.

# Braams, R., Carlisle, D., Detig, C., Goossens, M., Mittelbach, F., Rowley, C.A. and Schrod, J.

The LaTeX companion (2nd edn.), Pearson, 2004.

# Brightwell, G. and Tetali, P.

The number of linear extensions of the Boolean lattice. Order, 20: 333-345, 2003.

# Brightwell, G. and Winkler, P.

Graph homomorphisms and long range action. In *Graphs, Morphisms and Statistical Physics* (J. Nešetřil and P. Winkler eds.), DIMACS Series in Discrete Mathematics and Computer Science 63: 29-47, 2004.

# Brightwell, G. and Winkler, P.

A second threshold for the hard-core model on a Bethe lattice. *Random Structures and Algorithms*, 24: 303-314, 2004.

# Brightwell, G. and Winkler, P.

Counting Eulerian circuits is P-complete. To appear in the proceedings of the 2005 Workshop on Analytic Algorithmics and Combinatorics (ANALCO05); also submitted for journal publication. *CDAM Research Report*, 2004-12.

# Broersma, H. J.,

[see also: Borodin]

# Buan, A. B. Marsh, R. J. and Reiten, I.

Cluster mutation via quiver representations, preprint, December 2004.

# Buan, A. B. Marsh, R. J. and Reiten, I.

Cluster-tilted algebras, Transactions of the American Mathematical Society, to appear.

# Buan, A. B. Marsh, R. J. Reineke, M., Reiten, I. And Todorov, G.

Tilting theory and cluster combinatorics, preprint, February 2004.

# Bryant, D.E., Grannell, M.J. and Griggs, T.S.

Large sets of cycle systems on nine points, J. Combin. Math. Combin. Comput. (to appear).

# Bryant, D.E., Grannell, M.J., Griggs T.S. and Macaj, M.

Configurations in 4-Cycle Systems, Graphs Combin 20 (2004), 161-179.

# Bryant, D.E, Maenhaut, B.M., Quinn, K.A.S. and Webb, B.S.

Existence and embeddings of partial Steiner triple systems of order ten with cubic leaves, *Discrete math.* 284 (2004), 83-95.

### Buckley, P.G. and Osthus, D.

Popularity based random graph models leading to a scale-free degree distribution, Discrete Mathematics 282 (2004) 53-68.

### Caldero, P., Marsh, R.J. and Morier-Genoud, S.

Realisation of Lusztig cones. Representation Theory 8 (2004), 458-478.

### Cameron, P. J.

Automorphisms of graphs, in Topics in Algebraic Graph Theory (ed. L. W. Beineke and R. J. Wilson), Cambridge Univ. Press, Cambridge, 2004 (ISBN 0521801974), pp.137-155.

### Cameron, P. J.

Strongly regular graphs, in Topics in Algebraic Graph Theory (ed. L. W. Beineke and R. J. Wilson), Cambridge Univ. Press, Cambridge, 2004 (ISBN 0521801974), pp. 203-221.

### Cameron, P. J.

Combinatorics and Groups: Peter Cameron's IPM Lecture Notes, IPM Lecture Notes Series 4, Institute for Studies in Theoretical Physics and Mathematics (IPM), Tehran, 2004, 86pp.

# Cameron, P. J.

Topology in permutation groups, in Groups: *Topological, Combinatorial and Arithmetic Aspects* (ed. T. W. Müller), London Math. Soc. Lecture Notes 311, Cambridge University Press, Cambridge, 2004, pp. 93-105.

# Cameron, P. J.

Partitions and permutations, *Discrete Math.*, to appear.

# Cameron, P. J.

The random graph has the strong small index property, *Discrete Math.*, to appear.

# Cameron, P. J.

Embedding partial Steiner triple systems so that their automorphisms extend, *J. Combinatorial Design*, to appear.

# Cameron, P. J. (editor),

Problems from the 19th British Combinatorial Conference, *Discrete Math.,* to appear.

# Cameron, P. J. and Johnson, C. R.

The number of equivalence classes of symmetric sign patterns, *Discrete Math.,* to appear.

# Cameron, P. J. and Knarr, N.

Tubes in PG(3,q), *Europ. J. Combinatorics,* to appear.

