

## 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 some entries the combinatorial journals currently being taken are listed; a key to the titles is as follows:

A	Aequationes Mathematicae	N	Discrete Mathematics
B	Algebra Universalis	O	Discussiones Mathematicae: GraphTheory
C	Ars Combinatorica	P	European Journal of Combinatorics
D	Australasian Journal of Combinatorics	Q	Finite Fields and Applications
E	Biometrics	R	Geometriae Dedicata
F	Biometrika	S	Graphs and Combinatorics
G	Bulletin of the Institute of Combinatorics and itsApplications	T	IEEE Transactions on Information Theory
H	Combinatorica	U	Journal of Algebraic Combinatorics
I	Combinatorics, Probability and Computing.	V	Journal of Combinatorial Designs
J	Design, Codes and Cryptography	W	Journal of Combinatorial Mathematics and Combinatorial Computing
L	Discrete and Computational Geometry	X	Journal of Combinatorial Theory Series A
M	Discrete Applied Mathematics	Y	Journal of Combinatorial Theory Series B
a	Journal of Geometry	Z	Journal of Cryptology
b	Journal of Graph Theory	f	Order
c	Journal of Statistical Planning and Inference	g	Random Structures and Algorithms
d	Linear Algebra and its Applications	h	SIAM Journal on Discrete Mathematics
e	Networks	i	Utilitas Mathematica

## **UNIVERSITY OF ABERDEEN**

**Business School** University of Aberdeen, Edward Wright Building, Dunbar Street, Old Aberdeen, AB24 3QY. Tel: 01224 272167

<http://www.abdn.ac.uk/business>

Dr J.D. Lamb\* (graphs, matroids, combinatorial optimisation)

*Lecture Courses:* There are a number of general discrete mathematics courses.

*Current Periodicals:* A, B, E, F, H, I, J, L, M, N, P, Q, R, T, V, W, Z, d, g (some electronic access only).

## **ABERYSTWYTH UNIVERSITY**

**Institute of Mathematics & Physics** Aberystwyth University, Aberystwyth, SY23 3BZ. Tel: 01970 622802 Fax: 01970 6227777

<http://www.aber.ac.uk/maps/en/>

Prof. V.C. Mavron\* (designs, codes)

Dr. T. P. McDonough (designs, permutation groups, codes)

Prof. A.O. Morris (Emeritus: representation theory and algebraic combinatorics)

*Research student*

C Andreou (Regular Hadamard Matrices)

*Lecture courses* Graphs and Network (22 lectures, Prof. Mavron)

Discrete Mathematics (22 lectures, Prof. Mavron)

*Current periodicals:* P, U, h

## **BANGOR UNIVERSITY**

**School of Computer Science** University of Bangor, Dean Street, Bangor, Gwynedd LL57 1UT. Tel: 01248 382686 Fax: 01248 361429

<http://www.maths.bangor.ac.uk>

Dr. C.D. Wensley\* (combinatorial group theory, combinatorial species)

## **UNIVERSITY OF BATH**

**Department of Mathematical Sciences** University of Bath, Bath, BA2 7AY Tel: 01225 386989 Fax: 01225 386492

<http://www.bath.ac.uk/math-sci>

Prof. Peter Mörters (Probability, including random walks and random networks)

Prof. Mathew Penrose (probability theory, geometric random graphs)

Dr. Bernd Sing\* (aperiodic tilings and sequences, enumerative combinatorics, applications to physics)

*Research students*

Adam Kinnison (random walks on random trees, Prof. Mörters)

Marcel Ortgiese (directed polymers in random environments, Prof. Mörters)  
Parkpoom Phetpradap (intersections of random walks, Prof. Mörters)  
Tom Rosoman (topics in random geometric graphs, e.g. percolation thresholds: Prof. Penrose)

Forthcoming visitors to Bath in probability (often interacting with combinatorics) are listed at <http://www.maths.bath.ac.uk/~ak257/pab/pab.html>

*Seminar* Informal Probability Seminar (Friday 12.00, Dr. Alex Cox) may be relevant.

*Current Periodicals:* A, B, D, E, F, H, J, L, M, N, P, Q, R, S, T, U, V, X, Y, Z, a, b, c, d, e, f, g, h. Most of these are electronic access only (sometimes only after a fixed date) but E and F are paper access.

### **BIRKBECK COLLEGE**

*School of Economics, Mathematics and Statistics* Birkbeck College, Malet Street, London WC1E 7HX. Tel: 0207 631 6428 Fax: 0207 631 6416

<http://www.ems.bbk.ac.uk/>

Dr. A. Bowler\* (symmetric designs, combinatorial matrices, permutation groups)

Dr. S. Hart (permutation groups, sum-free sets)

*School of Computer Science and Information Systems* Birkbeck College, Malet Street, London WC1E 7HX. Tel: 0207 631 6700 Fax: 0207 631 6727

<http://www.dcs.bbk.ac.uk/>

Prof. T. I. Fenner (combinatorial algorithms, probabilistic algorithms, random graphs)

Dr. K. Gibson (cryptography, combinatorial algorithms)

Prof. G. Loizou (combinatorial algorithms)

### **UNIVERSITY OF BIRMINGHAM**

*School of Mathematics* University of Birmingham, Edgbaston, Birmingham B15 2TT. Tel: 0121 414 6587 Fax: 0121 414 3389

<http://www.mat.bham.ac.uk>

Dr. P. Butkovič (Combinatorial Optimisation)

Dr. D. Christofides (graph theory, Ramsey theory)

Prof. R.T. Curtis (Combinatorial Algebra)

Dr. A.D. Gardiner (Combinatorics)

Dr. D. Kühn (Graph Theory, Probabilistic Methods)

Dr. D. Osthus\* (Graph theory, Probabilistic Methods, Randomized Algorithms)

#### *Research Students*

O. Cooley (Ramsey theory and extremal graph theory, Dr. Kühn)

B. Fairbairn (Combinatorial Algebra, Prof. Curtis)

L. Kelly (Cycles in directed graphs, Dr. Osthus).

R. Mycroft (Hypergraph embedding problems, Dr. Osthus)

A. Treglown (Graph Packing problems, Dr. Kühn)

### *Lecture courses*

Discrete Mathematics (22 lectures, 1<sup>st</sup> year, Dr. Gardiner)  
Combinatorial Optimisation (22 lectures, 3<sup>rd</sup> year, Dr. Butkovič)  
Combinatorics (22 lectures, 3<sup>rd</sup> and 4<sup>th</sup> year, Dr. Kühn)  
Communication Theory (22 lectures, 3<sup>rd</sup> and 4<sup>th</sup> year, Dr. Osthus)  
Computability (22 lectures, 3<sup>rd</sup> and 4<sup>th</sup> years, Dr. Osthus)  
Advanced Topics in Combinatorics (22, 4<sup>th</sup> year, Dr. Kühn)

*Seminar* Combinatorics Research Seminar (Thursdays at 3.00 p.m., Dr. Kühn and Dr. Osthus) <http://web.mat.bham.ac.uk/D.Osthus/seminar.html>

## **UNIVERSITY OF BRISTOL**

*Department of Mathematics* University of Bristol, University Walk, Bristol, BS8 1TW, Tel: 0117 928 7978, Fax: 0117 928 7999.

<http://www.maths.bris.ac.uk>

Dr. Harald Helfgott (combinatorial number theory)  
Dr. Tim Riley (algorithmic complexity and geometry, formal languages, planar graphs)  
Dr. Misha Rudnev (harmonic analysis, geometric combinatorics, hard Erdős problems)  
Prof. Andreas Winter (quantum and classical information theory).

### *Research Fellows*

Dr. Robert Brignall (permutation patterns, relational structures, partial well order, antichains in partial orders)  
Dr. Nicholas Georgiou\* (random structures, partially ordered sets)  
Dr. Jeanette McLeod (graph colouring, Latin squares and asymptotic enumeration)  
Dr. Amarpreet Rattan (factorizations of permutations, combinatorial representation theory, lattice path combinatorics).  
Dr. Robert Waters (graph colouring, graph minors, infinite graph theory)

### *Research Students*

Joseph Grant (representation theory, Dr. Joseph Chuang)  
Sean Prendiville (additive and combinatorial number theory: Prof. Trevor Wooley).  
Tony Skyner (representation theory: Dr. Chuang)

### *Lecture Courses*

Discrete Mathematics I (48 lectures, 1<sup>st</sup> year)  
Discrete Mathematics II (12 lectures, 2<sup>nd</sup> year)  
Optimisation 2 (36 lectures, 2<sup>nd</sup> year)  
Information Theory (18 lectures, 3<sup>rd</sup> year)  
Experimental Design (18 lectures, 3<sup>rd</sup> year)  
Computational Complexity Theory (20 lectures, 3<sup>rd</sup> year)  
Optimisation 3 (36 lectures, 3<sup>rd</sup> year)  
Quantum Information Theory (16 lectures, 4<sup>th</sup> year)

*Seminar* Combinatorics Seminar fortnightly on Fridays at 3.00 p.m: see <http://www.maths.bris.ac.uk/events/seminars/series/index.php?id=41>

*Current Periodicals:* A, B, E, F, H, I, J, L, M, N, P, Q, R, S, T, U, V, X, Y, Z, a, b, c, d, e, f, g, h (electronic). E, h (paper); plus some old paper copies of A, B, F, H, J, L, M, N, R, T, X, Y, b, d, i.

**BT MOBILITY RESEARCH CENTRE, ADASTRAL PARK, MARTLESHAM.**  
<http://keithbriggs.info/>

Dr. Keith Briggs (graph theory and stochastic processes for network applications).

