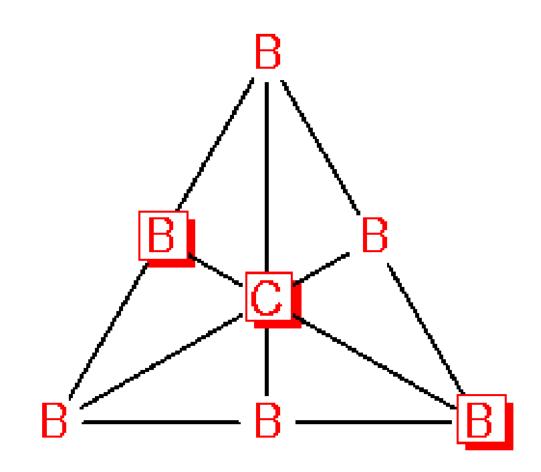
# British Combinatorial Bulletin 2002



# **BRITISH COMBINATORIAL BULLETIN 2002**

#### Editorial

First of all, I'm sorry it's late. I hope nobody needs a catalogue of all the other things that, at various key moments, took priority over working on the Bulletin. It will happen again, but hopefully not to anything like this extent.

At the Business Meeting during the last British Combinatorial Conference, it was agreed to move to electronic distribution of the Bulletin. This is the result. We are sending the Bulletin to institutional representatives in the form of pdf files (as I write this, the plan is to provide one file containing the complete Bulletin, and also four smaller files containing the front matter and each of the three lists, since that might be more convenient for some). We think the Bulletin should be viewable on-screen, and also that it should print out reasonably neatly. Please let me know if you have any problems, and we'll look into it.

The Bulletin is also being placed on the website http://www.cdam.lse.ac.uk/BCB/, and a few copies are being printed out for archival purposes.

The website also features announcements of future meetings, and the definitive versions of Lists A and B; what you see here is simply the state of these lists at the moment. We are happy to make corrections to these lists at any time; please do email us any changes (ideally, via your institution's representative). List C is collated on an annual basis.

I do not maintain an electronic mailing list of all combinatorial mathematicians in the UK. What I do have is an electronic mailing list of institutional representatives, which we have always used to ask for material for the Bulletin, and is being found increasingly useful as a means to advertise combinatorial meetings etc. I'm willing to add others to this list, or perhaps to make up a separate mailing list; if you want to join it, just send me an email - this shouldn't expose you to more than about 10-15 messages a year. If you want to send a message to the list, send me an email.

Many thanks to all the representatives around the country who sent in material for the Bulletin. More particularly, I am grateful to Jackie Everid for all her efforts in preparing the Bulletin for publication.

Graham Brightwell Editor

bcb@cdam.lse.ac.uk

#### **British Combinatorial Committee**

The Committee is: Peter Cameron (Chairman), Peter Rowlinson (Secretary), Keith Edwards (Treasurer), David Bedford, Graham Brightwell, James Hirschfeld, Mark Jerrum, John Lamb, Bridget Webb, Chris Wensley. Chris Saker, the organizer of the 2002 Postgraduate Conference is a co-opted member of the Committee.

News

The British Combinatorial Committee has a limited sum of money available to support approved meeting on combinatorial topics in the UK. Any institution requesting support will be expected to meet part of the total cost from its own funds or elsewhere. Proposals for consideration by the Committee, including outline plans and an outline budget, should be sent to the Secretary,

Professor Peter Rowlinson p.rowlinson@stirling.ac.uk.

#### Professor William T. Tutte 14th May 1917 - 2nd May 2002

We are sorry to report the death of Professor Bill Tutte on May 2, 2002. The cause was a recently diagnosed combination of lymphoma of the spleen and congestive heart failure.

An obituary of Bill Tutte by Dan Younger, an article by Tutte about his work at Bletchley Park, and other information can be found at: www.math.uwaterloo.ca/CandO\_Dept/index.shtml

An obituary by Norman Biggs appeared in the Independent on May 9, 2002. This can be found at: http://news.independent.co.uk/people/obituaries/story.jsp?story=293237

# Meetings in Combinatorics

#### 50th Anniversary of the Four-Colour Problem

23 October 2002 is the 150th anniversary of the four-colour problem (specifically, De Morgan's letter to Hamilton). On 23 October this year, the London Mathematical Society and the British Society for the History of Mathematics are holding a joint meeting in London (venue to be announced) to celebrate this event.

The speakers will be:

Robin Wilson (on the early history of the problem),

Kenneth Appel and Wolfgang Haken (on the Appel-Haken proof of the fourcolour theorem),

**Robin Thomas** (on the recent proof with N. Robertson, P. Seymour and D. Sanders),

Dan Archdeacon (on recent work in topological graph theory).

There may be a special dinner in the evening.

Two days earlier, on 21 October, Robin Wilson will give a general talk on the history and proof of the four-colour theorem, at Gresham College, High Holborn, at 5.30 pm, followed by the launch of his forthcoming Penguin book 'Four colours suffice'.

Further details of these events can be obtained nearer the time from the London mathematical Society or Gresham College, or from Robin Wilson [r.j.wilson@open.ac.uk].

#### One-Day Combinatorics Colloquium

The annual one-day colloquium will take place at the University of Reading, on Wednesday 15th May 2002.

Speakers are: D.J.White (Reading), R.J.Chapman (Exeter), R.Johnson (Cambridge), D.A.Preece (Kent and Queen Mary), J.Talbot (Oxford), I.Wanless (Oxford), I.Leader (Cambridge), I.Barany (UCL and Renyi Institute) and F.C.Holroyd (Open University).

The meeting starts at 10:30. Morning lectures take place in Rooms 113 and 314 of the Mathematics Building. Afternoon lectures are held in the Larger (Ditchburn) Lecture Theatre in the Physics Building.

For further information, including abstracts of the talks, please see the website: http://www.rdg.ac.uk/~smr99mj/colloquium.htm

#### 13th Postgraduate Combinatorial Conference

24th - 26th July 2002, University of Essex

The Postgraduate Combinatorial Conference is in its 13th year. The aim has always been to allow students to meet and talk about their research in an informal environment. The conference is aimed at British and European postgraduates working towards obtaining a PhD in mathematics in any area of combinatorics.

Each student attending is encouraged to give a short talk (20 mins) about their research. This will be the first time that most students have spoken outside their own department, and it is an excellent opportunity to gain practice in front of a small, friendly audience.

There are also three invited lectures. The speakers are: **Prof. Peter Cameron** (Queen Mary, University of London) **Prof. Dominique Perrin** (Universit de Marne-la-Valle) **Prof. Graham Brightwell** (London School of Economics)

All the talks will take place in the Department of Mathematics at the University of Essex. The conference runs from the afternoon of Wednesday 24th July to lunchtime on Friday 26th. Accommodation is available on campus for all those attending the conference.

Further details are available from the conference website: <u>http://www.essex.ac.uk/maths/PCC2002/</u> or from the organiser, Chris Saker, cjsake@essex.ac.uk. A registration form can be found on the website.

#### **19th British Combinatorial Conference**

The next British Combinatorial Conference will take place at the University of Bangor, Sunday 29 June - Friday 4 July, 2003. For further information, see the website: http://www.informatics.bangor.ac.uk/public/math/bcc2003/index.html

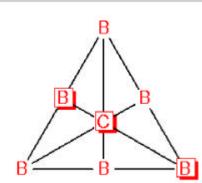
Invited speakers confirmed so far: **Dr Simon Blackburn** (Royal Holloway, University of London), **Prof Alexandre Borovik** (UMIST, Manchester) **Prof Pavol Hell** (Simon Fraser University, British Columbia), **Prof Dieter Jungnickel** (Universität Augsburg), **Dr Imre Leader** (DPMMS, Cambridge), **Prof Arun Ram** (University of Wisconsin-Madison), **Prof Anne Street** (University of Queensland, Brisbane), **Prof Günter Ziegler** (Technishe Universität, Berlin)

#### **Recent PhDs in Combinatorics**

#### University of Glamorgan

#### Roberto Montemanni,

Upper and lower bounds for the fixed spectrum frequency assignment problem, PhD, University of Glamorgan, January 2002 (Director of Studies D.H. Smith). Thesis is available at http://web.glam.ac.uk/schools/sot/doms/Research/radiofreq.php Roberto is now working at IDSIA, Galleria 2, 6928 Manno-Lugano, Switzerland (roberto@idsia.ch).



# List A Combinatorial Mathematicians based in Britain

### A

Aghaei, Morteza	Sussex
Allen, Stuart M.	Cardiff
Al-Meaither, M.	Royal Holloway
Al-Riyami, S.	Royal Holloway
Anderson, Dr. Ian	Glasgow
Annand, Marie L.	Aberdeen
Anthony, Dr. Martin H.G.	LSE, London
Antilla, M.	UCL,London
Appa, Dr. G.	LSE, London
Applegate, Mr. R.	QMUL
Arhin, Mr. J.	QMUL
Arrowsmith, Dr. David K.	QMUL, London
Atkinson, Prof. Michael D.	St. Andrews

#### B

Babbage, Dr. S.	Vodafone Group R&D
Bailey, Prof. R.A.	QMUL
Ball, Prof. Keith M.	UCL, London
Ball, Dr. Simeon	QMUL, London

UCL, London
Keele
Zergo
Stirling
East Anglia
Middlesex
Open University
LSE, London
UCL, London
Royal Holloway
Royal Holloway
Royal Holloway
QMUL
Cambridge
Vodafone Group R&D
UMIST
UMIST
Birkbeck, London
LSE, London
Leicester
UMIST
Surrey
Royal Holloway
Staffordshire
Birmingham
Exeter

# С

Cameron, Prof. Peter J.	QMUL, London
Camina, Dr. Alan R.	East Anglia

Campbell, Dr. Colin M.	St. Andrews
Campbell, Duncan	Dundee
Catarino, Paula	Essex
Chapman, Dr. Robin J.	Exeter
Chetwynd, Dr. Amanda G.	Lancaster
Ciechanowicz, Dr. Zbigniew Chez	Zergo
Clarke, Dr. Francis W.	Swansea
Clarke, Geoffrey M.	Kent
Cohen, Dr. Stephen D.	Glasgow
Constable, Robin L.	St. Andrews
Cook, Dr. R.J.	Swansea
Cooper, Dr. Colin	Goldsmith's
Cooper, Prof. S. Barry	Leeds
Cormode, Mr. Graham	Warwick
Cosh, B.	Goldsmith's, London
Croft, Dr. Hallard T.	Cambridge
Crouch, Dr. Simon	Hewlett-Packard
Csornyei, Ms. Marianna	UCL, London
Curtis, Dr. Robert T.	Birmingham

# D

Dagger, Dr. Stuart W.S.	Aberdeen
Damerell, Dr. R. Mark	Royal Holloway
Davies, Prof. Roy O.	Leicester
Daykin, Dr. David E.	Reading
Deineko, Dr. Vladimir	Warwick
Dent, A.	Royal Holloway
Dent, Susanne	East Anglia
Dobcsányi, Dr. P.	QMUL
Dolan, Dr. Alan K.	Open