# Cameron, P. J. and Müller, T. W.

A cohomological property of p-groups, Archiv der Mathematik 82 (2004), 200-204.

# Cameron, P. J. and Nešetřil, J.

Homomorphism-homogeneous relational structures, *Combinatorics, Probability and Computing,* to appear.

### Cameron, P. J. and Tarzi, S.

Switching with more than two colours, Europ. J. Combinatorics 25 (2004), 169-177.

### Cameron, P. J. and Wanless, I. M.

Covering radius for sets of permutations, Discrete Math., to appear.

**Cameron, P. J.** [see also: Bailey and Beineke]

# Campbell, D. F. and Edwards, K.J.

A new lower bound for the harmonious chromatic number, Australasian Journal of Combinatorics 29 (2004) 99-102.

# Cechlarova, K. Irving, R. W. and Manlove, D.F.

Stability in labour market games, ERCIM News 57 (2004), 27-28.

# Cieliebak, M. Erlebach, T., Liptak, Zs., Stoye, J. and Welzl, E.

Algorithmic Complexity of Protein Identification: Combinatorics of Weighted Strings, Discrete Applied Mathematics 137 (2004), 27-46.

# Cvetkovic, D. and Rowlinson P.

Spectral Graph Theory in: Topics in Algebraic Graph Theory, (Eds. Beineke L. W. and Wilson R. J.) Cambridge University Press (ISBN 0521-80197-4), 2004, pp.88-112.

# Cvetkovic D., Rowlinson P. and Simic S.,

Spectral Generalizations of Line Graphs, LMS Lecture Note Series, Vol. 314 Cambridge University Press (ISBN 0521-83663-8) 310 pages, 2004.

# Darby-Dowman, K

[see also: Nwana]

# Duckworth, W., Manlove, D.F. and Zito, M.

On the approximability of the maximum induced matching problem, J.Discrete Algorithms 3 (2005), 79-91.

# Duncan, A.J. and Gilman, R.H.,

Word Hyperbolic Semigroups, Math. Proc. Camb. Phil. Soc 2004, 136(3), 513-524.

# Duncan, A.J.,

Exponential genus problems in one-relator products of groups, submitted.

# Duncan, A.J.,

[see also: Batty]

### Edwards, K.J.

Detachments of complete graphs, Combinatorics, Probability and Computing, to appear.

### Edwards, K.J. and Farr, G.E.,

On monochromatic component size for greedy colourings, Discrete Applied Mathematics, to appear.

Edwards, K.J. and Farr, G.E., Planarization and fragmentability of some classes of graphs, submitted.

# Edwards, K.J., Horňák, M. and Woźniak, M.

On the neighbour-distinguishing index of a graph, submitted.

Ellison, L.

[see also: Anderson]

# Erlebach, T. and Hall, A.

NP-Hardness of Broadcast Scheduling and Inapproximability of Single-Source Unsplittable Min-Cost Flow, Journal of Scheduling 7 (2004), 223-241.

# Erlebach, T. Jansen, K. and Seidel, E.

Polynomial-Time Approximation Schemes for Geometric Intersection Graphs, SIAM Journal on Computing, to appear.

# Erlebach, T. and Jansen, K.

Conversion of Coloring Algorithms into Maximum Weight Independent Set Algorithms, Discrete Applied Mathematics, to appear.

# Forbes, A.D., Grannell, M.J. and Griggs, T.S.

Distance and fractional isomorphism in Steiner triple systems, submitted.

# Forbes, A.D., Grannell, M.J. and Griggs, T.S.

Steiner triple systems and existentially closed graphs, submitted.

# Forbes, A.D., Grannell, M.J. and Griggs, T.S.

On independent sets, Mathematica Slovaca (to appear).

# Forbes, A.D., Grannell, M.J. and Griggs, T.S.

Configurations and trades in Steiner triple systems, *Australas. J. Combin.* 29 (2004), 75-84.

# Forbes, A.D., Grannell, M.J. and Griggs, T.S.

Independent sets in Steiner triple systems, Ars Combin. 72 (2004), 161-169.

# Gerke, S. and McDiarmid, C.

Graph imperfection with a co-site constraint, SIAM Journal on Discrete Mathematics 17, (2004) 403 - 425.