### **BRUNEL UNIVERSITY**

*Department of Mathematical Sciences* Brunel University, Kingston Lane, Uxbridge, Middlesex UB8 3PH. Tel: 01895 265745 Fax: 01895 265732

<http://www.brunel.ac.uk/about/acad/sisem/math>

Dr. Rhiannon Hall (matroids, graphs)

Dr. Ilia Krasikov (graph theory, combinatorics, coding theory, number theory, orthogonal polynomials)

Dr. Igor Krasovsky (random matrices, orthogonal polynomials)

Prof. Gautam Mitra (combinatorial optimisation)

Dr. Nenad Mladenović (metaheuristic methods in combinatorial and global optimization, location, transportation, clustering and data mining)

Dr. Steven Noble\* (combinatorics, graph theory)

#### *Research Students*

Nicole Eggemann (Scale-free networks, Dr. Noble)

Alexander Zarkh (Discrete Orthogonal Polynomials, Dr. Krasikov).

#### *Lecture courses*

Encryption and Data Compression (48 lectures, 3<sup>rd</sup> year, Dr. Krasikov)

Algebra and Discrete Mathematics (48 lectures, 2<sup>nd</sup> year, Dr. Krasikov and Dr. Savin)

Discrete Mathematics, Probability and Statistics (48 lectures, 1<sup>st</sup> year, Dr. Shaw and Mrs. Browne)

*Working paper series* Technical Reports of Department of Mathematics (Ms. B. Curr)

*Current Periodicals:* A, B, F, H, I, J, L, M, N, P, Q, R, S, U, V, X, Y, Z, a, b, c, d, e, f, g (electronic only).

### **UNIVERSITY OF CAMBRIDGE**

*Department of Pure Mathematics and Mathematical Statistics* Centre for Mathematical Sciences, Wilberforce Rd, Cambridge CB3 0WB. Tel: 01223 337999

Fax: 01223 337920

<http://www.dpmms.cam.ac.uk/>

Prof. W. T. Gowers (Trinity) (analysis, combinatorics)

Prof. B. J. Green (Trinity) (combinatorics, number theory)  
Prof. G. R. Grimmett (Churchill) (probability theory, combinatorial theory)  
Prof. F. P. Kelly (Christ's) (random processes, networks, optimization)  
Prof. I. B. Leader\* (Trinity) (extremal combinatorics, Ramsey theory)  
Prof. J. Saxl (Caius) (group theory)  
Prof. A. G. Thomason (Clare) (combinatorics, graph theory, algorithms)  
Prof. R. R. Weber (Queen's) (mathematical operational research, stochastic networks)

#### *Fellows*

Prof. B. Bollobás (Trinity) (combinatorics, graph theory)  
Dr. D. Conlon (St. John's) (combinatorics and number theory)  
Dr. H. T. Croft (Peterhouse) (combinatorics, analysis)  
Dr. T. E. Forster (Clare Hall) (logic, set theory, combinatorics)  
Dr. R. D. Morris (Murray Edwards) (combinatorics)  
Dr. P. A. Russell (Churchill) (Ramsey theory)  
Dr. T. Sanders (Christ's) (analysis, combinatorics, number theory)

#### *Research students*

Mansur Boase (Prof. Gowers)  
P. Candela Pokorna (Prof. Gowers)  
Tom Coker (Prof. Bollobás)  
David Ellis (Prof. Leader)  
Gonzalo Fiz Ponteveros (Prof. Gowers)  
Bryn Garrod (Prof. Bollobás)  
John Haslegrave (Prof. Bollobás)  
Lloyd Husbands (Prof. Green)  
Allan Lo (Prof. Thomason)  
Eoin Long (Prof. Leader)  
Edward Marchant (Prof. Thomason)  
L. Matthiesen (Prof. Green)  
Vicky Neale (Prof. Green)  
George Petridis (Prof. Gowers)  
David Saxton (Prof. Thomason)  
Paul Smith (Prof. Gowers)  
Ta Sheng Tan (Prof. Leader)  
Mykhaylo Tyomkyn (Prof. Bollobás)

#### *Lecture courses*

Numbers and Sets (24 lectures, 1<sup>st</sup> year, Prof. P. T. Johnstone)  
Graph Theory (24 lectures, 3<sup>rd</sup> year, Prof. Leader)  
Coding and Cryptography (24 lectures, 3<sup>rd</sup> year, Prof. T. W. Körner)  
Additive Combinatorics (24 lectures, Part 3, Prof. Green)  
Combinatorics (16 lectures, Part 3, Prof. Leader)  
Percolation and Combinatorics (16 lectures, Part 3, Prof. Bollobás)  
Computational Complexity (12 lectures, non-examinable graduate, Prof. Gowers)

#### *Seminars*

Combinatorics (Thursdays at 2.30 p.m.)  
Discrete Analysis (Wednesdays at 2.15pm)

## **UNIVERSITY OF CARDIFF**

*School of Computer Science* Cardiff University, Queen's Buildings, Newport Road, PO Box 916, Cardiff CF24 3XF. Tel: 029 2087 4812 Fax: 029 2087 4598

<http://www.cs.cardiff.ac.uk/>

Dr. S. M. Allen\* (mobile communications, frequency assignment, combinatorial optimisation, latin squares)

Prof. S. Hurley (mobile communications, frequency assignment, combinatorial optimisation)

Dr. R. M. Whitaker (mobile communications, frequency assignment, combinatorial optimisation, latin squares)

### *Lecture courses*

Discrete mathematics I (1<sup>st</sup> year)

Discrete mathematics II (2<sup>nd</sup> year)

Information Security (3<sup>rd</sup> year)

Optimisation and Meta-Heuristics (3<sup>rd</sup> year)

Discrete mathematics (M.Sc.)

## **CITY UNIVERSITY LONDON**

*Faculty of Actuarial Science and Statistics* Cass Business School, 106 Bunhill Row, London EC1Y 8TZ Tel: 020 7040 8959 Fax: 020 7040 8572

<http://www.cass.city.ac.uk/facact>

Prof. C. Glass\* (operation research).

## **UNIVERSITY OF DERBY**

*Derbyshire Business School* Faculty of Business, Computing and Law, University of Derby, Kedleston Road, Derby DE22 1GB. Tel: 01332 591892

<http://www.derby.ac.uk/dbs/>

Dr. Peter J. Larcombe\* (hypergeometric function theory, generating functions, binomial coefficient sums)

*Research student:* James Clapperton (Dr. Larcombe)

*Lecture courses:* None

*Current periodicals:* None

## **UNIVERSITY OF DUNDEE**

*School of Computing* University of Dundee, Dundee DD1 4HN. Tel: 01382 384151 Fax: 01382 385509

<http://www.computing.dundee.ac.uk>

Dr. K. J. Edwards\* (Graph colourings, graph decompositions, complexity)

*Division of Mathematics* University of Dundee, 23 Perth Road, Dundee DD1 4HN. Tel. 01382 384471 Fax 01382 385516

<http://www.maths.dundee.ac.uk>

Sands, Dr. Arthur (retired: Combinatorial problems on finite Abelian groups)

*Research student* F. Stewart (Dr. Edwards).

*Lecture Courses:* Information Theory and Cryptography (M.Sc.)

*Current Periodicals:* T, V, b, d

## **DURHAM UNIVERSITY**

**Department of Computer Science** Science Laboratories, South Road, Durham DH1 3LE Tel: 0191 33 41700 Fax: 0191 33 41701

<http://www.dur.ac.uk/computer.science>

Dr. M. Bordewich (computational complexity; randomised algorithms; phylogenetics)

Prof. H. Broersma (graph theory, computational complexity, telecommunications)

Dr. T. Friedetzky (randomised algorithms; probabilistic analysis; sub-linear time algorithms; communication networks)

Dr. M. Johnson\* (graph theory, combinatorial optimization, combinatorial designs)

Dr. A. Krokhn (algebra; logic; discrete mathematics; constraint satisfaction; computational complexity; temporal reasoning)

Dr. D. Paulusma (graph theory; algorithms; combinatorial optimization; cooperative game theory)

Prof. I. A. Stewart (computational complexity; finite model theory; descriptive complexity; graph theory; interconnection networks; group theory)

Dr. S. Szeider (algorithms; proof complexity; parameterized and exact computation; propositional satisfiability; graph theory)

### *Research Staff*

Yonghong Xiang (interconnection networks; parallel and distributed computing; graph theory)

### *Research Students*

James Gate (descriptive complexity, Prof. Stewart)

Pim van 't Hof (graph algorithms, Dr. Paulusma)

Ioannis Lignos (graph algorithms, Dr. Johnson)

Luke Mathieson (parametrized computation, Dr. Szeider).

Lars Nagel (randomised algorithms, Dr. Friedetzky)

Mark Rhodes (proof complexity, Dr. Dantchev)

### *Lecture Courses:*

Algorithms and Discrete Mathematics (1<sup>st</sup> year, 20 lectures, Prof. Broersma)

Logic (1<sup>st</sup> year, 20 lectures, Prof. Stewart)

Formal and Discrete Mathematics (1<sup>st</sup> year, 40 lectures)

Algorithms and Complexity (2<sup>nd</sup> year, 20 lectures, Dr. Johnson and Dr. Paulusma)

Advanced Algorithms (3<sup>rd</sup> year, 20 lectures, Dr. Friedetzky)

Advanced Computational Complexity (3<sup>rd</sup> year, 20 lectures, Dr. Johnson)

Computability Theory (3<sup>rd</sup> year, 20 lectures, Dr. Dantchev)

Theory and Practice (3<sup>rd</sup> year, 20 lectures, Prof. Broersma)

### *Visitor*

Prof. Fedor Fomin (Bergen), algorithms and combinatorics, September 2008-July 2009.

#### *Seminars*

The Algorithms and Complexity Group have a weekly seminar.