Dugdale, Dr. J. Keith	Reading
Duncan, Dr. Andrew J.	Newcastle
Dupin, S.F.R.	Surrey
Dye, Prof. Roger H.	Newcastle
Dyer, Prof. Martin	Leeds
Dzamonja, Dr. M.	East Anglia

# E

Easton, Sarah J.	Staffordshire
Edwards, Dr. Keith J.	Dundee
Essam, Prof. John W.	Royal Holloway
Evans, Dr. David M.	East Anglia
Evans, Dr. Edward A.	St.Mary's U. C.
Everett, Prof. M. G.	Greenwich

# F

Falconer, Prof. Kenneth J.	St. Andrews
Fazey, E.	Royal Holloway
Fenner, Dr. Trevor I.	Birkbeck, London
Firby, Dr. Peter A.	Exeter
Fleischmann, Prof. Peter	Kent
Forbes, A.D.	Open University

# G

Garcia, Paul	Open
Gardiner, Dr. Anthony D.	Birmingham
Garnham, Debbie	Leicester
Georgiou, Nicholas	LSE
Gibson, Dr. J. Keith	Birkbeck, London
Gilder, John.	UMIST

Gillett, Dr. Raphael T.	Leicester
Gilmour, Dr. S. G.	QMUL
Glass, Dr. Celia A.	City
Godsave, Diane	Vodafone Group R&D
Goldberg, Dr. Leslie A.	Warwick
Goldberg, Dr. Paul W	Warwick
Gollman, Dr. D.	Royal Holloway
Gordon, Dr. Neil A.	Hull
Gowers, Prof. W. Tim	Cambridge
Grannell, Prof. Michael J.	Open
Grant-Ross, Peter	Birkbeck, London
Green, Dr. B.	Cambridge
Griggs, Prof. Terence S. (Terry)	Open
Gutin, Prof. Gregory	Royal Holloway

#### Η

Haigh, Claude W.	Swansea
Haight, Dr. John A.	UCL, London
Hammond, Paul R.	Sussex
Hardcastle, Tim	Leicester
Heide, G.	East Anglia
van den Heuvel, Jan	LSE
Hierons, Dr. Robert M.	Goldsmiths, London
Higgins, Dr. Peter M.	Essex
Hill, Prof. Ray	Salford
Hilton, Prof. Anthony J.W.	Reading
Hines, P.	Royal Holloway
Hirschfeld, Prof. James W.P.	Sussex
Hobbs, J.D.	Open

Hoffman, Michael	Leicester
Hoggar, Dr. Stuart G.	Glasgow
Hoffman de Visme, Ivan	Charterhouse School
Holroyd, Dr. Fred C.	Open
Hopkins, H.	Royal Holloway
Howard, Dr. John	LSE
Hughes, Prof. Daniel R.	QMUL, London
Hughes, Dr. J.W. Barrie	QMUL, London
Hughes Jones, Dr. R. (Dick)	Kent
Hunter, Gordon J.A.	St Mary's U. C.
Hurley, Steve	Cardiff

# I

Irving, Dr.	Robert W.	Glasgow

# J

Jackson, Prof. Bill	Goldsmiths, London
Jackson, Dr. Penelope S	Stirling
James, Prof. Gordon D.	ICL, London
Jarrett, David F.	Middlesex
Jarupunphol, P.	Royal Holloway
Jefferies, Dr. Nigel P.	Vodafone Group R&D
Jennings, Dr. Sylvia	South Bank
Jerrum, Dr. Mark	Edinburgh
Jha, Dr. Vikram	Glasgow Caledonian
Jimenez-Contreras, M. Estela	Sussex
Johnson, Dr. Jeffrey H.	Open
Johnson, Matthew	Reading
Johnson, J. Robert	Cambridge
Johnson, Tony	Open

Johnstone, Dr. W. Roy	Reading
Jones, Prof. Gareth A.	Southampton
Jones, Philip	East Anglia

# K

Keedwell, Dr. A. Donald	Surrey
Kelk, Mr. Steven	Warwick
Kemp, Prof. David	St Andrews
Kemp, Dr. Freda	St Andrews
Kenneth, R	East Anglia
Khu-Smith, V.	Royal Holloway
Kim, S-M.	Royal Holloway
King, Dr. Oliver H.	Newcastle
King, Prof. Ronald C.	Southampton
King-Sing (Roland) How Tai	
Klasing, R.	South Bank
Knott, Dr. Ron D.	Surrey
Koller, Angela	Brunel
Kovalenko, I	UNL
Krasikov, Dr. Ilia	Brunel

# L

Lakin, Steve	Leicester
Lamb, Dr. John D.	Kent
Larman, Prof. David G.	UCL, London
Lawson, Dr. Mark V.	Bangor
Laycock, Dr. P.J.	UMIST
Leader, Dr. I.B.	Cambridge
Leese, Dr. Robert	Oxford
Leinen, Dr. Felix A.	Newcastle

Lewis, Dr. Richard P.	Sussex
Liebeck, Prof. M.	Imperial College, London
Li'enart, E.	Goldsmiths, London
Linton, Dr. Stephen A.	St. Andrews
Lloyd, Dr. E. Keith	Southampton
Loizou, Prof. George	Birkbeck, London
Love, Chris	Salford
Lovegrove, Graham J.	Open
Luczak, M	Oxford

# M

Macdonald, Prof. I.G.	QMUL, London
Macpherson, Dr. H. Dugald	Leeds
Madelaine, Florent	Leicester
Maenhaut, Dr. Barbara M.	Open
Makroglou, Dr. Athena	Portsmouth
Manlove, Dr. David	Glasgow
Manning, Stephanie M.	Vodafone Group R&D
Manns, Mr. Tom	Portsmouth
Mansilla, Dr, S. P.	QMUL
Marsh, Dr. Robert J.	Leicester
Martin, K.	Royal Holloway
Martin, Dr. Russell	Warwick
Martin, T.	Royal Holloway
Martin, Prof. Ursula H.M.	St. Andrews
Mavron, Dr. Vassili C.	Aberystwyth
McAlpine, Kenneth M.	Abertay
McCabe, Dr. John H.	St. Andrews
McDiarmid, Dr. Colin J.H.	Oxford

McDonough, Dr. Thomas P.	Aberystwyth
McMullen, Prof. Peter	UCL, London
Michalopoulos, I.	Royal Holloway
Mirza, F.	Royal Holloway
Mitchell, Prof. Chris J.	Royal Holloway
Mitchell Dr. Jane M.O.	Open
Mitra, Prof. Gautam	Brunel
Morris, Prof. Alun O.	Aberystwyth
Müller, Dr. T. W.	QMUL
Murphy, Dr. Sean P.	Royal Holloway
Myers, J.S.	Cambridge

# Ν

Nelson, Roy	Open
Ng, S.	Royal Holloway
Noble, Dr. Steven	Brunel
Norman, Dr. Chris W.	Royal Holloway

# 0

O'Connor, Dr. John J.	St. Andrews
Ollis, Mr. M. A.	QMUL
Olsen, Dr. Lars	St. Andrews
O'Toole, L.	Royal Holloway
Owens, Dr. Peter J.	Surrey

# Р

Panov, Taras	Manchester
Paterson, Prof. Mike	Warwick
Payne, Prof. Roger W.	Rothamsted
Pearce, Prof. S. Clifford	Kent

Pebody, Dr. L.	Cambridge
Pejic, Snezana	LSE, London
Perkins, Dr. Stephanie	Glamorgan
Philips, Abraham	Birkbeck, London
Pikhurko, Oleg	Cambridge
Pinch, Dr. Richard G.E.	GCHQ, Cheltenham
Piper, Prof. Fred	Royal Holloway
Poole, Tim R.	Nottingham
Potts, Prof. Chris N.	Southampton
Powell, Dr. Martin B.	Oxford
Powell, Dr. Susan	LSE, London
Pratt, F	Staffordshire
Preece, Prof. Donald A.	Kent
Preiss, Prof. D.P.	UCL, London
Pretzel, Dr. Oliver R.L.	ICL, London
Prince, Dr. Alan R.	Heriot-Watt
Pu, Dr. Ida	Goldsmiths, London
Puricella, Antonio	Leicester

# Q

Quinn, Dr. Kathleen A.S. Ope	en
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# R

Rashwan, O.	East Anglia
Ray, Prof. Nigel	Manchester
Rees, Dr. Sarah E.	Newcastle
Rees, David H	Kent
Reuter, A.	Imperial
Reynolds, K.	Newcastle
Riordan, Dr. O.	Cambridge

Robertshaw, Dr. Andrew	Glamorgan
Robertson, Prof. Edmund F.	St. Andrews
Robson, Prof. John C.	Leeds
Rogers, Prof. C. Ambrose	UCL, London
Rooney, Dr. Joe	Open
Rowe, P.	Royal Holloway
Rowley, Dr. Christopher A.	Open
Rowley, Dr. Peter J.	UMIST
Rowlinson, Prof. Peter	Stirling
Rudloff, C.	East Anglia
Ruskuc, Dr. Nik	St Andrews
Russell, P.A.	Cambridge
Rutherford, Ms. Carrie G.	Glamorgan
Rymer, Dr. Neil W.	Bangor

# S

Salhi, A.	Essex
Sanders, A.J.	Cambridge
Sandling, Dr. Robert	Manchester
Sands, Dr. Arthur D.	Dundee
Saxl, Dr. Jan	Cambridge
Scott, Dr. Alex D.	UCL, London
Scott, Sandy	Glasgow
Sezgin, S.	UCL, London
Shareef. F.	QMUL, London
Shaw, Prof. (Emer) Ron	Hull
Shawe-Taylor, Prof. John S.	Royal Holloway
Sheehan, Dr. John	Aberdeen
Shreeve, Richard I.	Royal Grammar School
Siemons, Dr. I. Johannes	East Anglia

Singerman, Prof. David	Southampton
Singmaster, Prof. David B.	South Bank, London
Smith, Prof. Derek H.	Glamorgan
Soicher, Dr. Leonard H.	QMUL, London
Sonnino, Dr. A.	Sussex
Spence, Dr. Edward	Glasgow
Spiga, Mr. P.	QMUL
Stark, Dr. D. S.	QMUL
von Stengel, Dr. Bernhard	LSE
Stewart, Prof. Iain A	Leicester
Stirling, Dr. David S.G.	Reading
Stockwell, r.	Royal Holloway
Stratman, Dr. Bernd	St Andrews
Stratton, Dr. Anthony E.	Exeter
Strusevich, Dr. V. A.	Greenwich

# Т

Talbot, Dr. J.M.	Oxford
Talbot, Dr. Richard F.	Staffordshire
Tarzi, Dr. S.	QMUL
Taylor, Ms. S. C.	QMUL
Thiel, Dr. Stefan	Vodafone Group R&D
Thomas, Dr. A. D.	Swansea
Thomas, Dr. Rick M.	Leicester
Thomason, Dr. Andrew G.	Cambridge
Truss, Prof. John K.	Leeds