# Gerke, S. and McDiarmid, C.

On the number of edges in random planar graphs, Combinatorics, Probability and Computing 13, (2004) 165-183.

# Giulietti, M., Hirschfeld, J.W.P., Korchmaros G. and Torres, F.

Curves covered by the Hermitian curve, Finite Fields Appl., to appear.

### Goldstein, L, and Reinert, G.

(2005). Total Variation Distance for Poisson Subset Numbers. To appear: Annals of Combinatorics.

### Goodall, A.J.,

The Tutte polynomial modulo a prime, Advances in Applied Mathematics 32 (2004), 293-298

### Goodall, A.J.,

Some new evaluations of the Tutte polynomial, submitted

### Gordon, N.A., Jarvis, T.M. and Shaw, R.

Aspects of the linear groups GL(n,2), J. Combin. Math. and Combin. Comput., to appear.

Gordon, N.A.

[see also: Shaw]

# Graham, J.S., Montemanni, R., Moon, J.N.J. and Smith, D.H.,

Frequency assignment, multiple interference and binary constraints, submitted.

# Grannell, M.J., Griggs, T.S. and Knor, M.

Biembeddings of Latin Squares and Hamiltonian Decompositions, *Glasgow Math. J.* 46 (2004), 443-457.

# Grannell, M.J., Griggs, T.S., Knor, M. and Siran, J.

Triangulations of surfaces by complete tripartite graphs, submitted.

### Grannell M.J., Griggs T.S., Knor M. and Skoviera M.

A Steiner triple system which colors all cubic graphs, *J. Graph Theory* 46 (2004), 15-24.

# Grannell, M.J., Griggs, T.S. and Siran, J.

Maximum genus embeddings of Steiner triple systems, *European J. Combin. (to appear)* 

# Grannell, M.J., Griggs, T.S. and Stanton, R.G.

Minimal perfect bicoverings of  $K_v$  with block sizes two three and four, Ars Combin. 71 (2004), 125-138.

### Grannell, M.J., Griggs, T.S. and Stanton, R.G.

On  $\lambda$ -fold coverings with a maximum block size four for  $\lambda$  = 3, 4 and 5, *J. Combin. Math. Combin. Comput.* 51 (2004), 137-158.

### Grannell, M.J., Griggs, T.S. and Stanton, R.G.

On  $\lambda$ -fold coverings with a maximum block size four for  $\lambda \ge 6$ , *Utilitas Math.* 66 (2004), 221-230.

### Grannell, M.J. and Korzhik, V.P.

Nonorientable biembeddings of Steiner triple systems, *Discrete Math.* 285 (2004), 121-126.

### Grannell, M.J.

[see also: Adams, Bennett, Bryant and Forbes]

### Griggs, T.S., Danziger, P., Dukes, P. and Mendelsohn, E.

On the intersection problem for Steiner triple systems of different orders, submitted.

### Griggs, T.S., Lo Faro, G. and Quattrocchi, G.

On some colouring of 4-cycle systems with specified block colour patterns, submitted.

Griggs, T.S.,

[see also: Adams, Bennett, Bryant, Forbes and Grannell]

# Haralambous, Y., Plaice, J., Rowley, C.A. and Swoboda, P.

A multidimensional approach to typesetting, *Proceedings of the TeX Users Group* 24 (1) (2004), 105-114.

# Hauser, R.

[see also: Almaldi and Martinez]

# Hetherington, T. J. and Woodall, D. R.

Edge and total choosability of near-outerplanar graphs, submitted.

### van den Heuvel, J. and Johnson, M.

A polynomial algorithm for the source location problem in digraphs. *CDAM Research Report,* 2004-02.

### van den Heuvel, J. and Johnson, M.

Transversals of subtree hypergraphs and the source location problem in digraphs. *CDAM Research Report,* 2004-10.

### van den Heuvel, J. and Johnson, M.

The external network problem. To appear in Lecture Notes in Computer Science. *CDAM Research Report,* 2004-15

### Hill, R.

Multiple sudden infant deaths – coincidence or beyond coincidence? *Paediatric and Perinatal Epidemiology* 18 (2004), 320-326.

### Hill, R.

Some reflections on the cot death cases. *Significance,* to appear.