*Current Periodicals:* A, B, D, H, I, J, L, M, N, O, P, S, U, V, X, Y, Z, a, b, g, h. (electronic only except H, I, H which are hardcopies).

### **UNIVERSITY OF EAST ANGLIA, NORWICH**

*School of Mathematics* University of East Anglia, Norwich NR4 7TJ. Tel: 01603 456161 Fax: 01603 259515

<http://www.uea.ac.uk/mth>

Prof. A.R. Camina (block designs, finite groups)

Dr. M. Džamonja (logic, set theory, infinite combinatorics)

Prof. D. M. Evans (permutation groups, automorphism groups of infinite structures)

Dr. S. Lyle (representation theory).

Dr. I. J. Siemons\* (permutation groups, topological and homological methods)

Prof A.E. Zalesskii (group theory, ring theory)

#### *Research students*

Mr. S. Alder (simplicial geometries, Dr Siemons)

M. Ferreira (Dr. Evans)

Y. Lazou (Dr. Džamonja)

T. Phongpattanacharoen (reconstruction, Dr. Siemons)

J. De la Rue (model theory and infinite permutation groups, Dr. Evans)

M. Wong (Dr. Evans)

#### *Lecture courses (check availability):*

Discrete Mathematics (2<sup>nd</sup> year)

Set theory (3<sup>rd</sup> year)

Infinite permutation groups (4<sup>th</sup> year, p/g)

Representation Theory (3<sup>rd</sup> year)

Graph theory (3<sup>rd</sup> year)

Group theory (3<sup>rd</sup> year)

Computability (3<sup>rd</sup> year)

Model theory (3<sup>rd</sup> year)

### **UNIVERSITY OF EDINBURGH**

*School of Informatics* 2 Buccleuch Place, Edinburgh EH8 9LW Tel. 0131 650 2691

Fax: 0131 650 6626

<http://www.inf.ed.ac.uk>

Dr. Amin Coja-Oghlan (combinatorics, probability, efficient algorithms)

Dr. Mary Cryan\* (algorithms and complexity)

#### *Research students*

Paídí Creed (Dr. Cryan)

James Matthews (Dr. Cryan).

*Lecture Courses*

Algorithms and Data Structures (3<sup>rd</sup> year)  
Computability and Intractability (3<sup>rd</sup> year, MSc)  
Computational Complexity (4<sup>th</sup> year)

*Current Periodicals:* E, H, M, T, X, Y

**UNIVERSITY OF ESSEX**

***Department of Mathematical Sciences*** University of Essex, Wivenhoe Park,  
Colchester CO4 3SQ. Tel: 01206 873040 Fax: 01206 873043

<http://www.essex.ac.uk/math>

Dr. D. Branson (retired: applied probability, combinatorics of Stirling numbers)  
Prof. P.M. Higgins (combinatorics of algebraic semigroup theory, cryptography)  
Dr. David Penman\* (random and pseudo-random graphs)  
Dr. Chris Saker (part-time combinatorics on words, semigroup theory, cryptography)  
Dr. A. Salhi (combinatorial optimisation)  
Dr. Alexei Vernitski (algebra, combinatorics, computer security)  
Dr. Gerald Williams (computational group theory)

*Research students*

Andria Eleftheriou (reliability of graphs (M.Phil), Dr. Penman: part-time)  
Rong Gao (colourings of pseudo-random graphs, Dr. Penman)  
Zsofia Juhász (partially ordered sets, Dr. Vernitski)  
Shane Malik (extremal Ramsey graphs, Dr. Penman)  
Chris Melsa (Ramsey theory and contraction mappings (M.Sc.), Dr. Penman)  
Jason Wanner (analytic number theory (M.Sc.), Dr. Penman)

*Lecture Courses*

Graph Theory (3<sup>rd</sup> year, Dr. Penman) (30 lectures)  
Codes and Cryptography (Prof. Higgins, 3<sup>rd</sup> year) (30 lectures)  
Combinatorial optimisation (Dr. Salhi, 3<sup>rd</sup> year) (30 lectures)

*Current periodicals:* H, P, h.

**UNIVERSITY OF EXETER**

***School of Engineering, Computing and Mathematics*** Harrison Building, University  
of Exeter, North Park Road, Exeter EX4 4QF.

Tel: 01392 263650 Fax: 01392 264067

<http://www.secam.ex.ac.uk/mat>

Dr. R. J. Chapman\* (finite fields, coding theory, enumerative combinatorics)  
Prof. P. Vámos (representation of matroids)

*Lecture courses*

Discrete Mathematics (30 lectures, 1<sup>st</sup> year, Dr. Chapman)  
Graph theory (33 lectures, 3<sup>rd</sup> year, Dr. Firby)

Coding Theory (33 lectures, 3<sup>rd</sup> year, Dr. Stratton)

*Current periodicals:* C, D, W

## **UNIVERSITY OF GLAMORGAN**

*Division of Mathematics and Statistics* University of Glamorgan, Pontypridd, Mid Glamorgan CF37 1DL. Tel: 01443 482136 Fax: 01443 482169

<http://fat.glam.ac.uk/about/structure/mathsandstats/>

Dr. F. Hunt (graph theory, coding theory, signal sets with low correlation)

Dr. S. Perkins (coding theory, synchronization, combinatorial puzzles)

Prof. D. H. Smith\* (coding theory, DNA codes, frequency assignment)

### *Research students*

Niema Aboluion (DNA codes, Prof. Smith)

Sian Jones (Properties of Sudoku puzzles and their variants, Dr. Perkins)

Ryan Davies (Properties of Kakuro-type puzzles, Dr. Perkins)

Linzy Phillips (Erasure Codes Derived from Sudoku and Related Combinatorial Structures, Dr. Perkins)

### *Lecture courses*

Codes and Information (3<sup>rd</sup> year, Prof. Smith, Dr. Perkins)

Combinatorics and Network flows (2<sup>nd</sup> year, Dr. Perkins and Prof. Smith)

*Current periodicals:* J, N, T, X, Y, e. T is online only after Vol. 51. J is only from 2004.

## **UNIVERSITY OF GLASGOW**

*Department of Mathematics* University of Glasgow, University Gardens, Glasgow G12 8QW. Tel: 0141 330 5176 Fax: 0141 330 4111

<http://www.maths.gla.ac.uk>

Dr. I. Anderson (Honorary research fellow: designs, whist tournaments)

*Department of Computing Science* Sir Alwyn Williams Building, Lilybank Gardens, Glasgow G12 8QQ Tel: 0141 330 4256 Fax: 0141 330 4913

<http://www.dcs.gla.ac.uk>

Dr. R.W. Irving\* (combinatorial and graph algorithms)

Dr. D.F. Manlove (combinatorial and graph algorithms)

*Research Staff* Dr. Peter Biró (algorithms; graph theory; stable matchings).

### *Research students*

Eric McDermid (algorithms and computational complexity: 3<sup>rd</sup> year, Dr. Irving)

### *Lecture courses*

Discrete mathematics (Maths, 24 lectures, 3<sup>rd</sup> year, Dr. R. Steiner)

Graphs and networks (Maths, 22 lectures, 2<sup>nd</sup> year, Dr. S. Wassermann)

Algorithmics 3 (Computer Science, 3<sup>rd</sup> year, Dr. Irving)

Algorithmics 4 (Computer Science, 4<sup>th</sup> year, Dr. Manlove)

*Current periodicals:* C, O, i (paper only)  
E, F, V, b, h (paper and electronic)  
M, N, P, Q, T, X, Y, c (electronic only).

### **GOLDSMITHS COLLEGE**

**Department of Computing** Goldsmiths College, University of London, New Cross,  
London SE14 6NW. Tel: 0207 919 7850 Fax: 0207 919 7853  
<http://www.goldsmiths.ac.uk/computing/>

Dr. I. Pu\* (combinatorial algorithms, randomized, parallel, probabilistic and average case algorithmics)

#### *Lecture courses*

Discrete Mathematics (1<sup>st</sup> year)  
Data Structures and algorithms (2<sup>nd</sup> year, Dr. Pu)  
Graph Theory (3<sup>rd</sup> year)

*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**

**School of Computing and Mathematical Sciences** University of Greenwich, London,  
SE18 6PF Tel: 0208 316 8000 Fax: 0208 855 4033  
<http://www.gre.ac.uk/schools/cms>  
Prof. V.A. Strusevich (combinatorial optimization, scheduling theory)  
*Current Periodicals:* T

### **HERIOT-WATT UNIVERSITY**

**Department of Mathematics** Heriot-Watt University, Riccarton, Edinburgh EH14  
4AS. Tel: 0131 451 3221 Fax: 0131 451 3249  
<http://www.ma.hw.ac.uk/math.html>  
Dr. M.V. Lawson (semigroup theory, combinatorics on words)  
Dr. A. R. Prince\* (finite geometries, finite group theory)

**Department of Actuarial Mathematics and Statistics** Heriot-Watt University,  
Riccarton, Edinburgh EH14 4AS. Tel: 0131 451 3202 Fax: 0131 451 3249  
<http://www.ma.hw.ac.uk/ams>  
Dr. Jennie Hansen (probabilistic combinatorics)

*Lecture course* Discrete mathematics (45 lectures, 3rd year honours degree, Dr. Prince)

*Current periodicals:* E, F, I, c, g, h

### **UNIVERSITY OF HULL**

**Centre for Mathematics** University of Hull, Cottingham Road, Hull HU6 7RX. Tel: 01482 465885 Fax: 01482 466218

<http://www.hull.ac.uk/math/>

Prof. R. Shaw\* (Emeritus, finite geometry)

**Department of Computer Science** University of Hull, Hull HU6 7RX Tel: 01482 465951/465067 Fax: 01482 466666

<http://www.dcs.hull.ac.uk>

Dr. N.A. Gordon (465038) (finite geometry, computer algebra)