# V

Vámos, Prof. Peter	Exeter
Vernitskii, Alexey	Essex
Vowden, Dr. Barry J.	Kent

### $\mathbf{W}$

Wackrill, Dr. Patricia	Middlesex
Walker, Dr. Grant	Manchester
Walker, Keith	Keele
Walker, Prof. Michael	Vodafone Group R&D/Royal Holloway
Wallace, B	Royal Holloway
Walters, Dr. Mark	Cambridge
Wanless, Dr. Ian	Oxford
Waters, Steven	Glasgow Caledonian
Watts, Ivor	Open
Webb, Dr. Bridget S.	Open
Welham, Sue	Rothamsted
Welsh, Prof. Dominic J.A.	Oxford
Wensley, Dr. Christopher D.	Bangor
Whitaker, Roger	Cardiff
White, Dr. Lynda V.	ICL, London
Whitehead, Carol A.	Goldsmiths, London
Whitty, Prof. Robin W.	South Bank, London
Wild, Prof. Peter R.	Royal Holloway
Williams, Prof. H. Paul	LSE
Williams, Jini	Open
Wilson, Dr. Robert A.	Birmingham
Wilson, Dr. Robin J.	Open

Woodall, Dr. Douglas R.	Nottingham
Woodcock, Dr. Christopher F.	Kent
Wright, Professor Chris	Middlesex
Wright, Dr. Christopher K.	Birmingham
Wright, Dr. Edward M.	Aberdeen
Wright, R.	Vodafone Ltd

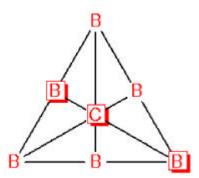
### Y

Yemane, Y. Royal Holloway

# Z

Zalesskii, Prof. A.E.	East Anglia
Zsak, Dr. Andras	Cambridge
Zverovich, Alexey	Royal Holloway
Zverovich, Dr. Vadim	Brunel

# List B



# Combinatorial staff, research students, lecture courses and seminars at departments in Britain

An asterisk denotes a contact name from whom further information can be obtained. Under most entries the combinatorial journals currently being taken are listed; a key to the titles is as follows:

- A Aequationes Mathematica
- B Algebra Universalis
- C Ars Combinatoria
- D Australasian Journal of Combinatorics
- E Biometrics
- F Biometrika
- G Bulletin of the Institute of Combinatorics and its Applications
- H Combinatorica
- I Combinatorics, Probability and Computing
- J Design, Codes and Cryptography
- K Discrete and Applied Geometry
- L Discrete and Computational Geometry
- M Discrete Applied Mathematics

- N Discrete Mathematics
- O Discussiones Mathematicae: Graph Theory
- P European Journal of Combinatorics
- Q Finite Fields and Applications
- R Geometriae Dedicata
- S Graphs and Combinatorics
- T IEEE Transactions on Information Theory
- U Journal of Algebraic Combinatorics
- V Journal of Combinatorial Design
- W Journal of Combinatorial Mathematics and Combinatorial Computing
- X Journal of Combinatorial Theory Series A
- Y Journal of Combinatorial Theory Series B
- Z Journal of Cryptology

a	Journal of Geometry	f	Order
b	Journal of Graph Theory	g	Random Structures and Algorithms
c	Journal of Statistical Planning and Inference	h	SIAM Journal on Discrete Mathematics
d	Linear Algebra and its Applications	i	Utilitas Mathematica
e	Networks		

#### UNIVERSITY OF ABERDEEN

University of Aberdeen, Edward Wright Building, Dunbar Street, Aberdeen AB9 2TY.

Tel: 01224 272000 Fax: 01224 487048

#### **Department of Mathematical Sciences**

Dr. J. Sheehan\* (graph theory, Ramsey theory) *Research fellow* Dr. E.M. Wright *Research student* M.L. Annand (Dr Sheehan) (Ramsey theory) *Lecture courses* Discrete mathematics (24 lectures, 2nd year u/g, Dr. Dagger) Graph theory (24 lectures, 4th year u/g, Dr. Sheehan) *Current periodicals*: J, P, Q, T, W

#### UNIVERSITY OF WALES, ABERYSTWYTH

University of Wales, Aberystwyth SY23 3BZ. Tel: 01970 622753 Fax: 01970 622777 http://www.aber.ac.uk/~matwww

#### **Department of Mathematics**

Dr. V.C. Mavron\* (designs) Dr. T.P. McDonough (designs and permutation groups) Prof. A.O. Morris (Emeritus Professor, representation theory and algebraic combinatorics) *Lecture courses* Graphs and Network (24 lectures, u/g, Dr. V. C. Mavron) Groups (20 lectures, u/g, Dr. T. P. McDonough) *Current periodicals*: P, U, X, h

#### **UNIVERSITY OF WALES, BANGOR**

School of Informatics, Division of Mathematics, University of Wales, Dean Street, Bangor, Gwynedd LL57 1UT. Tel: 01248 382686 Fax: 01248 361429 http://www.sees.bangor.ac.uk/ma/

#### School of Mathematics

Dr. M.V. Lawson (automata, languages, semigroups)
Dr. N.W. Rymer (graph colourings, stable assignments)
Dr. C.D. Wensley\* (combinatorial group theory, combinatorial species) *Lecture courses*Abstract algebra (25 lectures, 2nd year u/g, Dr. Lawson)
Graphical algorithms (20 lectures, 3rd year u/g, Dr. Rymer)
Combinatorial structures (20 lectures, 3rd year u/g, Dr. Rymer) *Current periodicals*: none

#### **BIRKBECK COLLEGE**

Birkbeck College, Malet Street, London WC1E 7HX.

Department of Statistics Tel: 0207 631 6308 Fax: 0207 436 3514

Dr. A. Bowler\* (symmetric designs, combinatorial matrices, permutation groups) *Research students*P. Grant-Ross (quasigroups)
A. Philips (non-associative finite-dimensional algebras) *Lecture courses*Discrete Methods (11 three-hour lectures, 2nd year u/g, Dr. Bowler)

#### Department of Computer Science

Tel: 071 631 6314 Fax: 071 636 4971

Dr. T.I. Fenner (combinatorial algorithms, probabilistic algorithms, random graphs)Dr. K. Gibson (cryptography, combinatorial algorithms)Prof. G. Loizou (combinatorial algorithms)

#### UNIVERSITY OF BIRMINGHAM

University of Birmingham, Edgbaston, Birmingham B15 2TT. Tel: 0121 414 6581 Fax: 0121 414 3389 http://www.mat.bham.ac.uk

#### School of Mathematics & Statistics

Dr. P. Butkovic\* (Combinatorial Optimisation) Prof. R.T. Curtis (Group Theory, Representation Theory) Dr. A.D. Gardiner (Graph theory) Prof. R.A. Wilson (Group Theory, Representation Theory) Dr. John Bray *Research Students* Sean Bolt Louise Murfitt Beth Holmes Stephen Stanley *Lecture courses* Combinatorial Optimisation (22, 3<sup>rd</sup> year, Dr. Butkovic) Coding Theory (22, 3<sup>rd</sup> year, Prof. R.Wilson) Discrete Mathematics (22, 2<sup>nd</sup> year, Dr. Flavell) Geometry of Groups (22, 4<sup>th</sup> year, Prof. Curtis) *Current periodicals*: F, N, R, c

#### **BRUNEL UNIVERSITY**

Brunel University, Kingston Lane, Uxbridge, Middlesex UB8 3PH. Tel: 01895 274000 Fax: 0189 5203303 http://www.brunel.ac.uk/depts/ma

#### **Department of Mathematical Sciences**

Mitra, Prof. Gautam (combinatorial optimisation) Noble, Dr. Steven (graph theory, combinatorial optimisation) Krasikov, Dr. Ilia (graph theory, combinatorial number theory, coding theory, orthogonal polynomials) Zverovich, Dr. Vadim (graph theory) Research Students Angela Koller (Dr. Noble, The Frequency Assignment Problem) Lecture courses Discrete Mathematics with Applications (24 lectures, 3rd year u/g, Dr. Krasikov) Graph Theory with Applications (24 lectures, 2nd year u/g, Dr. Krasikov) Groups, Fields and Codes (24 lectures, 2nd year u/g, Dr. Noble) Fundamentals of Mathematics (24 lectures, 1st year u/g, Dr. Noble) Working paper series Technical Reports of Department of Mathematics (Mrs. A. Wilkes) Current Periodicals: G, h

#### **UNIVERSITY OF CAMBRIDGE**

Centre for Mathematical Sciences, Wilberforce Rd, Cambridge CB3 0WB. Tel: 01223 337999 Fax: 01223 337920

#### Department of Pure Mathematics and Mathematical Statistics

Dr. H.T. Croft (Peterhouse) Prof. W.T. Gowers (Trinity) Dr. I.B. Leader\* (Trinity) Dr. J. Saxl (Caius) Dr. A. Thomason (Clare) Fellows Dr. B. Bollobás (Trinity) Dr. B. Green (Trinity) Dr. L. Pebody (Trinity) Dr. O. Pikhurko (St. John's) Dr. O.M. Riordan (Trinity) Dr. R. Steinberg (Judge Institute) Dr. M. Walters (Trinity) Dr. A. Zsak (Fitzwilliam) Research students J.R. Johnson (Dr. Leader) J.S. Myers (Dr. Thomason) P.A. Russell (Dr. Leader)

A.J. Sanders (Dr. Leader) Lecture courses
Numbers and Sets (24 lectures, Part 1A, Dr. Leader)
Codes and Cryptography (12 lectures, Part 2A)
Graph Theory (16 lectures, Part 2A, Dr. Thomason)
Combinatorics (16 lectures, Part 2B, Dr. Leader)
Algebraic Methods in Combinatorics (16 lectures, Part 3, Dr. Pkhurko)
Extremal Graph Theory (16 lectures, Part 3, Dr. Thomason)
Ramsey Theory (16 lectures, Part 3, Dr. Leader)
Seminar
Combinatorics (Thursdays at 2p.m.)
Current periodicals:

#### **UNIVERSITY OF WALES, CARDIFF**

Cardiff University, Queen's Buildings, Newport Road, PO Box 916, Cardiff CF24 3XF. Tel: +44 (0)29 2087 4812 Fax: +44 (0)29 2087 4598 http://www.cs.cf.ac.uk/

#### Department of Computer Science

S.M. Allen\* (20876070) (mobile communications, frequency assignment, combinatorial optimisation, latin squares)
S. Hurley (20874749) (mobile communications, frequency assignment, combinatorial optimisation)
R. Whitaker (20876058) (mobile communications, frequency assignment, combinatorial optimisation, latin squares)
Lecture courses
Discrete mathematics I (1st year u/g)
Discrete mathematics II (2nd year u/g)
Information and Meta-Heuristics (3rd year u/g)
Discrete mathematics (MSc)

#### UNIVERSITY OF DUNDEE

Dundee University, Dundee DD1 4HN.

*Division of Applied Computing* Tel: 01382 344145 Fax: 01382 345509 http://www.computing.dundee.ac.uk

Dr. K.J. Edwards\*(Graph colourings, graph decompositions, complexity) (344463) *Research students* D. Campbell (Dr. Edwards).