### Hill, R.

[see also: Barat]

### Hirschfeld, J.W.P.

The number of points on a curve, and applications, submitted.

### Hoffmann, M. and Thomas, R. M.

A geometric characterization of automatic semigroups, preprint, 2004.

# Holmes, P. E. and Wilson, R. A.

L2(59) is a subgroup of the Monster, J. London Math. Soc. 69 (2004), 141-152.

### Holmes, P. E. and Wilson, R. A.

Subgroups of the Monster generated by A5s, J. Algebra, to appear.

### Holroyd, F.C. and Škoviera, M.

Colouring of cubic graphs by Steiner triple systems, *J. Combin. Theory Ser. B* 91 (2004), 57-66.

# Holt, D.F., Rees, S.E., Röver, C.E. and Thomas, R.M.,

Groups with context-free co-word problem, to appear in the Journal of the London Mathematical Society.

# Hopkins, B, and Wilson, R.J.

The truth about Königsberg, College Mathematics Journal 35 (2004), 198-207.

# Irving, R.W., Michail, D., Mehlhorn, K., Paluch, K. and Telikepalli, K.

Rank-maximal matchings, Proc. SODA 2004, 15th ACM/SIAM Symposium on Discrete Algorithms, New Orleans (2004), 68-75.

### Irving, R.W. and Scott, S.

An algorithm for the stable fixtures problem, submitted.

# Irving, R.W

Plagiarism and collusion detection using the Smith-Waterman algorithm, submitted.

# Irving, R.W

Man-exchange stable marriage, submitted.

Irving, R.W

[see also: Abraham and Cechlarova]

# Ivrissimtzis, I. and Singerman, D.

Regular maps and principal congruence subgroups of Hecke groups. *European Journal of Combinatorics,* to appear in 2005.

# Jackson, B.

[see also: Abreu]

### Johnson, J. R.

A disproof of the Fon-der-Flaass conjecture, *Combin. Probab. Comput.* 13 (2004), 195-201.

### Johnson, J. R.

Long cycles in the middle two layers of the discrete cube, *J. Combinatorial Theory Ser.* A 105 (2004), 255-271.

### Johnson, J. R. and Kierstead, H. A.

Explicit 2-Factorisations of the Odd Graph, Order 21 (2004), 19-27.

### Johnson, M.

[see also: van den Heuvel]

# Jones, R.A., Perkins, S., Rutherford, C.G. and Smith, D.H.,

Quasisynchronous and asynchronous CDMA: code construction and assignment, submitted.

# Keedwell, A. D.

Critical sets in latin squares and related matters: an update. *Utilitas Math.,* 65(2004), 97-131.

# Keedwell, A. D.

Tests for loop nuclei and a new criterion for a latin square to be group-based. *Europ. J. Combin.*, 26(2005),111-116.

# Keedwell, A. D. and Mullen, G.

On sets of partially orthogonal latin squares and "near" projective planes. *Discrete Math.* 288(2005), 49-60.

# Keedwell, A. D. and Shcherbacov V. A.

Construction and properties of (*r*, *s*, *t*)-inverse quasigroups II. *Discrete Math*. 288(2005), 61-71.

# Keedwell, A. D. and Shcherbacov V. A.

Quasigroups with an inverse property and generalized parastrophic identities. Submitted.

# Key, J. D., McDonough, T.P. and Mavron, V. C.

Partial permutation decoding of codes from finite planes. To appear in the European Journal of Combinatorics 3.

# Key, J. D., McDonough, T.P. and Mavron, V. C.

Information sets and related PD-sets for codes from finite geometries and designs. Submitted.

### King, O.H., and Cossidente, A.,

Maximal orthogonal subgroups of finite unitary groups, Journal of Group Theory 2004, 7, 447-462.

# King, O.H., and Cossidente, A.,

On some maximal subgroups of unitary groups, Communications in Algebra 2004, 32, 989-995.

### King, O.H., and Cossidente, A.,

Twisted tensor product group embeddings and complete partial ovoids on quadrics in PG  $(2^{t}-1,q)$ , Journal of Algebra 2004, 273, 854-868.

### Koller, A. E. and Noble, S. D.

The domination number of greedy heuristics for the frequency assignmentproblem. Discrete Mathematics, 275 (2004) 331-338.