*Research report series* <http://www.hull.ac.uk/php/masrs/>

*Current periodicals:* J (electronic access only), T

### **IMPERIAL COLLEGE LONDON**

**Department of Mathematics** Imperial College London, London SW7 2AZ. Tel: 0207 594 8517 Fax: 0207 594 8483

<http://www.ma.ic.ac.uk>

Prof A. Ivanov (distance-transitive graphs)

Prof. M. W. Liebeck (group theory, algebraic combinatorics)

Dr. O. Pretzel (combinatorics)

### **KEELE UNIVERSITY**

**School of Computing and Mathematics** Keele University, Keele, Staffordshire ST5 5BG. Tel: 01782 583258 Fax: 01782 584268

<http://www.scm.keele.ac.uk/>

Dr. D. Bedford\* (latin squares; designs)

Dr. J. Preater (applied probability, random graphs)

#### *Lecture courses*

Graph theory (30 lectures, 3<sup>rd</sup> year, Dr. Bedford)

Discrete mathematics (30 lectures, 3<sup>rd</sup> year, Dr. Bedford)

*Current periodicals:* E, F, H, S, V, X, Y, b, h

### **UNIVERSITY OF KENT**

**Institute of Mathematics, Statistics and Actuarial Science** Cornwallis Building,  
University of Kent, Canterbury, Kent CT2 7NF. Tel: 01227 827181 Fax: 01227  
827932

<http://www.kent.ac.uk/IMS/>

Dr. G. D. Brown (toric geometry)

G.M. Clarke (non-orthogonal Graeco-Latin designs)

Prof. P. Fleischmann (algebraic combinatorics, root systems, Mobius function)

Dr. S. Launois ( $q$ -calculus)

Dr. R. E. Paget\* (representation theory of symmetric groups, cellular algebras)

Prof. D. A. Preece (Graeco-Latin designs, nested BIBDs, single-change covering designs, neighbour designs)

Dr. R. J. Shank (modular invariant theory)

Dr. B. J. Vowden (Graeco-Latin designs)

Dr. C. F. Woodcock (orthogonal Latin squares)

*Research associate* Dr. Alexander Kasprzyk (algebraic geometry, combinatorics of convex lattice polytopes).

*Research students*

Hamid Ahmedinezad (Dr. Brown)

Mark Colligan (Dr. Paget)

Jorge Nélio Marques Ferreira (Prof. Fleischmann)

Ashley Hobson (Dr. Shank)

*Lecture courses*

Discrete mathematics (36 lectures, 3<sup>rd</sup> year, Dr. Woodcock)

*Current periodicals:* E, F, T

(electronic access to A, B, H, J, L, M, N, P, Q, R, S, U, V, X, Y, Z, a, b, c, d, e, f, g)

**KING'S COLLEGE LONDON**

**Department of Computer Science** King's College, Strand, London, WC2R 2LS Tel  
020 7848 2588 Fax: 020 7848 2851

<http://www.dcs.kcl.ac.uk>

Dr Colin Cooper\* (random graphs, random algorithms)

**KINGSTON UNIVERSITY**

**Faculty of Computing, Information Science and Mathematics** Kingston University,  
Penrhyn Road, Kingston-upon-Thames, KT1 2EE

<http://cism.kingston.ac.uk>

Dr. Gordon J. A. Hunter\* (Applications of graph theory to Natural Language Modelling, Statistical Physics and Computational Networks)

Dr. Mark Jones (Number Theory and Cryptography)

Dr. Eckhard Pflügel (Cryptography and Information Security)

*Lecture courses*

Mathematical Programming (final year BSc, Dr. Jones)

Internet security (final year BSc, Dr. Pflügel);  
Cryptography (MSc, Dr. Pflügel)

The Department runs MSc Programmes in Network & Information Security,  
Networking & Data Communications.

*Current periodicals:* E, F, N, P, X, Y

### **UNIVERSITY OF LANCASTER**

*Department of Mathematics and Statistics* Fylde College, University of Lancaster,  
Lancaster LA1 4YF. Tel: 01524 593960 Fax: 01524 592681

<http://www.maths.lancs.ac.uk>

Prof. A.G. Chetwynd\* (combinatorial applications in statistics)

*Current periodicals:* E, F, T, Y, b, e

### **UNIVERSITY OF LEEDS**

*School of Mathematics* University of Leeds, Leeds LS2 9JT. Tel: 0113 3435140 Fax:  
0113 3435090.

<http://www.amsta.leeds.ac.uk/>

Dr. J. R. Britnell (group theory)

Prof. S.B. Cooper (graph theory, Ramsey theory, finite set systems)

Dr. V.V. Kisil (Applications of coherent states, wavelet transform and group  
representations in quantum mechanics, combinatorics, etc).

Prof. H.D. Macpherson (permutation groups and related combinatorics)

Dr. Robert Marsh (quantum groups, algebraic groups, Lie algebras)

Prof. J.K. Truss (permutation groups, automorphisms of ordered structures)

*School of Computing* University of Leeds, Leeds LS6 2HN Tel. 0113 343 5430 Fax  
0113 343 5468

<http://www.scs.leeds.ac.uk>

Prof. Martin Dyer\* (algorithms and complexity)

Dr. Haiko Muller (algorithms, graph theory)

Dr. Natasha Shakhlevich (deterministic scheduling theory, combinatorial  
optimisation, computational complexity)

Dr. Kristina Vuskovic (graph theory, algorithms and combinatorial optimisation)

#### *Postdoctoral Researcher*

Ton Kloks (graph theory and algorithms).

#### *Research Students*

Alessandro Condota (Prof. Dyer and Dr. Shakhlevich).

Ragab Elageili (Prof. Truss)

Andrew Handley (amorphous computation, Dr. N. Cohen and Prof. Dyer)

Simon Rose (Prof. Truss)

Velumailum Mohanaraj (amorphous computing and random graphs, Prof. Dyer).

Feresiano Mwesigye (theories of linear orders, Prof. Truss)

Simon Rose (Prof. Truss)

Murilo V.G. da Silva (even-hole-free graphs, Dr. Vuskovic).

Pietro dello Stritto (model theory for generalised polygons and BN pairs, Prof. MacPherson)

*Lecture courses*

Introduction to Discrete Mathematics (22 lectures, 2<sup>nd</sup> year, Prof. Truss)

Graph theory (22 lectures, 3<sup>rd</sup> year, Prof. Cooper)

Combinatorics (22 lectures, 3<sup>rd</sup> year, Dr. Allenby)

Introduction to Algorithms

Theory of computation

Computational graph theory and complexity

Modern issues in algorithmic design

*Current periodicals:* P, X, Y

**UNIVERSITY OF LEICESTER**

**Department of Computer Science** University of Leicester, University Road, Leicester LE1 7RH. Tel: 0116 252 3887 Fax: 0116 252 3604

<http://www.cs.le.ac.uk>

Prof. T. Erlebach (combinatorial optimization, approximation algorithms, algorithmic graph theory)

Prof. R. M. Thomas\* (combinatorial group and semigroup theory, automata theory)

**School of Psychology** University of Leicester, Lancaster Road, Leicester LE1 9HN. Tel: 0116 229 7198

<http://www.le.ac.uk/psychology>

Dr. R. T. Gillett

*Lecture courses*

Discrete Structures (15 lectures, 1<sup>st</sup> year, Dr. Gambino)

Automata, Languages and Computation (30 lectures, 2<sup>nd</sup> year, Prof. Thomas)

Analysis and Design of Algorithms (30 lectures, 3<sup>rd</sup> year, Dr. Fung)

Cryptography and Information Security (30 lectures, 3<sup>rd</sup> year, Dr. Fung and Dr. Tuotso)

Discrete Event Systems (24 lectures, M.Sc., Prof. Thomas)

Game Theory in Computer Science (24 lectures, M.Sc., Prof. Erlebach).

*Seminars* There is a regular seminar program, see

<http://www.cs.le.ac.uk/seminars/>

*Current periodicals:* E, F, M, N, T, X, Y, b, d, h (paper)

E, F, M, N, P, Q, R, T, U, X, Y, b, c, d, e, f, g, h (electronic)

**UNIVERSITY OF LIVERPOOL**

**Department of Computer Science** University of Liverpool, Ashton Building, Liverpool L69 3BX, United Kingdom. Tel. 0151 795 4276 Fax: 0151 795 4235.

<http://www.csc.liv.ac.uk/>

Prof. L.A. Goldberg\* (combinatorial algorithms, complexity of counting and sampling)

Dr. P.W. Goldberg (algorithmic game theory)

Dr. P. Krysta (algorithmic game theory)  
Dr. R. Martin (enumerative combinatorics)  
Dr. P.W.H. Wong (combinatorial algorithms, scheduling, packing)  
Dr. M. Zito (algorithms and complexity, random structures)

*Research Fellow*

Markus Jalsenius (Markov chain algorithms)<sup>1</sup>

*Research Students*

Iain G. Kelly (colouring random graphs, Dr. Zito)  
Antony McCabe (Tutte polynomial, Prof. L. Goldberg)  
Andrew McGrae (colouring, random graphs, Dr Zito)  
Patarawit Polpinit (algorithmic game theory, Dr P. Goldberg)

*Lecture courses:*

Comp108 Algorithmic Foundations (1<sup>st</sup> year)  
Comp202 Complexity of Algorithms (2<sup>nd</sup> year)  
Comp308 Efficient Parallel Algorithms (3<sup>rd</sup> year)  
Comp309 Efficient Sequential Algorithms (3<sup>rd</sup> year)  
Comp523 Advanced Algorithmic Techniques (M.Sc.)  
Comp526 Applied Algorithmics (M.Sc.)