*Division of Mathematics* Tel. 01382 344 471 Fax 01382 345516 <u>http://www.maths.dundee.ac.uk/</u> Sands, Dr. Arthur (Combinatorial problems on finite Abelian groups; retired) *Lecture course* Graph theory (27 lectures, 3rd/4th year u/g)

Current Periodicals: T, b, d

#### **UNIVERSITY OF EAST ANGLIA - NORWICH**

University of East Anglia, Norwich NR4 7TJ. Tel: 01603 456161 Fax: 01603 259515 http://www.mth.uea.ac.uk/welcome.html

#### School of Mathematics

Prof. A.R. Camina (block designs, finite groups) (ext. 592849), Dr. M. Dzamonja (logic, set theory, infinite combinatorics) (ext. 592981) Dr. D.M. Evans (permutation groups, automorphism groups of infinite structures) (ext. 592594) Dr. I.J. Siemons\* (permutation groups, topological and homological methods) (ext. 592578) Prof. A.E. Zalesskii (group theory, ring theory) (ext. 593710) *Research associates* Dr. Philip Mavnard Research students C. Kurtz (Dr Siemons/Prof Zalesskii) E. McFarlane (Dr Camina) H. Nuebling (Dr Evans) G. Piper (Dr Dzamonja) K. Thompson (Dr Dzamonja) H. Treacher (Dr Siemons) R. Vincent (Prof Zalesski) *Lecture courses* Discrete Mathematics(2nd year u/g) Set theory (3rd year u/g in 2002/3) Linear algebra and linear groups (3rd year u/g in 2002/3) Infinite permutation groups (4th year, p/g, Dr Evans in 2003/4) Representation Theory (3rd year u/g, in 2003/4) Codes and designs (3rd year u/g in 2003/4) Graph theory (3rd year in 2002/3) Group theory (3rd year in 2003/4) Computability (3rd year in 2003/4) Model theory (3rd year in 2003/4) Visitors Prof. V. B. Mnukhin (Suva, Fiji Islands)

#### **UNIVERSITY OF EDINBURGH**

The King's Buildings, Edinburgh EH9 3JZ Tel. 0131 6505129 Fax: 0131 6677209 http://www.dcs.ed.ac.uk

*Department of Computer science* Dr. Mark Jerrum\* (combinatorial algorithms, computational complexity, random structures) Lecture Courses Algorithms and Data Structures (3<sup>rd</sup> year u/g) Computability and Intractability (3<sup>rd</sup> year u/g, MSc) Computational Complexity (4<sup>th</sup> year u/g, MSc, 1<sup>st</sup> year PhD) *Current Periodicals*: E, H, M, T, X, Y,

#### **UNIVERSITY OF ESSEX**

University of Essex, Wivenhoe Park, Colchester CO4 3SQ. Tel: 01206 873024 Fax: 01206 873598

#### **Department of Mathematics**

Dr. P.M. Higgins\* (combinatorics of algebraic semigroup theory)
Tel: 01206 873019 Fax: 01206 873043
Dr. A. Salhi (combinatorial optimisation)
Tel: 01206 873022 Fax: 01206 873043 *Research students*P. Catarino, A. Vernitskii (both Dr. Higgins). *Lecture courses*One half of the second year algebra course (20 lectures) is combinatorics.
Combinatorial optimisation (40 lectures, 3rd year u/g) *Current periodicals*: C, D, K, Y

#### **UNIVERSITY OF EXETER**

University of Exeter, North Park Road, Exeter EX4 4QE. Tel: 01392 264 464 Fax: 01392 263997 http://www.maths.ex.ac.uk

#### **Department of Mathematics**

Dr. R.J. Chapman\* (finite fields,coding theory, enumerative combinatorics) Dr. P.A. Firby (p/t) (distance and heterogeneity in graphs, applications to mathematical biology) Dr. A.E. Stratton (finite fields, linear recurrent sequences, coding theory and cryptography) Prof. P. Vámos (representation of matroids) *Lecture courses* Discrete Mathematics (30 lectures, 1<sup>st</sup> year u/g, Robin Chapman) Graph theory (33 lectures, 3rd year u/g,Peter Firby)) Coding Theory (3<sup>rd</sup> year u/g, Dr. Stratton) *Current periodicals*: C, D, W

#### UNIVERSITY OF GLAMORGAN

University of Glamorgan, Pontypridd, Mid Glamorgan CF37 1DL. Tel: 01443 482251 Fax: 01443 482711 http://www.glam.ac.uk/maths

#### **Division of Mathematics and Statistics**

Prof. D.H. Smith\* (frequency assignment, network reliability, coding theory)Dr. S. Perkins (coding theory, synchronization)Dr. A. Robertshaw (graph theory)

Ms. C. Rutherford (matroids, coding theory) *Lecture courses* Codes and Information (3rd year u/g, Prof. Smith, Dr. Perkins) Network flows and reliability (3rd year u/g, Prof. Smith) Combinatorics (2nd year u/g, Dr. Perkins) *Current periodicals*: N, T, X, Y, e

#### UNIVERSITY OF GLASGOW

University of Glasgow, University Gardens, Glasgow G12 8QW. Tel: 0141 339 8855 Fax: 0141 330 4111 http://www.maths.gla.ac.uk

#### **Department of Mathematics**

Dr. I. Anderson\* (designs, whist tournaments)
Dr. S.D. Cohen (application of finite fields)
Dr. S.G. Hoggar (error correcting codes, combinatorics of iterated function systems and fractals)
Dr. E. Spence (algebraic graph theory, combinatorial designs)
Lecture courses
Combinatorial designs (25 lectures, 4th year u/g, Dr. Spence)
Discrete mathematics (24 lectures, 3rd year u/g, Dr. Anderson)
Graphs and networks (22 lectures, 2<sup>nd</sup> year u/g, Dr. Anderson)
Groups, symmetry and fractals (22 lectures, 2<sup>nd</sup> year u/g, Dr. Hoggar)
Mathematics of information technology (25 lectures, 4th year u/g, Dr. Hoggar)
Occasional combinatorial seminars

#### Department of Computing Science

http://www.dcs.gla.ac.uk Dr. R.W. Irving (combinatorial algorithms and complexity) Dr D.F. Manlove (optimisation problems) *Lecture course* Algorithms (4th year u/g) *Research student* S. Scott (algorithms) *Lecture courses* Algorithms (4<sup>th</sup> year u/g, Dr. Irving)

Current periodicals: C, E, F, M, N, O, P, Q, T, V, X, Y, b, c, h, i

#### **GLASGOW CALEDONIAN UNIVERSITY**

Glasgow Caledonian University, Cowcaddens Road, Glasgow G4 0BA. Tel: 0141 331 3609 Fax: 0141 33 3005

#### **Department of Mathematics**

Dr. V. Jha\* (finite geometries) S. Waters (cryptography). *Lecture courses* Galois fields and Cryptography (Mr. Waters) *Current periodicals*: none

#### **GOLDSMITHS COLLEGE**

Goldsmiths College, University of London, Lewisham Way, London SE14 6NW.

Tel: 0207 919 7850 Fax: 0207 919 7853

#### **Department of Mathematical and Computing Sciences**

Dr. R. M. Hierons (finite state automata, tours of graphs, network optimisation) Prof. B. Jackson\* (cycles and paths, connectivity, Euler tours, matroid theory) Dr. I. Pu (combinatorial algorithms, randomized, parallel, probabilistic and average case algorithmics)

C. A. Whitehead (independence and domination in graphs) *Research students*B. Cosh (Prof. Jackson) (graph connectivity)
E. Lienart(Prof Jackson) (Graph Colouring) *Lecture courses*Discrete Mathematics (1st year u/g, Prof. B. Jackson)
Graph Theory (3<sup>rd</sup> year u/g, Prof. B. Jackson)
Data Structures and algorithms (2<sup>rd</sup> year u/g, Dr. Pu) *Current Periodicals*: X, Y, b

#### GOVERNMENT COMMUNICATIONS HEADQUARTERS

Priors Road, Cheltenham GL52 5AJ. Tel: 01242 221491 Fax: 01242 226816 C.C. Cocks (Chief Mathematician) Dr. R.G.E. Pinch\*

#### **UNIVERSITY OF GREENWICH**

University of Greenwich, London, SE18 6PF Tel: 0208 316 8000 Fax: 0208 855 4033

#### School of Maths, Statistics and Computing

Prof. M.G.Everett (Graph Theory) Prof. V.A. Strusevich (Scheduling Theory) *Lecture Course* Graph Theory (3<sup>rd</sup> yr u/g, Prof. Everett) *Current Periodicals*: T

#### **HERIOT-WATT UNIVERSITY**

Heriot-Watt University, Riccarton, Edinburgh EH14 4AS. Tel: 0131451 3221 Fax: 0131 451 3249 http://www.ma.hw.ac.uk

#### Department of Mathematics

Dr. A.R. Prince\* (finite geometries, finite group theory) *Lecture course* Discrete mathematics (45 lectures, 3rd year honours degree, Dr. Prince) *Current periodicals*: E, F, I, c, g, h

#### **HEWLETT-PACKARD LABORATORIES**

Hewlett-Packard Laboratories, Filton Road, Stoke Gifford, Bristol BS34 8QZ. Tel: 0117 979 9910 Fax: 0117 312 9870 http://hplbwww.hpl.hp.com/mcs/

Dr. S. Crouch (crytography, coding theory, finite algebraic geometry) *Current periodicals*: T

#### **UNIVERSITY OF HULL**

University of Hull, Cottingham Road, Hull HU6 7RX. Tel: 01482 465885 Fax: 01482 466218 http://www.hull.ac.uk/maths/

*Department of Mathematics* Prof. R. Shaw\* (Emeritus) (finite geometry)

#### Department of Computer Science

Dr. N.A. Gordon (465038) (finite geometry, computer algebra) *Current periodicals*: J, P, R, T

#### **IMPERIAL COLLEGE**

Imperial College, Huxley Building, 180 Queensgate, London SW7 2BZ.
Tel: 0207 589 5111 Fax: 0207 584 7596 *Department of Mathematics*Prof. G.D. James, Prof. M. Liebeck, Dr. O. Pretzel\*, Dr. L. White

#### **KEELE UNIVERSITY**

Keele University, Keele, Staffordshire ST5 5BG. Tel: 01782 621111 Fax: 01782 584268 http://www.keele.ac.uk/depts/ma/maths.html

#### **Department of Mathematics**

Dr. D. Bedford\* (583468) (latin squares; designs) <u>http://www.keele.ac.uk/depts/ma/people/db.html</u> K. Walker (583268) (graphs) *Lecture courses* Graph theory (30 lectures, 3rd year u/g, Dr. Bedford) Discrete mathematics (30 lectures, 3rd year u/g, Dr. Bedford) *Current periodicals*: E, F, H, S, V, X, Y, b, h

#### UNIVERSITY OF KENT AT CANTERBURY

Cornwallis Building, The University, Canterbury, Kent CT2 7NF. Tel: 01227 764000 Fax: 01227 827932 http://www.ukc.ac.uk/IMS/