### Kostochka, A. V. and Woodall, D. R.

Irreducible hypergraphs for Hall-type conditions, and arc-minimal digraph expanders, *European J. Combin.*, to appear.

# Krasikov, I. and Noble, S. D.

Finding next-to-shortest paths in a graph. Information Processing Letters, 92 (2004) 117-119.

# Krattenthaler, C. and Müller, T. W.,

Equations in finite semigroups: Explicit enumeration and asymptotics of solution numbers, *J. Combinatorial Theory Ser.* A 105 (2004), 291-334.

# Kühn D. and Osthus, D.

Complete minors in  $K_{s,s}$ - free graphs, Combinatorica 25 (2004) 49-61.

# Kühn D. and Osthus, D.

Induced subdivisions in  $K_{s,s}$ - free graphs of large average degree, Combinatorica 24 (2004) 287-304

# Kühn D. and Osthus, D.

Every graph of sufficiently large average degree contains a  $C_4$ - free graph of large average degree, Combinatorica 24 (2004) 155-162.

# Kühn D. and Osthus, D.

Subdivisions of  $K_{r+2}$  in graphs of average degree at least *r*+epsilon and large but constant girth, Combinatorics, Probability and Computing, 13 (2004) 361-371.

# Kühn D. and Osthus, D.

Large topological cliques in graphs without a 4-cycle, Combinatorics, Probability and Computing 13 (2004) 93-102.

# Kühn D. and Diestel, R.

Topological paths, cycles and spanning trees in infinite graphs, European J. Combinatorics 25 (2004) 835-862

# Kühn D. and Diestel, R.

On infinite cycles I, Combinatorica 24 (2004) 69-89.

# Kühn D. and Diestel, R.

On infinite cycles II, Combinatorica 24 (2004) 91-116.

# Lakin, S. R. and Thomas, R. M.

Context-sensitive decision problems in groups, in C. S. Calude, E. Calude and M. J. Dinneen (eds.), Developments in Language Theory: 8th International Conference, DLT 2004, Auckland, New Zealand (Lecture Notes in Computer Science 3340, Springer-Verlag, 2004), 296-307.

# Leese, R. A. and Noble, S. D.

Cyclic labelling with constraints at two distances. Electronic Journal of Combinatorics, 11 (2004) R16.

# Luczak, M. and Winkler, P.

Building uniformly random subtrees. *Random Structures and Algorithms,* 24: 420-443, 2004.

# Luczak, M. and McDiarmid, C.

On the power of two choices: balls and bins in continuous time. To appear in *Annals of Applied Probability*.

# Luczak, M. and McDiarmid, C.

On the maximum queue length in the supermarket model, Annals of Probability, to appear.

# Luczak, M. and Norris, J. R.

Strong approximation for the supermarket model. To appear in *Annals of Applied Probability.* 

# Maenhaut, B., Wanless, I. and Webb, B.S.

Subsquare-free Latin squares of odd order, submitted.

# Manlove, D.F. and Middendorf, M.

Combined super-/substring and super-/subsequence problems, Theoretical Computer Science 320 (2005), 247-267.

# Manlove, D.F., Abraham, D., Cechlarova, K. and Mehlhorn, K.

Pareto-optimality in house allocation problems, Proc. ISAAC 2004, 15th Annual International Symp. Algorithms and Computation, Lecture Notes in Computer Science 3341, Springer-Verlag, 3-15.

### Manlove, D. F. and Cechlarova, K.

The exchange-stable marriage problem, submitted.

### Manlove, D. F.

[see also: Abraham, Cechlarova and Duckworth]

# Marsh, R. J. and Rietsch, K.

Parametrizations of flag varieties. Representation Theory 8 (2004), 212-242.

### Martinez, S., Hauser, R. and Matzinger, H.

Large deviation based upper bounds for the LCS problem. Submitted, under revision.

### Mavron, V. C.

[see also: Al-Kenani, Key and McDonough]

# Maximov, A., Johansson, T. and Babbage, S.

'An Improved Correlation Attack on A5/1'. In Selected Areas in Cryptography 2004, published as Lecture Notes in Computer Science 3357 by Springer Verlag.