*Seminar:*

Complexity Theory and Algorithmics Seminar, Thursdays 3:15.

**LONDON SCHOOL OF ECONOMICS**

**Department of Mathematics** London School of Economics, Houghton Street, London WC2A 2AE. Tel: 0207 955 7732 Fax: 0207 955 6877

<http://www.maths.lse.ac.uk>

Prof. Steve Alpern (ergodic theory, game theory, search theory)

Prof. Martin Anthony (computational learning theory, neural networks, theory of computing)

Dr. Tugkan Batu (randomized computation, algorithms on massive data sets, property testing, statistical testing, streaming algorithms)

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

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

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

Dr. Malwina Luczak (probability and discrete mathematics)

Dr. Jozef Skokan (quasi-randomness, applications of the regularity lemma, numbers in Ramsey theory)

Prof. Bernhard von Stengel (game theory and complexity)

**Operational Research Group, Department of Management.** London School of Economics, Houghton Street, London WC2A 2AE Tel: 0207 955 7653 Fax: 0207 955 6885

<http://www.lse.ac.uk/collections/operationalResearch/>

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<sup>1</sup> Prof. P. W. Goldberg and Dr. P. Krysta are adjoint members of the group.

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

Prof. Richard Steinberg (operations management, combinatorial auctions, transportation networks)

Prof. Paul Williams (linear and integer programming)

#### *Research students*

Anne Balthasar (game theory, Prof. von Stengel)

Raju Chinthalapati (computational learning theory, Prof. Anthony)

Marianne Fairthorne (combinatorics, Prof. Brightwell)

David Ferguson (Ramsey theory, Prof. van den Heuvel and Dr. Skokan)

Wan Huang (game theory, Prof. von Stengel)

Julian Merschen (game theory, Prof. von Stengel)

Somkiat Trakultraipruk (Graph Theory, Prof van den Heuvel).

Zibo Xu

#### *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)

#### *Lecture courses*

Discrete Mathematics (20 lectures, 2<sup>nd</sup> year, Dr. Skokan)

Combinatorial Optimization (20 lectures, M.Sc., Prof. Appa)

Theory of Algorithms (20 lectures, 3<sup>rd</sup> year, Prof. von Stengel)

Computational Learning Theory and Neural Networks (20 lectures, M.Sc., Dr. Batu)

Algorithms and Computation (20 lectures, M.Sc., Prof. von Stengel)

Discrete Mathematics and Complexity (20 lectures, M.Sc., Dr. Skokan)

Information, Communication and Cryptography (20 lectures, M.Sc., Prof. Biggs)

#### *Seminars*

Seminar on Discrete and Applicable Mathematics, Thursdays 2:00 (Dr. Luczak)

CDAM Informal Workshop, Fridays 12:00 (Dr. Skokan)

<http://www.cdam.lse.ac.uk/Seminar/>

### **LONDON SOUTH BANK UNIVERSITY**

***Faculty of Business, Computing and Information Management B.C.I.M.***, London

South Bank University, 103 Borough Road, London SE1 0AA. Tel: 0207 928 8989

Fax: 0207 815 7793

<http://www.lsbu.ac.uk/bcim/depts/msfs/>

Dr. Sylvia Jennings (coding theory, text compression)

Dr. Carrie Rutherford (matroid theory)

*Visiting Professors:* David Singmaster (recreational mathematics)

Robin Whitty\* (graph theory)

#### *Lecture courses*

Discrete mathematics occurs in the first year of all the computing courses (Dr. Jennings, Dr. Rutherford).

Applications of combinatorics appear in 1<sup>st</sup> and 2<sup>nd</sup> year courses in financial mathematics (Dr. Rutherford)

Option in Applied Cryptography occurs in the final year (Dr. Jennings)

*Study group/working paper series:*

<http://myweb.lsbu.ac.uk/~ruthercg/MathsStudyGroup/>

*Current periodicals:* T

## **UNIVERSITY OF MANCHESTER**

*School of Mathematics* University of Manchester, Oxford Road, Manchester M13 9PL. Tel: 0161 275 5800 Fax: 0161 275 5819

<http://www.manchester.ac.uk/math/>

Prof. A.V. Borovik (matroids and generalisations, Coxeter matroids, Coxeter groups)

Prof. R. M. Bryant (groups; Lie algebras)

Prof. V. Buchstaber (multivalued groups and association schemes: geometry and combinatorics of polytopes)

Dr. J. Grbić (combinatorial Hopf algebras; topology and combinatorics of polytopes)

Dr. M. Johnson (free Lie algebras: Young tableaux)

Dr. M. Kambites\* (combinatorial group and semigroup theory, automata, computational complexity and cryptography)

Dr H. Khudaverdian (Lie groups and algebras; symmetric functions; Schur functions; Young tableaux; combinatorics in geometry)

Prof. P. J. Laycock (emeritus: experimental design)

Prof. J. Paris (logic, including interactions with combinatorics)

Prof. N. Ray (combinatorial Hopf algebras, geometry and combinatorics of polytopes)

Prof. P. J. Rowley (group theory)

Dr. R. Sandling (Steenrod algebra: lattices)

### *Research Students*

Andrew Fenn (geometry and combinatorics of polytopes, Prof. Buchstaber and Prof. Ray)

Elaine Render (algebraic automata theory, Dr. Kambites)

James Hook (stochastic processes on graphs, Dr. D. Broomhead)

### *Lecture courses*

Discrete Mathematics (24 lectures, 2<sup>nd</sup> year, Dr. Mark Muldoon)

Coding Theory (24 lectures, 3<sup>rd</sup> year, Prof. Peter Symonds)

Combinatorics and Graph Theory (24 lectures, 3<sup>rd</sup> year, Dr. Gabor Megyesi)

Mathematical Programming (24 lectures, 3<sup>rd</sup> year, Mr. Mike Tso)

Combinatorial and Toric Topology (32 lectures, 4<sup>th</sup> year/MSc, Prof. Buchstaber)

Computational Complexity (32 lectures, 4<sup>th</sup> year/MSc, Dr. Kambites)

*Current periodicals:* A, B, E, F, H, I, L, M, N, P, R, S, T, U, V, X, Y, Z, a, b, c, d, e, f, g, h.

## **MIDDLESEX UNIVERSITY**

**Economics and Statistics Department** Middlesex University Business School, The Burroughs, London, NW4 4BT Tel: 020 8411 6824

<http://www.mdx.ac.uk/bs/>

Dr. Thomas D. Bending\* (Bent functions; finite geometries; lotteries).

### *Lecture Courses*

Operational Research for Business (3rd year)

Models in Management Science (M. Sc.)

*Current Periodicals:* F, V, b, e (all available both on paper and electronically).

## **UNIVERSITY OF NEWCASTLE UPON TYNE**

**School of Mathematics and Statistics** Newcastle University, Newcastle upon Tyne NE1 7RU. Tel: 0191 222 6000 Fax: 0191 222 8020

<http://www.ncl.ac.uk/math/>

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, finite geometry)

Prof. S. Rees (algorithms in group theory and geometry, automatic groups and related classes of groups, connections between group theory and formal language theory)

Dr. Alina Vdovina (geometric group theory, noncommutative geometry, knot theory, Riemannian geometry)

### *Lecture courses*

Enumeration and Combinatorics (24 lectures, 2<sup>nd</sup> year, Dr. Duncan)

Geometries and Designs (24 lectures, 3<sup>rd</sup> year, Dr. King)

Coding Theory (24 lectures, 3<sup>rd</sup> year, Dr. Vdovina).

*Current periodicals:* A, B, F, H, I, J, L, M, N, P, Q, R, S, T, U, V, X, Y, a, c, d, e, f, g. These are mostly electronic access only, but F, P, R, T, U, X, c, d are paper-access too.

## **UNIVERSITY OF NOTTINGHAM**

**School of Mathematical Sciences** University of Nottingham, University Park, Nottingham NG7 2RD. Tel: 0115 951 4949 Fax: 0115 951 4951

<http://www.maths.nottingham.ac.uk>

Dr. D.R. Woodall\* (retired: graph colourings, electoral systems)

### *Lecture courses*

Introductory Graph Theory (30 lectures, 3<sup>rd</sup> year, Dr. Diamantis)

Combinatorics (30 lectures, 3<sup>rd</sup> year, Prof. Hoffmann)

Coding and cryptography (30 lectures, 3<sup>rd</sup> year, Dr. Wuthrich)

*Current periodicals:* several (electronic access only).

## **NOTTINGHAM TRENT UNIVERSITY.**

*School of Science and Technology*, Nottingham Trent University, Clifton Campus, Nottingham NG11 8NS. Tel: 0115 848 8417

[http://www.ntu.ac.uk/sat/about/academic\\_teams/phys\\_maths.html](http://www.ntu.ac.uk/sat/about/academic_teams/phys_maths.html)

Dr. T. J. Hetherington\* (graph colourings)

*Research students*: none

*Lecture courses*: Introductory Graph Theory (24 lectures, 3<sup>rd</sup> year, Dr. Hetherington).

*Current periodicals*: several (electronic access only).

## **THE OPEN UNIVERSITY**

*Department of Mathematics and Statistics* The Open University, Walton Hall, Milton Keynes MK7 6AA. Tel: 01908 653479 Fax: 01908 653744

<http://www.mathematics.open.ac.uk/>

Dr. K. M. Chicot (infinite combinatorics)

Prof. M. J. Grannell (combinatorial design theory, combinatorial computing, Steiner Systems, topological design theory)

Prof. T. S. Griggs (combinatorial design theory, combinatorial computing, Steiner Systems, topological design theory)

Dr. U. Grimm (enumerative combinatorics, words, tilings, applications to physics)

Dr. F. C. Holroyd (fractional graph colourings, graceful and related tree labellings, Erdős-Ko-Rado properties of graphs)

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

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

Prof. J. Širáň (topological graph theory, Cayley graphs)

Dr. B. S. Webb (automorphisms of designs, Latin squares, infinite designs)

Prof. R. J. Wilson (history of graph theory and combinatorics, graph colourings)

*Department of Physics and Astronomy* Faculty of Science, The Open University, Walton Hall, Milton Keynes MK7 6AA.