#### Institute of Mathematics and Statistics

G.M. Clarke (827901) (non-orthogonal Graeco-Latin designs) Dr. R. Hughes Jones (823799) (enumerating and constructing polyhedral surfaces) Prof. P Fleischmann (823654) (algebraic combinatorics, root systems, Mobius function) Prof. S.C. Pagrage (827262) (block designed row and solumn designs)

Prof. S.C. Pearce (827263) (block designs; row and column designs)

Prof. D.A. Preece\* (827901) (Graeco-Latin designs, nested BIBDs, single-change covering designs, neighbour designs)
D.H. Rees (01243 375250) (non-orthogonal Graeco-Latin designs, nested BIBDs, neighbour designs)
Dr. B.J. Vowden (823649) (Graeco-Latin designs)
Dr. C.F. Woodcock (823803) (orthogonal Latin squares)

#### **Canterbury Business School**

The University, Canterbury, Kent, CT2 7PE Tel: 01227 784564 Fax: 01227 761187 http://www.ukc.ac.uk/CBS/

Dr. J.D. Lamb (824046) (graphs, matroids, algorithms and applications)

*Lecture courses* 

Discrete mathematics (30 lectures, 3<sup>rd</sup>year u/g,Dr. Woodcock) Computational algebra (30 lectures, 3rd year u/g, Prof. Fleischmann) *Current periodicals*: E, F, T

#### UNIVERSITY OF LANCASTER

University of Lancaster, Lancaster LA1 4YL. Tel: 01524 593960 Fax: 01524 592681 http://www.maths.lancs.ac.uk

Department of Mathematics and Statistics Dr. A.G. Chetwynd\* (combinatorial applications in statistics) *Current periodicals*: E, F, T, Y, b, e

#### UNIVERSITY OF LEEDS

University of Leeds, Leeds LS2 9JT. Tel: 0113 2335140 Fax: 0113 2335145 http://amsta.leeds.ac.uk/pure/index.html

#### School of Mathematics

Prof. S.B. Cooper (graph theory, Rams ey theory, finite set systems), Dr. H.D. Macpherson\* (permutation groups and related combinatorics), Prof. J. K. Truss (permutation groups, automorphisms of infinite Steiner systems)

Research Students

G. Campero-Arena (Prof. Truss, countable homogeneous ordered structures) *Lecture courses* 

Introduction to Discrete Maths (22 lectures, 2<sup>nd</sup> year u/g, Prof. Cooper) Graph theory (22 lectures, 3rd year u/g, Dr. Cooper) Combinatorics (22 lectures, 3rd year u/g, Prof. J.C.McConnell)

Coding theory (22 lectures, 3rd year u/g, Prof. Robson) *Working Paper series* 

http://www.amsta.leeds.ac.uk/pure/preprints/leedsprep.html School of Computer Studies University of Leeds, Leeds LS6 2HN

Tel. 0113 233 5430 Fax 0113 233 5468 http://www.scs.leeds.ac.uk Dyer, Prof. Martin (algorithms and complexity) *Other researchers* Greenhill, Dr. Catherine (Prof. Dyer, algorithms and complexity) *Lecture course* Introduction to Algorithms Theory of computation Computational graph theory and complexity Modern issues in algorithmic design *Research Report Series* <u>http://www.scs.leeds.ac.uk/services/reports/reports.html</u> *Current periodicals*: P, X, Y

#### **UNIVERSITY OF LEICESTER**

University of Leicester, University Road, Leicester LE1 7RH.

Department of Mathematics and Computer Science Tel: 0116 2523887 Fax: 0116 2523604 http://www.mcs.le.ac.uk

Dr. R.J. Marsh (2525107) (quantum groups, Lie algebras, Weyl groups and related piecewise-linear combinatorics) <u>http://www.mcs.le.ac.uk/~rmarsh</u> Prof. I.A. Stewart (2525356) (finite model theory; complexity theory; pure, applied, and algorithmic graph theory) <u>http://www.mcs.le.ac.uk/~istewart</u> Prof. R.M. Thomas\* (2523885) (combinatorial group and semigroup theory, automata theory) <u>http://www.mcs.le.ac.uk/~rthomas</u>

*Other researcher based in the Department* Prof. R.O. Davies (retired) (2705002)

Research students

R. Bruce (Prof. Stewart) (mobile computing and complexity)
D. Garnham (Prof. Thomas) (group theory and formal languages)
T. Hardcastle (Prof. Thomas) (loops and groups)
M. Hoffmann (Prof. Thomas) (semigroups and automata)
S.R. Lakin (Prof. Thomas) (group theory and complexity)
F. Madelaine (Prof. Stewart) (finite model theory)
A. Puricella (Prof. Stewart) (algorithms and complexity)

Lecture courses

Logic and Discrete Structures (48 lectures, 1<sup>st</sup> year u/g, Dr. de Vries) Algorithms and Data Structures (36 lectures, 1<sup>st</sup> year u/g, Dr. Measor and Dr. Ghani) Pure Mathematics at Work (18 lectures, 1<sup>st</sup> year u/g, Dr. Ault) Automata, Languages and Computation (36 lectures, 2<sup>nd</sup> year u/g, Prof. Thomas) Design and Analysis of Algorithms (36 lectures, 2<sup>nd</sup> year u/g, Dr. Schmitt) Coding Theory (36 lectures, 3<sup>rd</sup> year u/g, Dr. Ault) Parallel and Distributed Computing (36 lectures, 3<sup>rd</sup> year u/g, Prof. Stewart)

#### Seminars

The department holds regular seminars (given by internal and external speakers) in Mathematics and Computer Science,

including several with a combinatorial theme. Details may be found on the web; see

http://www.mcs.le.ac.uk/seminars/Seminars.html

#### Technical Reports

The department has a technical report series, copies of which may be obtained on request. Details are available on the web at: http://www.mcs.le.ac.uk/research/publications/Publications.html

#### Department of Psychology

Tel: 0116 2522170 http://www.mcs.le.ac.uk/psychology/

Dr. R.T. Gillett (2522171) *Current periodicals*: E, F, M, N, P, Q, T, X, Y, b, h

#### LONDON SCHOOL OF ECONOMICS

London School of Economics, Houghton Street, London WC2A 2AE. Tel: 0207 955 7732 - 0207 955 6373 Fax: 0207 955 6877 <u>http://www.maths.lse.ac.uk</u>

#### Department of Mathematics, and Centre for Discrete and Applicable Mathematics

Prof. Steve Alpern (ergodic theory, game theory, search theory) Dr. Martin Anthony\* (computational learning theory, neural networks, theory of computing)

Prof. Norman Biggs (algebraic graph theory, history of combinatorics, applications in physics and finance)

Prof. Graham Brightwell (partially ordered sets, random structures)

Dr. Jan van den Heuvel (graph theory, discrete mathematics, applications)

Dr. Bernhard von Stengel (Game theory and Complexity)

Research students

Nick Georgiou (Prof. Brightwell) (posets)

Snezana Pejic (Dr. van den Heuvel) (frequency assignment) Phillipp Reinfeld (Prof. Biggs) (algebraic graph theory)

CDAM Research Reports

http://www.cdam.lse.ac.uk/Reports/

Details and reports can be requested from Jackie Everid, (info@maths.lse.ac.uk, 0207 955 7732)

#### Department of Operational Research

Tel: 0207 955 7653

Dr. Gautam Appa (orthogonal latin squares, mixed integer programming, robust regression)

Dr. Susan Powell (mathematical programming and combinatorial optimization,

operational research) Prof. Paul Williams (linear and integer programming)

Lecture courses

Discrete mathematics (20 lectures, 3rd year u/g, Prof. Biggs) Combinatorial optimization (20 lectures, 3rd year u/g and M.Sc., Dr. Appa) Theory of Algorithms (20 lectures, 3rd year u/g and M.Sc., Dr.von Stengel) Computational learning theory (20 lectures, M.Sc., Dr. Anthony) *Seminar and Workshop* Seminar on Discrete and Applicable Mathematics, Thursdays 2:00, Dr. von Stengel CDAM Informal Workshop, Fridays 3:30, Dr. van den Heuvel

#### **UNIVERSITY OF MANCHESTER**

University of Manchester, Oxford Road, Manchester M13 9PL. Tel: 0161 275 5800 Fax: 0161 275 5819 http://www.ma.man.ac.uk

#### **Department of Mathematics**

Dr. T. Panov (toric varieties and polytopes, Stanley-Reisner rings and simplicial complexes, and subspace arrangements)

Prof. N. Ray\* (umbral calculus, chromatic polynomials, posets of partitions and permutations, permutation matrices, Hopf algebras and quantum structures,

Toric varieties and polytopes)

http://www.ma.man.ac.uk/~nige/

Dr. R. Sandling (block designs)

Dr. G. Walker (modular representation theory, symmetric functions, Schur functions, partitions,

Young tableaux, pictures)

Lecture courses

Trees and networks (1st year u/g, Prof. Ray)

Coding theory (3rd year u/g, Dr. McCrudden)

Combinatorics (4th year, u/g, Prof. Ray)

Discrete mathematics (2nd year u/g, Dr. Sandling)

Discrete optimization (3rd year u/g, Dr. Sandling)

Seminar

Occasional joint combinatorics seminars, in conjunction with Salford University and UMIST (details from N. Ray) *Current periodicals*: E, F, P, R, S, U, X, Y

# UNIVERSITY OF MANCHESTER INSTITUTE OF SCIENCE AND TECHNOLOGY

UMIST, P.O. Box 88, Manchester M60 1QD. Tel: 0161 200 3641 Fax: 0161 200 3669

#### **Department of Mathematics**

Mr. J. Gilder\*, Prof. R.M. Bryant, Dr. P.J. Rowley, Dr. P.J. Laycock Dr. A.V. Borovik (matroids and generalisations, Coxeter matroids, Coxeter groups)

Seminar

Occasional joint combinatorics seminar in conjunction with Salford University and

Manchester University; details from N. Ray (Manchester) *Lecture course* Combinatorics (24 lectures, 3rd year u/g, J. Gilder) Coding theory (24 lectures, 3rd year u/g, J. Gilder) Discrete mathematics (24 lectures, 2nd year, u/g, Mr. Gilder) *current periodicals*: C, D, K, L, N, U

#### **UNIVERSITY OF MIDDLESEX**

Middlesex University Business School, The Burroughs, London, NW4 4BT Tel: 020 8411 6824

#### Mathematics and Statistics Group

Dr Thomas D Bending\*, (Bent functions; finite geometrics; lotteries). David F Jarrett, (Graph Theory applied to traffic modelling) Dr Patricia Wackrill (Graph theory, traffic modelling, Celtic knotwork) Prof. Chris Wright (Graph theory, routing on networks) *Lecture Course* Further Maths (3<sup>rd</sup> yr u/g) *Current Periodicals*: F, T, b

#### UNIVERSITY OF NEWCASTLE UPON TYNE

Newcastle University, Newcastle upon Tyne NE1 7RU.0 Tel: 0191 222 6000 Fax: 0191 222 8020 http://www.ncl.ac.uk/mathematics/