### McDiarmid, C., Steger, A. and Welsh. D.J.A.

Random planar graphs, J. Combinatorial Theory B, 93, (2005) 187 - 206.

# McDiarmid, C.

On the span of a random channel assignment problem, Combinatorica}, to appear.

# McDiarmid, C., Gerke, S. Steger, A and Weissl, A.

Random planar graphs with n nodes and a fixed number of edges. SODA 2005

McDiarmid, C., Addario-Berry, L., Dalal, K., Reed, B. A. and Thomason, A. Vertex-Colouring Edge-Weightings, Combinatorica, to appear.

McDiarmid, C. [see also: Luczak]

# McDonough, T.P., Mavron, V. C. and Tonchev, V. D.

Maximal arcs and Hadamard designs. To appear in Discrete Mathematics.

McDonough, T.P. [see also: Key]

### McSorley, J. P. and Soicher, L. H.

Constructing t-designs from t-wise balanced designs, *Europ. J. Combinatorics*, to appear.

### de Mier, A. and Noy, M.

On graphs determined by their Tutte polynomials, Graphs Combin. 20 (2004) 105--119

**de Mier, A. and Noy, M.** A solution to the tennis ball problem, Theoret. Comput. Science, to appear.

de Mier, A. [see also: Bonin]

Mitra, G. [see also: Nwana]

### Montemanni, R., Smith, D.H. and Allen, S.M.,

An improved algorithm to determine lower bound for the fixed spectrum frequency assignment problem, European Journal of Operational Research, 156, August 2004, pp 736-751.

### Müller, T. W. (editor),

Groups: Topological, Combinatorial and Arithmetic Aspects, London Math. Soc. Lecture Notes 311, Cambridge University Press, Cambridge, 2004. ISBN 0-521-54287-1.

### Müller, T. W.

Parity patterns in Hecke groups and Fermat primes, in Groups: Topological, Combinatorial and Arithmetic Aspects (ed. T. W. Müller), London Math. Soc. Lecture Notes 311, Cambridge University Press, Cambridge, 2004, pp. 327-374.

### Müller, T. W.

Counting wreath product representations of finite groups, J. Algebra, to appear.

# Müller, T. W. and Schlage-Puchta, J. C.

Classification and statistics of finite index subgroups in free products, *Advances in Math.* 188 (2004), 1-50.

# Müller, T. W. and Schlage-Puchta, J. C.

Modular arithmetic of free groups, Forum Math., to appear.

# Müller, T. W. and Schlage-Puchta, J. C.

Asymptotic stability for sets of polynomials, Acta Math. Hung., to appear.

# Müller, T. W. and Schlage-Puchta, J. C.

Character theory of symmetric groups, subgroup growth of Fuchsian groups, and random walks, *Advances in Math.*, to appear.

# Müller, T. W. and Schlage-Puchta, J. C.

Expansion properties of symmetric groups, *J. Combinatorial Theory Ser. A,* to appear.

# Müller, T. W. and Schlage-Puchta, J. C.

On the number of primitive lambda-roots, Acta Arithmetica, to appear.

### Müller, T. W. and Schlage-Puchta, J. C.

Some examples in the theory of subgroup growth, *Monatshefte Math.*, to appear.

### Müller, T. W.

[see also: Cameron and Krattenthaler]

### Ninčák, J. and Owens, P. J.

On a problem of R Häggkvist concerning edge-colouring of biparte graphs. *Combinatorica*, 24 (2004), 325-329.

### Noble, S. D.

Evaluating the rank generating function of a graphic 2-polymatroid. Combinatorics, Probability and Computing, to appear.

### Noble, S. D.

[see also: Koller, Krasikov and Leese]

### Norris, J. R.

[see also: Luczak]

### Nwana, V., Darby-Dowman, K. and Mitra, G.

A two-stage parallel branch and bound algorithm for mixed integer programs. IMA Journal of Management Mathematics 15 (2004) 227-242.

# Nwana, V., Darby-Dowman, K. and Mitra, G.

A co-operative parallel heuristic for mixed zero-one linear programming: combining simulated annealing with branch and bound. European Journal of Operational Research 164 (2005) 12-23.