<http://physics.open.ac.uk/>

Prof. A. I. Solomon (combinatorial physics, integer sequences)

*Department of Computing* The Open University, Walton Hall, Milton Keynes MK7 6AA. Tel. 01908 653037

<http://www.computing.open.ac.uk/>

Dr Maria Vargas-Vera (ontologies, graph theory in natural languages)

*Visiting research fellow* Dr. A.D. Forbes (Mathematics: combinatorial designs)

### *Research students*

M. Heuer (combinatorial aspects of sequences and tilings: Dr. Grimm, Prof. Baake (University of Bielefeld) and Dr. Umerski (Open University)).

A. Kay (applications of graph theory in natural language processing: Dr Rowley, Dr Webb and Dr Vargas-Vera)

D. Parks (graph theory in America, 1860-1940: Prof. Wilson: part-time)

C. Psomas (topological design theory: Prof Griggs, Prof Širán and Dr. Webb)  
I. Watts (graph homomorphisms, generalisations of graph colourings: Dr. Holroyd: part-time)

*Courses* M336: Groups and Geometry (3<sup>rd</sup> year)  
MT365: Graphs, networks and design (3<sup>rd</sup> year)  
M836: Coding Theory (M.Sc.).

*Current periodicals:* A, C, D, E, F, H, J, N, P, S, V, W, X, Y, b, i.

## **UNIVERSITY OF OXFORD**

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

<http://www.maths.ox.ac.uk>

Dr. R. Leese (channel assignment problems)  
Prof. Oliver Riordan (combinatorics, graph theory)  
Prof. Alex Scott (combinatorics, graph theory)  
Prof. D. J. A. Welsh (retired: applied probability, complexity)

*Department of Statistics* 1 South Parks Road, Oxford OX1 3TG. Tel: 01865 272860  
Fax: 01865 272595

<http://www.stats.ox.ac.uk>

Prof. C. J. H. McDiarmid\* (probability and algorithms, probabilistic methods in combinatorics, colouring problems)  
Dr. James Martin (probability theory, links to statistical physics and theoretical computer science)  
Prof. Gesine Reinert (network statistics (including small world graphs), applied probability).  
Dr. Bhalchandra Thatte (combinatorial, graph-theoretic and pedigree reconstruction problems).

*Computing Laboratory* Wolfson Building, Parks Road, Oxford OX1 3QD Tel: 01865 73838 Fax: 01856 73839

<http://web.comlab.ox.ac.uk/oucl/>

Dr Raphael Hauser (continuous optimization, applied probability).  
Dr. Stephan Kreutzer (computational logic, logic and graph theory, finite model theory, graph searching games, verification and verification games, model checking, database theory).  
Dr. Andy Twigg (theoretical computer science, compact routing, graph algorithms)

### *Research students*

Milanka Jankovic (Prof Riordan)  
Hiu Fai Law (Prof Scott)  
Tom Rackham (Prof Scott)  
Bilyana Shoilekova (Prof McDiarmid)  
Matthew White (Prof. Scott)

### *Lecture courses*

Combinatorial optimisation (12 lectures, M.Sc. Applied Statistics, Prof. McDiarmid)  
Communication theory (16 lectures, 3<sup>rd</sup> year, Dr. D. Stirzaker)  
Integer programming (16 lectures, 3<sup>rd</sup> year, Dr. Hauser)  
Graph Theory (16 lectures, 4<sup>th</sup> year, Prof. Scott)  
Probabilistic Combinatorics (16 lectures, 4<sup>th</sup> year, Dr. Riordan)

*Seminar* Combinatorial theory (Tuesdays at 2.30 p.m.)

*Current periodicals:* D, E, J, K, L, N, P, Q, T, Y

## **UNIVERSITY OF PLYMOUTH**

*School of Mathematics & Statistics* University of Plymouth, Drake Circus, Plymouth  
PL4 8AA. Tel: +44 (0)1752 586888 Fax: +44 (0)1752 586900

<http://www.plymouth.ac.uk/pages/view.asp?page=7889>

Dr. Stephen Huggett\* (graph theory, twistor theory).

## **UNIVERSITY OF PORTSMOUTH**

*Department of Mathematics* Buckingham Building, Lion Terrace, Portsmouth,  
Hampshire PO1 3HE Tel: 023 9284 6367 Fax: 023 9284 6364

<http://www.port.ac.uk/departments/academic/math>

Dr. A. Makroglou\*

*Current periodicals:* X, Y, b

## **QUEEN MARY, UNIVERSITY OF LONDON**

*School of Mathematical Sciences (Mathematics Research Centre)* Queen Mary,  
University of London, Mile End Road, London E1 4NS. Tel: 0207 975 5440 Fax:  
0208 980 9587

<http://www.maths.qmw.ac.uk/>

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)

Dr. J. N. Bray (group theory)

Prof. P. J. Cameron\* (groups and their operands, graphs, codes, designs, models, orbits and enumeration)

Prof. Anthony Hilton (Emeritus Professor: graph theory, design theory, finite set systems)

Prof. Bill Jackson (graph theory)

Prof. Mark Jerrum (computational complexity, probabilistic computation, the complexity of combinatorial enumeration)

Dr. J. Robert. Johnson (graph theory and combinatorics)

Dr. Peter Keevash (hypergraph theory)

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

Prof. Donald Preece (Emeritus Professor: design theory)

Dr. T. Prellberg (statistical mechanics, dynamics, enumerative combinatorics)

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

Dr. D. S. Stark (probability and combinatorics)  
Dr. Mark. Walters (probabilistic combinatorics, percolation, extremal problems)  
Prof. R. A. Wilson (computational group theory)

*Researchers*

Dr. Adam Watson (graph theory, matroid theory, rigidity)  
Dr. Taoyang Wu (Network coding)  
Dr. Sam Tarzi (graph theory)

*Research students*

Fatma Al-Kharoosi (coding theory, Prof. Cameron)  
Michael Brough (graph theory: Prof. Jackson)  
Andrew Drizen (design theory, Markov chains: Prof. Cameron)  
John Faben (counting complexity for CSP: Prof. Jerrum)  
Victor Falgas-Rouvry (extremal problems, percolation, probabilistic combinatorics:  
Dr Walters)  
Josephine Kusuma (coding theory, Prof. Cameron)  
Federico Montecalvo (covering designs, Prof. Cameron)  
Alexander O'Neill (graph theory: Prof. Cameron)  
Derek Patterson (design theory: Prof. Soicher)  
Emil Vaughan (graph theory and statistics: Prof. Cameron)

*Lecture courses*

Algorithmic Graph Theory (36 lectures, 2nd year, Dr. Keevash)  
Combinatorics (36 lectures, 3<sup>rd</sup> year, Prof. Jackson)  
Coding Theory (36 lectures, 3<sup>rd</sup> year, Dr. Fayers)  
Cryptography (36 lectures, 3<sup>rd</sup> year, Prof. Jackson)  
Enumerative and Asymptotic Combinatorics (24 lectures, M.Sc., Prof. Müller)  
Extremal combinatorics (24 lectures, M.Sc., Dr Keevash)  
Graphs, colourings and designs (24 lectures, M.Sc., Prof. Hilton)

*Seminars* Combinatorics study group (Prof. Cameron, Fridays 4:30pm)

<http://www.maths.qmul.ac.uk/~pjc/csg.html>

Design of Experiments (Dr. Coad, Thursday 4:30pm)

Pure Mathematics (Dr. Tomasic, Monday 4:30pm)

*Current periodicals:* A, B, E, F, H, I, J, L, M, N, P, Q, R, S, T, U, V, X, Y, a, b, c, d, e, f, g. Print only for g, electronic only for A, I, J, L, M, Q, S, a, c,d,e,f. All others available both electronically and in print.

**UNIVERSITY OF READING**

*Department of Mathematics* University of Reading, Whiteknights, P.O. Box 220  
Reading, Berks RG6 6AX. Tel: 0118 378 8996 Fax: 0118 931 3423

Prof. A. J. W. Hilton\* (graph theory, design theory, finite set systems)

Dr. W. R. Johnstone (graph theory)

Dr. D. S. G. Stirling (graph theory)

*Honorary fellow* Dr. D. C. Daykin

*Lecture courses*

Linear Algebra and Coding Theory (44 lectures, Dr. T. Kuna)

*Current periodicals:* C, N, P, S, X, Y, b

**ROTHAMSTED EXPERIMENTAL STATION**

***Biomathematics Unit*** IACR - Rothamsted, Harpenden, Herts AL5 5RJ Tel: 01582 763133 Fax: 01582 4671166

<http://www.rothamsted.bbsrc.ac.uk>

Prof. R. W. Payne\* (Statistical computing, design and analysis of experiments, identification keys and diagnostic tables, statistical modelling)

Sue Welham (REML estimation of various components, neighbour effects, design of laboratory experiments, statistical modelling)

*Current periodicals:* E, F

**ROYAL HOLLOWAY, UNIVERSITY OF LONDON**

***Department of Mathematics*** Royal Holloway, Egham Hill, Egham, Surrey TW20 0EX. Tel: 01784 443093 Fax: 01784 430766

<http://www.ma.rhul.ac.uk>

Prof. S. Blackburn (enumeration of groups, applications of algebraic methods to data communications, coding theory, cryptography)

Dr. C. Cid (cryptography, security, computational algebra)

Dr. C. Elsholtz\* (combinatorial number theory, prime numbers)

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. Gerke (graph theory, combinatorics, random structures and algorithms)

Dr. B. Klopsch (group theory, additive combinatorics)

Dr. K. M. Martin (cryptography and information security)

Prof. C. Mitchell (cryptography and information security)

Prof. S. P. Murphy (spatial probability, cryptography)

Dr. C. W. Norman (algebraic topics)

Prof. K. Paterson (cryptography and coding)

Prof. F. C. Piper (algebraic combinatorics: finite geometry, theory of designs, coding theory, cryptography)

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. N. Stephens, Prof. M. Walker (Vodafone Ltd).