#### **Department of Mathematics**

Prof. R.H. Dye (geometry of the classical groups, spreads, ovoids, configurations and their groups)

Dr. A.J. Duncan (combinatorial group theory, one-relator products of groups, decision problems and equations over presentations of groups) Dr. O.H. King\* (subgroup structure of classical groups, Buekenhout geometries) Dr. S. Rees (algorithms in group theory and geometry, automatic groups and related classes of groups, connections between group theory and formal language theory) Research associates Dr. M. Batty Dr. C.H.E.W. Röver *Research students* S. Fulthorp (Dr. Duncan) O. Payne (Dr. Rees) Lecture courses Graph Theory (24 lectures, 2nd/3rd/4th year u/g, alternate years, Dr. Duncan) Coding Theory (24 lectures, 2nd/3rd/4th year u/g, alternate years, Dr. Ford) Geometries and Designs (24 lectures, 3rd/4th year u/g, alternate years) Current periodicals: E, F, P, R, T, U X, Y, c, d

#### UNIVERSITY OF NOTTINGHAM

University of Nottingham, University Park, Nottingham NG7 2RD. Tel: 0115 951 4949 Fax: 0115 951 4951 http://www.maths.nottingham.ac.uk

#### School of Mathematical Sciences

Dr. D.R. Woodall\* (951 4959) (graph colourings, chromatic polynomials, electoral systems) <u>http://www.maths.nottingham.ac.uk/personal/drw</u> *Research students* T. R. Poole(Dr. Woodall) *Lecture courses* Introductory Graph Theory (30 lectures, 3<sup>rd</sup> yr u/g, Dr. Anderson) Combinatorics (30 lectures, 3rd and 4<sup>th</sup> year u/g, Dr. Woodall) Coding and cryptography (30 lectures, 3rd year u/g, Dr. Woodall) *Current periodicals*: none

#### THE OPEN UNIVERSITY

The Open University, Walton Hall, Milton Keynes MK7 6AA. Tel: 01908 653479 Fax: 01908 653744 <u>http://mcs.open.ac.uk/mcsexternal/</u>

#### Faculty of Mathematics and Computing

Dr. F.C. Holroyd (652327) (fractional and circular graph colourings; graceful and related tree labellings)

Dr. B.M. Maenhaut (659274) (combinatorial design theory, graph theory) R. Nelson (retired) (Ramsey theory)

Dr. K.A.S. Quinn\* (653909) (designs and their applications)

Dr. C.A. Rowley (0207 794 0575) (design of experiments, problems in document science)

Dr. B.S. Webb (653242, 01752 896138) (automorphisms of designs and permutation representation, infinite designs)

Dr. R.J. Wilson (652337) (edge-colourings of graphs, history of combinatorics, spectral graph theory)

Research fellows

Prof. M.J. Grannell (sec. 653479) (combinatorial design theory, combinatorial computing, Steiner systems)

Prof. T.S. Griggs (sec. 653479) (combinatorial design theory, combinatorial computing, Steiner systems)

(For staff web pages, please go to <u>http://mcs.open.ac.uk/puremaths/</u> and click on `Members'.)

Research students

G.K. Bennett (part-time, Prof. Grannell, Prof. Griggs and Dr. Webb) (topological design theory)

A.D. Forbes (part-time, Prof. Grannell, Prof. Griggs and Dr. Maenhaut) (configurations and colourings of designs)

P. Garcia (Dr. Wilson) (history of combinatorics)

T. Johnson (part-time, Dr. Holroyd) (graph multi-colourings, colourings with structured colour set)

G. J. Lovegrove (part-time, Prof. Grannell, Prof. Griggs and Dr. Quinn) (automorphisms of designs)

J. Williams (part-time, Dr. Wilson and Dr. Holroyd) (total colourings)

I. Watts (part-time, Dr. Holroyd) (graph homomorphisms, generalisations of graph colourings)

#### Faculty of Technology

Tel. 01908 652944 Fax 01908 654052 <u>http://www-tec.open.ac.uk</u>
Dr. A.K. Dolan (networks)
Dr. J.H. Johnson (networks, complex systems, computer vision, transportation systems)
Dr. J. Rooney (robotics, kinematic geometry, Clifford algebras, differential geometry, screw theory, tensegrity structures) *Research Student*J.D. Hobbs (part-time, Dr. Rooney) (mechanical space systems, reconfigurable structures)

#### Courses

M336: Groups and Geometry (30 CAT points, third level) MT365: Graphs, networks and design (30 CAT points, third level) M836: Coding Theory (M.Sc. component course) *Current periodicals*: H, J, N, P, S, V, X, Y, b

#### UNIVERSITY OF OXFORD

The Mathematical Institute, 24-29 St. Giles, Oxford OX1 3LB. Tel: 01865 273525 Fax: 01865 273583

#### Faculty of Mathematical Sciences

Dr. M.B. Powell (St. Peter's) (groups and codes) Prof. D.J.A. Welsh\* (Merton) (applied probability, complexity) Dr. R. Leese (St. Catherine's) (channel assignment problems)

#### **Department** of Statistics

1 South Parks Road, Oxford OX1 3TG.
Tel: 01865 272860 Fax: 01865 272595
Dr. C.J.H. McDiarmid (Corpus Christi) (probability and algorithms, probabilistic methods in combinatorics, colouring problems)

*Research staff* J.M. Talbot

Research students M. Luczak (St. Catherine's, Prof. Welsh) Lecture courses Combinatorial optimisation (12 lectures, 2nd year u/g, Dr. McDiarmid) Communication theory (16 lectures, 3rd year u/g, Dr. McDiarmid and Dr. Powell) Complexity and cryptography (16 lectures, 4th year u/g, Dr. Talbot) Randomised algorithms (16 lectures, 1st year p/g, Prof. Welsh) Seminar Combinatorial theory (Tuesdays at 3 p.m.) Current periodicals: D, E, J, K, L, N, P, Q, T, Y

#### **UNIVERSITY OF PORTSMOUTH**

Mercantile House, Hampshire Terrace, Portsmouth, Hants PO1 2EG. Tel: 023 92 843016 Fax: 023 92 843106 http://www.sms.port.ac.uk/dmshome.html

#### School of Computer Science and Mathematics,

Dr. C.W. Evans\* (843119) (graph theory, combinatorial theory, coding theory and designs)
Dr. A. Makroglou
Mr. T.S. Manns *Lecture courses*Graph and networks (24 lectures, final year u/g, Dr. Evans)
Discrete Mathematics (24 lectures, stage 2 u/g, Dr. Evans)
Discrete Mathematics (24 lectures, electrical engineering stage 2, Mr T Manns)
Projects (final year u/g). Occasional Seminars. *Current periodicals*: P, X, Y

### QUEEN MARY, UNIVERSITY OF LONDON

Queen Mary, University of London, Mile End Road, London E1 4NS. Tel: 0207 975 5440 Fax: 0208 980 9587

#### School of Mathematical Sciences (Mathematics Research Center)

Prof. D.K. Arrowsmith (graph colourings, percolation theory, interaction models and knot invariants)

Prof. R.A. Bailey (design of experiments, latin squares and their generalisations, designs for complicated block structures, association schemes, partition species) Prof. P.J. Cameron\* (groups and their operants, graphs, codes, designs, models, orbits and enumeration)

Dr. Thomas Müller (group theory, combinatorics, analysis)

Dr. L.H. Soicher (5463) (computational group theory, graph theory, finite geometry, design theory)

Dr. D. S. Stark (probability and combinatorics)

Researchers

Dr. Simeon Ball (Research fellow)

Dr. P. Dobcsányi (Research assistant, design theory and internet resources)

Prof. Dan Hughes (Emeritus Professor: finite geometry)

Dr. J.W.B. Hughes (representations of Lie superalgebras)

Dr. S.P. Mansilla (Research fellow, arc-transitive digraphs and Latin squares)

Prof. Donald Preece (Professorial fellow)

Research students

Ross Applegate (Prof. Cameron; posets)

John Arhin (Dr. Soicher; existence and structure of SOMAs)

Matt Ollis (Prof. Bailey; design theory)

Pablo Spiga (Prof. Cameron; permutation groups)

Sam Tarzi (Prof. Cameron; model theory)

*Lecture courses* 

Complexity and Optimization in Operational Research (36 lectures, 2nd/3rd year u/g, Prof. Hodges and Dr. Stark)

Games and Linear Programming (36 lectures, 2nd/3rd year u/g, Dr. Radcliffe) Discrete mathematics (36 lectures, 1st year u/g, Prof. Bullett)

Algorithmic Mathematics (36 lectures, 2nd year u/g., Dr Vivaldi)

Graph Theory and Applications (36 lectures, 2nd/3rd year u/g., Prof. Leedham-Green)

Coding Theory (36 lectures, 3rd year u/g., Dr Beck)

Design of Experiments (36 lectures, 3rd year u/g., Prof. Bailey)

Sets, logic and categories (24 lectures, 4th year, M.Sc., Prof. Leedham-Green) Seminars Combinatorics study group (Prof. Cameron, Fridays 4:30pm) Design of Experiments (Prof. Bailey, Thursday 4:30pm) Pure Mathematics (Dr. Müller, Monday 4:30pm) Current periodicals: B, E, F, H, P, R, T, U, X, Y, g

#### UNIVERSITY OF READING

Department of Mathematics, University of Reading, Whiteknights, P.O. Box 220 Reading, Berks RG6 6AX. Tel: 0118 987 5123 Fax: 0118 931 3423 e-mail: smsmaths@rdg.susssysl.ac.uk

### **Department of Mathematics**

Dr. J.K. Dugdale (graph theory) Tel: 0118 9875123, ext. 4012 Prof. A.J.W. Hilton\* (graph theory, design theory, finite set systems) Tel: 0118 931 8989 Dr.W.R.Johnstone (graph theory) Tel: 0118 9875123,ext.4013 Dr. D.S.G. Stirling (graph theory) Honorary fellow Dr. D.C. Daykin Research Student M.Johnson *Lecture courses* Combinatorics (20 lectures, 1st year u/g,Dr Dugdale) Combinatorics (40 lectures, 3nd year u/g, Dr. Dugdale, Prof. Hilton) Graph theory (40 lectures, 3rd year u/g, Dr. Dugdale, Prof. Hilton) Combinatorics (20 lectures, 3rd year u/g, Prof. Hilton) Research seminar Combinatorics seminar (Mondays at 3 p.m.) Current periodicals: C, N, P, S, X, Y, b

#### **ROTHAMSTED EXPERIMENTAL STATION**

IACR - Rothamsted, Harpenden, Herts AL5 5RJ Tel: 01582 763133 Fax: 01582 4671166 http://www.res.bbsrc.ac.uk/stats/

#### Statistics Department

Prof. R.W. Payne\*, (Statistical computing, design and analysis of experiments, identification keys and diagnostic tables, statistical modeling)Welham, Sue (REML estimation of various components, neighbour effects, design of laboratory experiments, statistical modeling*Current periodicals*: E, F

### **ROYAL HOLLOWAY**

Royal Holloway, Egham Hill, Egham, Surrey TW20 0EX.