# Oliver, G. P. and Thomas, R. M.

Automatic presentations for finitely generated groups, in V. Diekert and B. Durand (eds.), 22nd Annual Symposium on Theoretical Aspects of Computer Science (STACS'05), Stuttgart, Germany (Lecture Notes in Computer Science 3404, Springer-Verlag, 2005), 693-704.

# Ollis, M. A.

Protection against premature termination of experiments based on Williams squares with circular structure, *Utilitas Mathematica*, to appear.

# Osthus, D.

[see also: Buckley and Kühn]

# Owens, P. J.

[see also: Ninčák]

# Parkes, D. W., Shavrukov, V. Yu. and Thomas, R. M.

Monoid presentations of groups by finite special string-rewriting systems, RAIRO Theoretical Informatics and Applications 38 (2004), 245-256.

# Plaice, J. and Rowley, C.A.

New directions in document formatting: What is text?, *Proceedings of the Glyph and Typesetting Workshop 2003, Kyoto, Japan* (2004), 1-8.

# Plaice, J. and Rowley, C.A.

Characters are not simply names, nor documents trees, *Proceedings of the Glyph and Typesetting Workshop 2003, Kyoto, Japan* (2004), 9-16.

# Perkins, S. Smith, D.H. and Ryley, A.,

Robust data compression: consistency checking in the synchronization of variable length codes, The Computer Journal, Vol. 47, No. 3, (May 2004), pp. 309-319.

# Perkins, S. and Smith, D.H.,

Robust data compression: variable length codes and burst errors, The Computer Journal, to appear.

# Perkins, S., Sakhnovich, A.L. and Smith, D.H.,

On an upper bound for mixed error-correcting codes, submitted.

Preece, D. A. [see also: Anderson]

# Poole, T. R.

A degree and neighbourhood condition for the extendability of a set of I edges to a k-factor in a bipartite graph, submitted.

# Poole, T. R.

A sufficient condition for Hamiltonian circuits in bipartite graphs, submitted.

# Preece, D. A., Wallis W. D. and Yucas, J. L.

Paley triple arrays, Australasian Journal of Combinatorics, to appear.

# Quinn, K. A. S.

[see also: Bryant]

# Read, R.C. and Wilson, R.J.

An atlas of graphs, paperback edn., Oxford University Press, 2004.

# Reinert, G., Schbath, S., and Waterman, M.S.

(2005). Statistics on words with applications to biological sequences. In Lothaire: Applied Combinatorics on Words. J. Berstel and D. Perrin, eds., Cambridge University Press, 251-328

**Rees, S. E.** [see also: Batty and Holt]

**Robertshaw, A. M.,** k-factors and extendability in bipartite graphs, submitted.

# Robertshaw, A. M.,

Vertex-disjoint cycles covering a graph and containing specified edges, submitted.

### Rowlinson P.

Star complements and maximal exceptional graphs, Publ. Inst. Math. Beograd, to appear.

### Rowlinson P.

Co-cliques and star complements in extremal strongly regular graphs, Submitted.

**Rowlinson P.** [see also: Bell and Cvetkovic]

# Rowley, C. A.

[see also: Braams, Haralambous and plaice]

# Rutherford, C. G.

[see also: Jones]

### Savani, R. and von Stengel, B.

Exponentially many steps for finding a Nash equilibrium in a bimatrix game. *CDAM Research Report,* 2004-03. Extended abstract in: Proc. 45th Annual IEEE Symposium on Foundations of Computer Science (FOCS 2004), 258-267.

Scott, S. [see also: Irving]

# Shaw, R. and Gordon, N.A.

The quintic Grassmannian  $G_{1,4,2}$  in PG(9,2), *Designs, Codes and Cryptography*, 32 (2004) 381-396.

# Shaw, R., Maks, J.G. and Gordon, N.A.

The classification of flats in PG(9,2) which are external to the Grassmannian G <sub>1,4,2</sub>, *Designs, Codes and Cryptography*, 34 (2005) 203-227

# Shaw, R., Maks, J.G. and Gordon, N.A.

Partial spreads in PG(4,2) and flats in PG(9,2) external to the Grassmannian  $G_{1,4,2}$ . *Discrete Mathematics,* to appear.