*Postdoctoral Researcher* Dr. M. B. Paterson (frameproof codes, key distribution schemes, multivariate equation solving techniques).

***Department of Computer Science*** Royal Holloway, Egham Hill, Egham, Surrey TW20 0EX. Tel: 01784 443421 Fax: 01784 443420

<http://www.cs.rhul.ac.uk>

Prof. D. Cohen (constraint satisfaction, graphs and hypergraphs)  
Prof. Z. G. Gutin (graphs and combinatorics, combinatorial optimisation)  
Dr. A Yeo (graphs and combinatorics, combinatorial optimisation)

*Research students*

M. Albrecht (algebraic aspects of cryptography: Dr. Cid)  
D. Appel (group theory: Dr. Klopsch)  
J. Birkett (security, asymmetric cryptography: Dr. Dent).  
L. Chen (Role-Based Access Control: Dr. Crampton)  
J. Cho (key management, secure protocol design for mobile communications)  
N. Hoare (cryptography and network security, Prof. Paterson)  
R. Hughes-Jones (combinatorics, Prof. Blackburn)  
D. Karapateyan (Prof. Gutin)  
Eun Jung Kim (Prof. Gutin)  
C. Mullan (cryptography and group theory; Prof. Blackburn and Dr Cid)  
J. Novak (formerly J. Bate) (combinatorial key management techniques: Dr. Martin).  
L. O'Toole (DES, MARS, feistel networks)  
A. Panoui (combinatorics and cryptography: Prof. Blackburn)  
P. Rochanakul (combinatorics and cryptography: Prof. Blackburn and Dr. Ng)  
R. S. Ruprai (elliptic curves, Dr. Galbraith)  
A. Soleimanfallah  
S. Srinivasan (cryptography, network security, provable security: Prof. Paterson)  
M. J. Saarinen (theoretical and engineering aspects of computer security)

*Lecture courses*

Discrete mathematics (33 lectures, 2<sup>nd</sup> year, Dr. Elsholtz)  
Cipher systems (33 lectures, 3rd year, Dr. Ng)  
Error correcting codes (33 lectures, 3rd year, Dr. Audenaert)  
Game theory (33 lectures, 3rd year, Dr. Sheer)  
Theory of error correcting codes (44 lectures, p/g, Dr. Audenaert )  
Channels (33 lectures, p/g, Dr. Audenaert )  
Combinatorics (33 lectures, p/g, Dr. Gerke)  
Network Algorithms (44 lectures, p/g, Dr. James McKee)  
Public Key Cryptography (33 lectures, p/g, Prof. Blackburn).  
Advanced Cypher Systems (44 lectures, p/g, Dr. Ng)  
Applications of Field Theory (33 lectures, p/g, Dr. Klopsch)

The Department of Mathematics runs taught M.Sc. programmes in Information Security, Mathematics of Cryptography and Communications, and Mathematics for Applications.

*Seminars* Pure Maths Seminar (Dr. Gerke) (Tuesdays at 4.00 p.m. in room 219).

*Current periodicals:* E, F, H, J, M, N, P, S, T, X, b, h (all available hard copy, some also available electronically).

**UNIVERSITY OF ST. ANDREWS**

*School of Mathematics and Statistics* The Mathematical Institute, North Haugh, St. Andrews, Fife KY16 9SS. Tel: 01334 463745 Fax: 01334 463748

<http://www.mcs.st-and.ac.uk>

Dr. C. M. Campbell (combinatorial group theory, combinatorics of semigroup presentations)  
R. L. Constable (combinatorics)  
Prof. K. J. Falconer (combinatorial geometry)  
Dr. B. Gray (groups acting on graphs, relational structures)  
Dr. S. Huczynska (Applications of finite fields, permutation arrays, combinatorial designs)  
Dr. A.W. Kemp (combinatorial applications in statistics)  
Prof. C. D. Kemp (combinatorial applications in statistics)  
Dr. J. H. McCabe (graph theory, number theory)  
Dr. J. D. Mitchell (combinatorial and topological aspects of group and semigroup theory)  
Dr. M. Neunhoeffler (group and representation theory)  
Dr. J. J. O'Connor (combinatorial group theory)  
Dr. L. Olsen (analysis and combinatorics)  
Dr. M. R. Quick (group theory)  
Prof. E. F. Robertson (combinatorial group theory, combinatorics of semigroup presentations)  
Dr. C. M. Roney-Dougal\* (finite permutation and matrix groups, computational group theory, constraint programming).  
Prof. N. Ruškuc (combinatorics of words, mappings, permutations: combinatorial semigroup theory)  
Dr. B. O. Stratmann (combinatorial group theory, Kleinian groups)

***School of Computer Science*** North Haugh, St Andrews, Fife KY16 9SS.

Tel: 01334 463253 Fax: 01334 463278

<http://www.cs.st-andrews.ac.uk/>

Prof. S. A. Linton (computational algebra: systems, algorithms and applications)

*Research Assistant* Dr. A. B. Konovalov (computational group and group ring theory)

*Research Students*

Mrs N. H. Abu-Ghazali (Prof. Ruškuc)  
Miss F. T. Brunk (extremal combinatorics on partial permutations and posets, Dr. Huczynska and Prof. Ruškuc).  
Mr A. M. H. Connelly  
Miss H. J. Coutts (finite permutation and matrix groups, Dr. Quick and Dr. Roney-Dougal)  
Mr. S. Craik (graph theory, Dr. Mitchell and Prof. Ruškuc)  
Mr A. Distler (enumeration of finite semigroups, Dr. Mitchell and Prof. Ruškuc)  
Miss J. D. Ferguson (group theory, Dr. Quick)  
Mr. A. Geddes (Dr. Mitchell)  
Ms A. Mahdi (Prof. Ruškuc)  
Mr V. Maltcev (semigroup theory: Dr. Mitchell and Prof. Ruškuc)  
Mr J. M. McDougall-Bagnall (generation questions in finite groups, Dr. Quick)  
Ms N. E. Menezes (probabilistic group theory, Dr. Quick and Dr. Roney-Dougal)  
Ms S. A. Munday (Fuchsian groups and Diophantine Analysis, Dr Stratmann)  
Mr Y. Negi (Prof. Linton and Dr. Roney-Dougal)

Mr Y. H. Peresse (Generation questions in infinite transformation semigroups, Dr. Mitchell and Dr. Quick)  
Mr M. Pfeiffer (Prof Ruškuc and Dr Neunhoeffler)  
Miss C.R.Pollard (matrix group algorithms, Dr Roney-Dougal and Dr Neunhoeffler).  
Mr A. J. Samuel (Noncommutative fractal geometry, Dr. Stratmann)

*Lecture courses*

Discrete mathematics (56 lectures, 2<sup>nd</sup> year)  
Finite mathematics (24 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, alternate years)  
Graph Theory (24 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, alternate years)  
Various courses involving algorithms and complexity at 3<sup>rd</sup>/4<sup>th</sup> year level.

*Seminars* Pure Mathematics Colloquium 4pm Thursdays  
Algebra and Combinatorics Seminar 4pm Wednesdays

*Current periodicals:* A, B, E, F, H, J, L, M, N, P, Q, R, S, U, V, X, Y, Z, a, b, c, d, e, f, g (all online only).

**UNIVERSITY OF SALFORD**

***Mathematics Section, School of Computing, Science and Engineering*** University of Salford, Salford M5 4WT.

<http://www.cse.salford.ac.uk>

Honorary Professor: Ray Hill\* (coding theory, finite geometry)

*Current periodicals:* T

**UNIVERSITY OF SOUTHAMPTON**

***School of Mathematics*** University of Southampton, Southampton SO17 1BJ. Tel: 023 8059 3612 Fax: 023 8059 5147

<http://www.maths.soton.ac.uk>

Prof. G. A. Jones\* (permutation groups, connections between groups and graphs)

Prof. R. C. King (representations theory of Lie algebra and superalgebras, applications in Physics)

Dr. E. K. Lloyd (retired: combinatorics and graph theory including applications and history)

Prof. C. N. Potts (combinatorial optimization and scheduling)

Prof. D. Singerman (discontinuous groups with applications to Riemann surfaces and the theory of maps)

***Department of Management*** 023 8059 3966

<http://www.management.soton.ac.uk>

Dr. Julia A. Bennell

*Lecture courses*

Combinatorics and Graph theory (13 lectures, 1<sup>st</sup> year, Dr. Ann Hirst)

Theory of numbers (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, Dr. Mary Jones)

Scheduling (10 lectures, M.Sc., Prof. Potts)

Algorithms (36 lectures, 2<sup>nd</sup> year, Prof. Jones)

Information and coding Theory (36 lectures, 3<sup>rd</sup> year, Prof. Jones)

Algorithms, machines and languages (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, Prof. Jones)  
Finite Mathematics (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, Dr. Jim Renshaw)  
Graph Theory (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, Dr. Renshaw)

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

### **STAFFORDSHIRE UNIVERSITY**

***Faculty of computing, Engineering and Technology***, Staffordshire University, Leek Road, Stoke-on-Trent, ST4 2AZ. Tel/Fax: 01782 294026  
Prof. Brian Burrows  
Dr. Sarah J. Easton\*

### **UNIVERSITY OF STIRLING**

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

<http://www.cs.stir.ac.uk/math/>

Dr. P. S. Jackson (algebraic graph theory)  
Emeritus Prof. P. Rowlinson\* (algebraic graph theory)

#### *Lecture courses*

Discrete structures (44 lectures, 1<sup>st</sup> year)  
Combinatorics (32 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, alternate years)  
Algebra and codes (32 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, alternate years)

*Current periodicals*: F, H, N, P, R, S, U, X, Y, d (all electronic).