#### **Department of Mathematics**

Tel: 01784 443093 Fax: 01784 430766

Dr. M.V.D. Burmester (information security; cryptography, complexity) Dr. R.M. Damerell (algebraic combinatorics, computing applications) Prof. J.W. Essam (applications of graph theory, combinatorics, numerical analysis and computing techniques to problems in critical phenomena theory, in particular to phase transitions, conduction in disordered materials, polymer science, epidemic models and cellular automata) Dr. S. Blackburn (enumeration of groups, applications of algebraic methods to data communications, coding theory, cryptography) Dr. A. Fuchsberger (cryptography and information security) Dr. K.M. Martin (cryptography and information security) Prof. C. Mitchell (cryptography and information security) Dr. S.P. Murphy (spatial probability, cryptography) Dr. C.W. Norman (algebraic topics) Prof. F.C. Piper (algebraic combinatorics: finite geometry, theory of designs, coding theory, cryptography) Dr. M.J. Robshaw (cryptography and information security) Prof. P.R. Wild\* (algebraic combinatorics: designs and difference sets, statistical applications, applications of discrete mathematics to data communications, coding theory, cryptography) Visiting Professors Prof. H.J. Beker, Prof. Y. Desmedt, Prof. M. Walker (Vodaphone Ltd), **Research Staff** Dr. S. Ng Dr. R. Shipsey Dr. R. White *Research students* M. Al-Meaither, S. Al-Riyami, G. Blacklaw, C. Blackwell, A. Dent, E. Fazey, H. Hopkins, P. Jarupunphol, S. M. Kim, V. Khu-Smith, T. Martin, I. Michalopoulos, F. Mirza, L. O'Toole, P. Rowe, R. Stockwell, C. Swart, B. Wallace, Y. Yemane Lecture courses Discrete mathematics (33 lectures, 2nd year u/g, Dr. Cohn) Cipher systems (33 lectures, 3rd year u/g, Prof.Wild) Combinatorics (33 lectures, 3rd year u/g, Dr. Yates) Error correcting codes (33 lectures, 3rd year u/g, Dr. Cohn) Game theory (33 lectures, 3rd year u/g, Dr, Burmester) Combinatorial optimisation (33 lectures, 3rd year u/g, Dr. Yates) Theory of graphs (33 lectures, 3rd year u/g, Dr. Damerell) Theory of error correcting codes (33 lectures, p/g, Dr. Burmester) Cipher systems (33 lectures, p/g, Prof. Wild) Combinatorics (33 lectures, p/g, Dr. Damerell) Graph theory (33 lectures, p/g, Dr. Damerell) Design theory (33 lectures, p/g, Prof. Wild) Discrete Optimisation (33 lectures, p/g, Dr. Yates) The Department of Mathematics runs taught M.Sc. programmes in Information Security,

Discrete Mathematics with Computing Applications and Dependable Computer Systems jointly with the Department of Computer Science.

#### Seminars

Discrete mathematics and its applications (organizer: Dr. Blackburn) (Tuesdays at 4.00 p.m. in room 219)

#### Department of Computer Science

Tel: 01784 443421 Fax: 01784 443420 Prof. J.S. Shawe-Taylor\*, Prof. Z.G. Gutin, Dr. P.G. Jeavons *Lecture courses* Theory of computing (33 lectures, 1st year u/g, Dr. Jeavons) Discrete mathematics and probability (33 lectures, 1st year u/g, Dr. Murphy) Design and analysis of algorithms (33 lectures, 2nd year u/g, Dr. Gollman) Formal languages (33 lectures, 2nd year u/g, Dr. Gollman) Signals, codes and ciphers (33 lectures, 3rd year u/g, Dr. Price, Prof. Mitchell and Prof. Shawe-Taylor) Neural networks (33 lectures, 3rd year u/g, Prof. Shawe-Taylor) Connection science and machine learning (organizer: Prof. Shawe-Taylor) *Current periodicals*: E, F, H, J, M, N, P, S, T, X, b, h

#### **UNIVERSITY OF ST. ANDREWS**

The Mathematical Institute, North Haugh, St. Andrews, Fife KY16 9SS. Tel: 01334 463745 Fax: 01334 463748 <u>http://www.dcs.st-and.ac.uk</u>

### School of Mathematics and Statistics

Dr. C.M. Campbell\* (combinatorial group theory, combinatorics of semigroup presentations)

R.L. Constable (combinatorics)

Prof. K.J. Falconer (combinatorial geometry)

Prof. A.W. Kemp (combinatorial applications in statistics)

Dr. C.D. Kemp (combinatorial applications in statistics)

Dr. J.H. McCabe (graph theory, number theory)

Dr. J.J. O'Connor (combinatorial group theory)

Dr. L. Olsen (analysis and combinatorics)

Prof. E.F. Robertson (combinatorial group theory, combinatorics of semigroup presentations)

Dr. N. Ruskuc (combinatorial semigroup theory)

Dr. B.O. Stratmann (combinatorial group theory, Kleinian groups) *Lecture courses* 

Discrete mathematics (56 lectures, 2nd year u/g)

Finite mathematics (24 lectures, 3rd/4th year u/g, alternate years)

Graphs (24 lectures, 3rd/4th year u/g, alternate years)

Various courses involving algorithms and complexity at  $3^{rd}/4^{th}$  year u/g..

*Current periodicals*: B, E, F, f

#### UNIVERSITY OF SALFORD

University of Salford, Salford M5 4WT. Tel: 0161 295 3999 Fax: 0161 295 5559

Mathematics Section, School of Sciences Prof. R. Hill\* (coding theory, finite geometries) Visiting Professor T. Maruta (September 2000 - August 2001) *Research students* Love, C.P. (Dr. Hill, coding theory) *Lecture courses* Discrete mathematics (48 lectures, 2nd year u/g, Prof. Hill) Coding theory (48 lectures, 3rd year u/g, Prof. Hill) *Current periodicals*: J, P, T, h

### SOUTH BANK UNIVERSITY

S.C.I.S.M., South Bank University, 103 Borough Road, London SE1 0AA. Tel: 0207 815 7400 Fax: 0207 815 7499 http://www.scism.sbu.ac.uk

### School of Computing, Information Systems and Mathematics

Jennings, Dr. Sylvia\* (coding theory, text compression) King Sing, Dr. Roland H.T. (combinatorial models of fault based program testing) Whitty, Prof. Robin (Graph theoretical modeling of human memory) *Visiting Professor:* Singmaster, David (recreational mathematics) *Lecture courses* Discrete mathematics occurs in the first year of all the computing courses (S. Jennings, R. Whitty, D. Singmaster). Option in Applied Cryptography occurs in the final year (S. Jennings) *Working Paper Series* <u>http://www.scism.sbu.ac.uk/publications/tech\_rep/index.html</u> *Current periodicals*: T

#### UNIVERSITY OF SOUTHAMPTON

University of Southampton, Southampton SO17 1BJ. Tel: 023 8059 3612 Fax: 023 8059 5147 http://www.maths.soton.ac.uk

#### Faculty of Mathematical Studies

Prof. G.A. Jones (x3654) (permutation groups, connections between groups and graphs)
Prof. R.C. King (x3700) (representations theory of Lie algebra and superalgebras, applications in Physics)
Dr. E.K. Lloyd\* (x5135) (combinatorics and graph theory including applications and history)
Prof. C.N. Potts (x3651) (combinatorial optimization and scheduling)
Prof. D. Singerman (x3671) (discontinous groups with applications to Riemann surfaces and the theory of maps) *Research student*Anton Prowse (Prof. Jones) *Lecture courses*Combinatorics and Graph theory (13 lectures, 1st year u/g, Dr. Ann Hirst)
Theory of numbers (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year u/g, Dr. Mary Jones)

Scheduling (10 lectures, M.Sc. in Operational Research, Prof. Potts) Algorithms (36 lectures, 2nd year, u/g, Prof. Jones) Information and coding Theory (36 lectures, 3rd year u/g, Prof. Jones) Algorithms, machines and languages (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year u/g, Prof. Jones) Finite Mathematics (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year u/g, Dr. Jim Renshaw) Graph Theory (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year u/g, Dr. Jim Renshaw)

#### **Department of Management**

023 8059 3966 Dr. Julia A. Bennell (x5671)

Current periodicals: A, C, E, F, M, N, P, R, T, X, Y

#### STAFFORDSHIRE UNIVERSITY

School of Computing, Staffordshire University, Leek Road, Stoke-on-Trent, ST4 2AZ.

Tel/Fax: 01782 294026

Mathematics and Statistics Group Burrows, Prof. Brian cmtblb@soc.staffs.ac.uk Easton, Dr. Sarah\* cmtsje@soc.staffs.ac.uk Pratt, Mr. Fred cmtjfo@soc.staffs.ac.uk Talbot, Dr. Richard F. cmtrft@soc.staffs.ac.uk Research students Millington, June (Measurement of disorder in non-periodic sequences, Burrow, Prof. B, Talbot, Dr. R.)

#### UNIVERSITY OF STIRLING

The University of Stirling, Dept. of Computing Science and Mathematics, Stirling, Scotland FK9 4LA. Tel: 01786 467460 Fax: 01786 464551

# Mathematics and Statistics Group, Department of Computing Science & Mathematics

http://www.cs.stir.ac.uk/maths/ Dr. F.K. Bell (467462) (algebraic graph theory) Dr. P.S. Jackson (467430) (algebraic graph theory) Prof. P. Rowlinson\* (467464) (algebraic graph theory) *Lecture courses* Discrete structures (44 lectures, 1st year u/g) Combinatorics (32 lectures, 3rd/4th year u/g, alternate years) Algebra and codes (32 lectures, 3rd/4th year u/g, alternate years) *Current periodicals*: C, F, R, X, Y, b, d

#### UNIVERSITY OF SURREY

University of Surrey, Guildford, Surrey GU2 7XH. Tel: 01483 300800 Fax: 01483 876071 http://www.maths.surrey.ac.uk

**Department of Mathematics and Statistics** Honorary Visiting Senior Research Fellows Dr. A.D. Keedwell\* (Latin squares and quasigroups, finite projective planes, coding theory)

Dr. P.J. Owens (Polyhedral graphs, Latin squares)

*Department of Electronic and Electrical Engineering* Dr. D.R.B. Burgess (Coding and security in communications)

Lecture courses

Groups and Symmetry (36 lectures, 2<sup>nd</sup> year u/g, Dr. Hydon) Algorithms and Data structures (36 lectures, 2<sup>nd</sup> year u/g, Mr. Bish) Statistical methods (36 lectures, 2<sup>nd</sup> year u/g, Dr. Young) *Current periodicals*: C, E, F, T, V, X, Y, b, c, i

### UNIVERSITY OF SUSSEX

University of Sussex, Brighton, East Sussex BN1 9QH. Tel: 01273 678105 Fax: 01273 678097 http://www.maths.susx.ac.uk