# Shaw, R. and Gordon, N.A.

The polynomial degree of the Grassmannian G<sub>1,n,2</sub>. (Submitted)

Shaw, R. [see also: Gordon]

Sheehan, J. [see also: Abreu]

# Singerman, D.

Riemann surfaces, Belyi functions and Hypermaps, in Topics on Riemann surfaces and Fuchsian groups. LMS Lecture Note Series 287, (2001) 43-68

# Singerman, D. and Syddall, R.I.

The Riemann surface of a combinatorial dessin, Beitrage zur Algebra und Geometrie, Vol.44, No.24, (2003) 13-430

**Singerman, D.** [see also: lvrissimtzis]

# Smith, D.H., Hughes, L.A., Moon, J.N.J., and Montemanni, R.,

Measuring the Effectiveness of Frequency Assignment Algorithms, submitted.

Smith, D. H. [see also: Graham, Jones, Montemanni and Perkins]

# Soicher, L. H.

Computing with graphs and groups, in Topics in Algebraic Graph Theory (ed. L. W. Beineke and R. J. Wilson), Cambridge Univ. Press, Cambridge, 2004 (ISBN 0521801974), pp. 250-266.

# Soicher, L. H.

The GRAPE 4.2 Package for GAP 4.4, 2004; See http://www.maths.qmul.ac.uk/~leonard/grape/

# Soicher, L. H.

The DESIGN 1.1 Package for GAP 4.4, 2004; See http://designtheory.org/software/gap\_design/

# Soicher, L. H.

[see also: Bailey and McSorley]

# Stark, D.,

The vertex degree distribution of random intersection graphs, *Random Structures* & *Algorithms* 24 (2004), 249-258.

# Stark, D.,

Convergence in distribution for subset counts between random sets, *Electronic J. Combinatorics* 11 (2004), R59 (9pp.)

# Stark, D.,

Review of "Logarithmic Combinatorial Structures: a Probabilistic Approach" by Richard Arratia, A. D. Barbour, and Simon Tavare, Bull. London Math. Soc., to appear.

Tarzi, S. [see also: Cameron]

# Thomas, R. M.

[see also: Holt]

# Tsai, P. W., Gilmour , S. G. and Mead, R.

Statistical isomorphism of three-level fractional factorial designs, *Utilitas Mathematica*, to appear.

# Vernitski, A.

Finite quasivarieties and self-referential conditions, Studia Logica 78 (2004), 337-348.

# Wanless, I. M.

[see also: Cameron and Maenhaut]

### Waters, R. J.

Some new bounds on T<sub>r</sub>-choosability, submitted.

# Waters, R. J.

Consecutive list colouring and a new graph invariant, submitted.

# Webb, B. S.

[see also: Bryant and Maenhaut]

# Wilson, R.J.

The early history of block designs, *Rendiconti del seminario matematico di Messina, Serie II, Tomo XXV* N.9 (2003), 267-276.

# Wilson, R.J.

History of graph theory, *Handbook of graph theory* (ed. J. Gross and J. Yellen), CRC Press (2004), 29-49.

# Wilson, R.J.

Alice in Numberland: an informal dramatic presentation in 8 fits, *Mathematical adventures for students and amateurs* (ed. D. Hayes and T. Shubin), Math. Assoc. of America (2004), 259-280.

# Wilson, R.J.

Cztery barwy wystarcza, cyzli o kolorawaniu map, Delta 6 (361) (2004), 12-13.

# Wilson, R.J.

Graph theory puzzles', *Popularisering av Matematik*, Nasjonalt Senter for Matematikk I Opplaeringen, Trondheim 2 (2004), 159-166.

# Wilson, R.J.

Articles on 'Thomas Penyngton Kirkman' and 'Alfred Bray Kempe', *New dictionary of national biography*, Oxford Univ. Press, 2004.

# Wilson, R.J.

*Four colours suffice*, US paperback edn., Princeton University Press, 2004 and Japanese edn., Shinchosha Co., 2004.

Wilson, R.J.

[see also: Balakrishnan, Beineke, Hopkins and Read]

# Wilson, R.A.

[see also: Holmes]

# Woodall, D. R.

Total 4-choosability of series-parallel graphs, submitted.

# Woodall, D. R.

[see also: Hetherington and Kostochka]