### **UNIVERSITY OF SURREY**

***Department of Mathematics*** University of Surrey, Guildford, Surrey GU2 7XH. Tel: 01483 300800 Fax: 01483 686071

<http://www.maths.surrey.ac.uk/>

*Honorary Visiting Senior Research Fellow* Dr. A.D. Keedwell\* (Latin squares and quasigroups, finite projective planes, coding theory)

#### *Lecture courses*

Groups and symmetry (30 lectures, 2<sup>nd</sup> year, Dr. L. Avramidou)  
Algebra and Codes (30 lectures, 2<sup>nd</sup> year, Dr. D. Fisher)  
Galois theory (3rd year, 30 lectures, Dr. D. Fisher)  
Experimental design (30 lectures, 3<sup>rd</sup> year (alternate years), Dr J. D. Godolphin)

*Current periodicals*: C, E, F, i (paper), T (electronic).

### **UNIVERSITY OF SUSSEX**

***Department of Mathematics*** University of Sussex, Brighton, East Sussex BN1 9RF. Tel: 01273 877345 Fax: 01273 678097

<http://www.sussex.ac.uk/math>

Prof. J. W. P. Hirschfeld\* (finite geometry, algebraic geometry, coding theory)

*Research students*

Najm Al-Seraji (finite geometry, Prof. Hirschfeld)  
Emad Al-Zangana (finite geometry, Prof. Hirschfeld)  
Gary Cook (coding theory, Prof. Hirschfeld)  
Jamie Hutton (coding theory, Prof. Hirschfeld)  
Karl Waugh (finite geometry, Prof. Hirschfeld)

*Lecture courses*

Groups and Rings (30 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, Dr. R. Fenn)  
Coding Theory (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, Prof. Hirschfeld)

*Current periodicals:* None

**SWANSEA UNIVERSITY**

**Mathematics Department** Swansea University, Singleton Park, Swansea SA2 8PP

Tel: 01792 295457 Fax: 01792 295843

<http://www-maths.swan.ac.uk>

Dr. F. W. Clarke

Dr. A.D. Thomas

*Lecture courses*

Combinatorics (20 lectures, 3<sup>rd</sup> year)  
Applied algebra (40 lectures, 3<sup>rd</sup> year, Dr. Clarke)

**UNIVERSITY COLLEGE LONDON**

**Department of Mathematics** University College London, Gower Street, London

WC1E 6BT. Tel: 020 7679 2839 Fax: 020 7383 5519

<http://www.ucl.ac.uk/Mathematics>

Prof. K.M. Ball (convex and discrete geometry, functional analysis)

Prof. I. Bárány (convex geometry, geometry of numbers, theory of integer programming)

Prof. M. Csörnyei (real analysis)

Dr. J.A. Haight (combinatorial number theory, measure theory, ramsey theory, logic)

Prof. M. Laczkovich (real analysis)

Prof. D.G. Larman (geometric analysis, combinatorics)

Prof. P. McMullen (emeritus: convexity, regular polytopes)

Prof. A. Sokal (combinatorial aspects of mathematical physics)

Dr. J. Talbot\* (combinatorics, complexity theory)

**Department of Economics** University College London, Gower Street, London WC1E

6BT Tel: 020 7679 5888 Fax: 020 7916 2775

<http://www.ucl.ac.uk/economics/>

Prof. K. Binmore (emeritus: game theory)

*Research students*

Maria Prodromou (combinatorial properties of convex and discrete sets, Prof. Bárány)  
Rahil Baber (combinatorics, Dr. Talbot)

*Lecture courses*

Optimisation (2<sup>nd</sup> year)  
Graph Theory and Combinatorics (3<sup>rd</sup> year)  
Geometry of numbers (3<sup>rd</sup> year, Prof. Larman)  
Computational Geometry (3<sup>rd</sup> year, Prof. McMullen)  
Game theory (3<sup>rd</sup> year, Prof. Binmore)

*Seminar Colloquium* (Tuesdays at 4.00 p.m.)  
*Informal Seminar* (Wednesdays at 4.30pm)

**VODAFONE GROUP UK.**

Vodafone House, 1 The Connection, Newbury RG14 2FN. Tel: 01635 33251 Fax: 01635 31127

<http://www.vodafone-rnd.com/whoweare/uk.htm>

Dr. S. Babbage\*  
Dr. C. Belrose  
Dr. N. Bone  
Dr. N. Jefferies  
S. Manning  
Prof. M. Walker  
R. Wright

The group is interested in cryptography, randomness, statistics, applications of graph theory and combinatorics.

*Current periodicals:* G, T, Z

**UNIVERSITY OF WARWICK**

Coventry, CV4 7AL

***Department of Computer Science*** Tel: 0247652 3193 Fax: 024 7657 3024

<http://www.dcs.warwick.ac.uk/>

Prof. Artur Czumaj (analysis and design of algorithms and data structures, randomized algorithms, graph theory, game theory)  
Dr. Matthias Englert (EPSRC Postdoctoral Fellow in Theoretical Computer Science: analysis and design of algorithms and data structures, approximation algorithms)  
Dr. Marcin Jurdzinski (algorithmic game theory, logic in computer science, optimization, modelling and algorithmic analysis of systems)  
Dr. Oded Lachish (coding theory, circuit complexity, sublinear algorithms)  
Dr. Rajagopal Nagarajan (quantum information processing, security and cryptography)  
Prof. Mike Paterson\* (computational complexity, analysis and design of algorithms)  
Dr. Harald Räcke (algorithms, network algorithms).  
Dr. Rahul Savani (game theory)  
Dr. Alex Tiskin (discrete mathematics, parallel computation, combinatorial optimization).

***Warwick Business School*** Tel. 024 7652 8220 Fax: 024 7652 4539

<http://www.wbs.ac.uk>

Prof. Bo Chen (scheduling theory and applications; real-time optimisation; combinatorial optimisation)

Dr. Vladimir Deineko (combinatorial optimisation, polynomially solvable cases of NP-hard problems)

Dr. Sinan Gürel (scheduling, algorithmic game theory)

**Warwick Mathematics Institute** Tel. 024 7652 4661 Fax: 024 7652 4182.

<http://www.maths.warwick.ac.uk>

Dr. Peter Allen (extremal graph theory, Ramsey theory, asymptotic enumeration; DIMAP postdoc)

Dr. Vadim Lozin (algorithmic and structural graph theory)

#### *Research Students*

Anna Adamaszek (approximation algorithms, Prof. Czumaj)

Michal Adamaszek (combinatorial algebraic topology, Prof. J. Jones and Prof. Czumaj)

Haris Aziz (combinatorial optimization, algorithmic game theory, Prof. Paterson)

John Fearnley (algorithmic game theory, Dr. Jurdzinski)

Nicholas Korpelainen (algorithmic and structural graph theory, Dr. Lozin)

Peter Krusche (efficient parallel processing, Dr. Tiskin)

Nikolaos Papanikolaou (quantum protocols, Dr. Nagarajan)

Michal Rutkowski (game theory, Dr. Jurdzinski)

#### *Lecture courses*

Discrete Mathematics and its Applications 1 and 2 (1<sup>st</sup> year)

Combinatorics (2<sup>nd</sup> year)

Algorithm Design (2<sup>nd</sup> year)

Mathematical Programming (2<sup>nd</sup> year)

Combinatorial Optimisation (2<sup>nd</sup> year)

Probability and Discrete Mathematics (2<sup>nd</sup> year)

Complexity of Algorithms (3<sup>rd</sup> year)

Efficient Parallel Algorithms (3<sup>rd</sup> year)

Advanced Topics in Algorithms (3<sup>rd</sup> year)

Modelling and Algorithmic Analysis of Systems (4<sup>th</sup> year)

Algorithmic Game Theory (4<sup>th</sup> year)

Mathematical Programming and Heuristics (MSc)

Operational Research (4<sup>th</sup> year)

Combinatorial Optimisation (MSc)

All the people listed above at Warwick are affiliated with DIMAP, the Centre for Discrete Mathematics and its Applications; see <http://www.dcs.warwick.ac.uk/dimap> for details.

## **UNIVERSITY OF THE WEST OF ENGLAND, BRISTOL**

**Faculty of Computing, Engineering and Mathematical Sciences** University of the West of England, Coldharbour Lane, Bristol BS16 1QY. Tel: 0117 344 2783 Fax: 0117 344 2734

<http://www.cems.uwe.ac.uk/amg/>

Dr Rhys Gwynllyw (graph theory and its applications)

Dr Ana Sendova-Franks (graph theory and its applications)  
Dr. Vadim Zverovich\* (graph theory, combinatorial optimisation)

*Research Students:*

Anush Poghosyan (graph theory and algorithms, Dr. Zverovich).

*Lecture courses*

Discrete Mathematics (2<sup>nd</sup> year)

Operational Research (2<sup>nd</sup> year)

Decision Analysis (3<sup>rd</sup> year)

Mathematical Programming (3<sup>rd</sup> year)

*Current periodicals:* D, N, S, b