School of Mathematical Sciences

Prof. J.W.P. Hirschfeld\* (finite geometry, algebraic geometry, coding theory) http://www.maths.susx.ac.uk/Staff/JWPH/ Dr. R.P. Lewis (theory of partitions) http://www.maths.susx.ac.uk/Staff/RPL.html/ *Research students* M. Aghaei (Prof. Hirschfeld, coding theory) M.E. Jimenez-Contreras (Prof. Hirschfeld, finite geometry) P.R. Hammond (Dr. Lewis, number theory) A. Sonnino (Prof. Hirschfeld, finite geometry) Lecture courses Discrete Maths I (30 lectures, 1<sup>st</sup> yr u/g, Dr, Wraith) Discrete Maths II (30 lectures, 1<sup>st</sup> yr u/g, Dr. Lewis) Number theory (30 lectures, 2<sup>nd</sup> year u/g, Dr. Lewis) Graph theory (30 lectures, 3rd and 4<sup>th</sup> year u/g, Dr. Lewis) Coding theory (30 lectures, 3rd and 4<sup>th</sup> year u/g, Prof. Hirschfeld) Algebraic geometry I (30 lectures, p/g, Prof. Hirschfeld) Algebraic geometry II (30 lectures, p/g, Prof. Hirschfeld) **Seminars** Topology, Algebra and Geometry Group seminars, Prof. Hirschfeld. Fridays 11.30 a.m. http://www.maths.susx.ac.uk/Seminars/TAGG/Current.html Working Paper series http://www.maths.susx.ac.uk/Reports/TAGG/index.html TAGG research reports can be requested from Richard Chambers (r.j.chambers@sussex.ac.uk) Current periodicals: E, F, T, X, c

# UNIVERSITY COLLEGE, LONDON

University College, Gower Street, London WC1E 6BT. Tel: 0207 387 7050 Fax: 0207 383 5519

#### **Department of Mathematics**

(extension 2838) Prof. C.A. Rogers (retired), Prof. D.G. Larman, Prof. D. Preiss, Prof. K.M. Ball, Dr. J.A. Haight, Prof. P. McMullen, Dr. A.D. Scott\*, Prof. I. Barany, M. Csornvei **Research Students** M. Antilla (Prof. Ball) S. Sezgin (Prof. Larman) *Lecture courses* Optimisation  $(2^{nd} \text{ year } u/g)$ Graph Theory and Combinatorics (3rd year u/g) Geometry of numbers (3rd year u/g, Prof. Larman) Computational Geometry (3<sup>rd</sup> year u/g, Prof. McMullen) Game theory (3rd year u/g, Prof. Binmore) Seminar Colloquium (Wednesdays at 2.30 p.m.) Informal Seminar, Mondays or Tuesdays at 4.00pm

#### **Department of Economics**

Prof. K. Binmore

#### UNIVERSITY COLLEGE, SWANSEA

University College, Swansea SA2 8PP. Tel: 01792 205678 Fax: 01792 295618

#### Department of Mathematics

Dr. F.W. Clarke, Dr. R.J. Cook\*, Dr. A.D. Thomas *Lecture courses* Combinatorics (20 lectures, 3rd year u/g, Dr. Cook) Applied algebra (40 lectures, 3rd year u/g, Dr. Clarke)

*Department of Chemistry* C.W. Haigh

#### **VODAFONE GROUP RESEARCH AND DEVELOPMENT - UK**

The Courtyard, 2-4 London Road, Newbury, Berkshire RG14 1JX. Tel: 01635 33251 Fax: 01635 31127 Dr. S. Babbage\*, Dr. N. Bone, D. Godsave, Dr. N. Jefferies, S. Manning, Dr. S. Thiel, Prof. M. Walker, R. Wright (Vodafone Ltd) (Cryptography, randomness, statistics, applications of graph theory and combinatorics) *Current periodicals*: N, Z

### **UNIVERSITY OF WARWICK**

University of Warwick, Coventry, CV4 7AL.

Department of Computer Science Tel: 024 7652 3193 Fax: 024 7657 3024 <u>http://www.dcs.warwick.ac.uk/</u> Dr. L.A. Goldberg\* (combinatorial algorithms, randomised algorithms) 024 7652 3363 <u>http://www.dcs.warwick.ac.uk/~leslie/</u> Dr. Paul Goldberg (combinatorial algorithms, VC dimension) 024 7652 3088 http://www.dcs.warwick.ac.uk/~pwg/

Dr. R. Martin (combinatorial algorithms, randomised algorithms) 024 7657 3802 http://www.dcs.warwick.ac.uk/~martin

Prof. M. Paterson (string algorithms, combinatorial algorithms) 024 7652 3194 http://www.dcs.warwick.ac.uk/~msp

Research Students

Graham Cormode (Paterson) (sequence comparison problems) http://www.dcs.warwick.ac.uk/~grahamc

Steven Kelk (Goldberg) (combinatorial algorithms, randomised algorithms) http://www.dcs.warwick.ac.uk/~skelk

#### Lecture courses

Mathematics for computer scientists (1st year u/g) Discrete Maths 1 (1st year u/g) Discrete Maths 2 (1st year, u/g) Data Structures and Algorithms (2nd year, u/g) Complexity of Algorithms (3rd year, u/g) *Web Page* Algorithms and Complexity Theory Research Group <u>http://www.dcs.w</u> arwick.ac.uk/~leslie/theory.html

### Warwick Business School

Phone: 024-76528220 Fax: 024-76524539 Dr. Vladimir Deineko (Combinatorial Optimisation, Polynomially Solvable Cases of NP-hard Problems) 024-76524501 *Lecture courses* Mathematical Programming (1st, 2nd, 3rd year u/g and master students) Operational Research (4rd year, u/g) Optimisation (master students)

# 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 2001. 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.

# Abel, R. J. R., Greig, M. and Rees, D. H.

Existence of OBIBDs with k = 4 with and without nesting, submitted.

# Adams, P., Bryant, D., El-Zanati, S., Vanden Eynden, C. and Maenhaut, B

Least common multiples of cubes, Bull. Inst. Combin. Appl., to appear.

# Adams, P., Bryant, D. and Maenhaut, B.

Common multiples of complete graphs and a 4-cycle, submitted.

# Allen, S.M., Smith, D.H. and Hurley, S.,

Generation of lower bounds for minimum span frequency assignment, Discrete Applied Mathematics, Vol. 119, Nos. 1-2, (2002), pp 59-78.

# Alpern, S.

Rendezvous in One and More Dimensions, CDAM Research Report 2001-05.

# Alpern, S. and Howard, J.V.

Alternating Search at Two Locations, Dynamics and Control, Vol. 10, 319-339.

# Alpern, S. and Prasad, V.

Typical Properties of Volume Preserving Homeomorphisms. Cambridge Tracts in Mathematics, Cambridge University Press. Vol. 139

# Alpern, S. and Reyniers. D.

Games of Crowding, International Game Theory Review, Vol. 3, No. 1, 27-56.

# Anderson, I.

Some cyclic and 1-rotational designs, in Surveys in Combinatorics,2001 (ed. J.W.P.Hirschfeld), LMS Lecture Note Series 288, 2001, 47-73.

# Anderson, I. and Finizio, N.J.

On the construction of directed triplewhist tournaments, J. Comb. Math. and Combin. Computing 35 (2000), 107-115.

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

Locally balanced change-over designs, Utilitas Math., to appear

# Anderson, I and Preece, D.A.

Power-sequence terraces for Zn where n is an odd prime power, Discrete Maths, to appear.

# Andrews, G.E. and Lewis, R.P.

Restricted bipartitions, Discrete Mathematics, 232 (2001), 85-89.

# Andrews, G.E. and Lewis, R.P.

An algebraic identity of F.H. Jackson and its implications for partitions, Discrete Mathematics, 232 (2001), 77-83.

# Anthony, M.

(Book) Discrete Mathematics of Neural Networks: Selected Topics, SIAM, 2001.

### Araujo, I.M., Branco, M.J.J., Fernandez, V.H., Gomes G.M.S. and Ruskuc, N

On generators and relations for unions of semigroups, Semigroup Forum 63 (2001), 49 - 62.

### Araujo, I.M. and Ruskuc, N.

Finite presentability of Bruck-Reilly extensions of groups, J. Algebra 242 (2001), 20 - 30.

### Atkinson, A. C. and Bailey, R. A.

One hundred years of the design of experiments on and off the pages of Biometriki. *Biometrika*, **88**, (2001), 53-97.

### Atkinson, A. C., Bogacka, B. and Zhigljavsky, A.

Editors of *Optimum Design 2000*, Kluwer, Dordrecht, 2001. ISBN 0-7923-6798-7

#### Atkinson, M.D., Murphy, M.M. and Ruskuc, N.

Sorting with ordered stacks in series, Theoret. Comput. Sci., to appear.

#### Atkinson, M.D., Murphy, M.M. and Ruskuc, N.

Partially well-ordered closed sets of permutations, Order, to appear.

#### Babbage, S.,

Design of Security Algorithms for Third Generation Mobile Telephony Information Security Technocal Report, Vol 5, No 3 (2000), 66-73.

### Bailey, R. A. and Monod, H.

Efficient semi-Latin rectangles: designs for plant disease experiments. *Scandinavian Journal of Statistics*, **28**, (2001), 257-270.

### Bailey, R. A., Ollis, M. A. and Preece, D. A.

Round-dance neighbour designs from terraces, Discrete Mathematics, submitted.

#### Ball, S., Hill, R., Landjev, I. and Ward, H.

On  $(q^2+q+2,q+2)$ -arcs in the projective plane PG(2,q), Designs Codes Cryptography **24** (2001), 205-224.

# Bedford, D., Ollis, M. A. and Whitaker, R. M.

On bipartite tournaments balanced with respect to carry-over effects for both teams. Discrete Mathematics, **231**, (2001), 81-87.

# Bedford, D., Ollis, M. A. and Johnson, M.

Defining sets for latin squares given that they are based on groups. Submitted.

### Bedford, D. and Johnson, M.

Weak critical sets in cyclic Latin squares. The Australasian Journal of Combinatorics, 23(2001), pp 301-316.

### Bedford, D. and Whitaker, R. M.

Bounds on the number of latin squares in a mutually quasi-orthogonal set, Discrete Mathematics, 231(2001), pp 89-96.

### Bedford, D. and Whitaker, R. M.

A new construction for efficient semi-latin squares. The Journal of Statistical Planning and Inference, 98(2001), pp 287-292.

### Bedford, D. and Whitaker, R. M.

Quasi-orthogonal latin squares and their applications. Submitted.

### Bell, F.K.

Line graphs of bipartite graphs with Hamiltonian paths. Submitted.

### Bell, F.K. and Rowlinson, P.

On the multiplicities of graph eigenvalues. Submitted.

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

Bi-embeddings of Steiner triple systems of order 15, *Graphs Combin.* 17 (2001), 193-197.

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

Cyclic bi-embeddings of Steiner triple systems on 31 points, *Glasg. Math. J.* 43 (2001), 145-151.

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

On cyclic bi-embeddings of Steiner triple systems of order 12*s*+7, *J. Combin. Des.*, to appear.

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

On the bi-embeddability of certain Steiner triple systems of order 15, *Europ. J. Combin.*, to appear.

#### Biggs, N.

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# Biggs, N.

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