

## 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 Combinatoria	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 & Computer Science*, Aberystwyth University, Aberystwyth, SY23 3BZ. Tel: 01970 622802 Fax: 01970 622826 email:

[maths@aber.ac.uk](mailto:maths@aber.ac.uk)

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

Prof J. D. Key (Honorary Professor: combinatorics, codes)

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

Dr T. P. McDonough (retired, Honorary Lecturer: designs, permutation groups, codes)

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

*Lecture courses* None currently.

*Current periodicals:* P, U, h

## **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>

Dr. Ceclie Mailler (probability)

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

Prof Mathew Penrose (probability theory, geometric random graphs)

Dr Alexandre Stauffer\* (probability including random walks,, random graphs, percolation and Markov chain mixing times)

Forthcoming visitors to Bath in probability (often interacting with combinatorics) are listed at <http://www.bath.ac.uk/research/centres/probability-laboratory/seminars/> ( scroll down the page).

*Seminar* Probability Seminar (Monday, 12.15):

<http://www.bath.ac.uk/research/centres/probability-laboratory/seminars/>

*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 Andrew Bowler\* (symmetric designs, combinatorial matrices, permutation groups)

Dr Ben Fairbairn (combinatorial algebra).

Prof. Sarah Hart (permutation groups, sum-free sets)

Dr. Steven Noble (graph polynomials and matroids)

Dr Maura B. Paterson (frameproof codes, key distribution schemes, multivariate equation solving techniques).

Dr Amarpreet Rattan (factorizations of permutations, combinatorial representation theory, lattice path combinatorics).

*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 Trevor I. Fenner (combinatorial algorithms, probabilistic algorithms, random graphs)

Prof George Loizou (combinatorial algorithms)

Dr Oded Lachish (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>

<http://web.mat.bham.ac.uk/combinatorics/main.html> (for combinatorics group).

Dr Nikolaos Fountoulakis (Random Graphs, Randomized Algorithms)

Prof Daniela Kühn (Extremal and Probabilistic Combinatorics)

Dr Allan Lo (Extremal Combinatorics)

Dr Richard Mycroft (Extremal Combinatorics)

Prof Deryk Osthus\* (Extremal and Probabilistic Combinatorics)

Dr. Guillem Pernarua (Probabilistic Combinatorics)

Dr Will Perkins (Probabilistic Statistics, Algorithms)

Dr Andrew Treglown (Extremal Combinatorics)

### *Research Fellows*

Dr. Felix Joos (Combinatorics)

Dr Jaehoon Kim (Combinatorics)

### *Research Students*

Padraig Condon

Matthew Coulson

Alberto Espuny

Frederik Garbe (Dr Mycroft)

Stefan Glock (Prof Osthus)

Robert Hancock (Dr Treglown)

Tassio Naia Dos Santos (Dr Mycroft)

Nicolas Sanhueza  
Wei En Tan (Dr Hefetz)  
Amelia Taylor (Prof Kühn)

*Lecture courses*

Combinatorial Optimisation (22 lectures, 3<sup>rd</sup> year)  
Discrete Mathematics (22 lectures, 1<sup>st</sup> year)  
Combinatorics (22 lectures, 3<sup>rd</sup> and 4<sup>th</sup> year)  
Communication Theory (22 lectures, 3<sup>rd</sup> and 4<sup>th</sup> year)  
Computability (22 lectures, 3<sup>rd</sup> and 4<sup>th</sup> years)  
Advanced Topics in Combinatorics (22, 4<sup>th</sup> year)  
Graph Theory (44, 3<sup>rd</sup> and 4<sup>th</sup> year)

*Seminar* Combinatorics Research Seminar (usually Thursdays 2 p.m)

<http://web.mat.bham.ac.uk/combinatorics/>

## 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>

Prof Carl Dettmann (random geometric graphs, wireless networks, dynamical systems, statistical physics)

Dr Oliver Johnson (group testing, entropy, log-concavity)

Dr Misha Rudnev (harmonic analysis, geometric combinatorics, hard Erdős problems)

Dr Julia Wolf (additive Combinatorics)

Prof Trevor Wooley (number theory)

*Research Fellows*

Dr. Ben Barber\* (extremal combinatorics)

Dr Thomas Bloom (arithmetic combinatorics)

Dr Edward Crane (Geometric function theory, circle packings, holomorphic dynamics, discrete probability, two-dimensional statistical mechanics)

Dr Neil Gillespie (error-correcting codes, permutation groups, codes in graphs)

Dr Justin McInroy (groups, algebras, finite geometry, codes)

*Department of Computer Science* Merchant Venturers Building, Woodland Road, Bristol, BS8 1UB, Tel. 0117 954 5264, Fax 0117 954 5208

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

Dr Raphael Clifford (algorithms)

Dr Ashley Montanaro (quantum computation, including combinatorial aspects)

Dr He Sun (spectral graph theory, randomised algorithms)

*Research Fellows*

Dr Allyx Fontaine (algorithms)

### *Research Students*

Pierre-Yves Bienvenu  
Daniel El-Baz  
Luka Rimanic  
Sophie Stevens

### *Lecture Courses*

Combinatorics (36 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)  
Quantum Information Theory (16 lectures, 4<sup>th</sup> year)  
Complex Networks (36 lectures, 3<sup>rd</sup> and 4<sup>th</sup> year)  
Topics in Discrete Mathematics (15 lectures, 3<sup>rd</sup> and 4<sup>th</sup> year)

*Seminar* Combinatorics Seminar on Thursdays at 4.15 p.m: see

<http://www.bristol.ac.uk/math/events/combinatorics/>

### *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 (online). 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/siscm/math>

Dr Carolyn Chun (matroids)

Dr Rhiannon Hall\* (matroids, graphs)

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

### *Lecture courses*

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

Elements of Combinatorics (24 lectures, 2<sup>nd</sup> year, Dr Krasikov)

Fundamentals (24 lectures, 1st year, Dr Winter)

Probability (36 lectures, 1st year, Dr Tajik)

Institutional Research Repository (containing preprints etc.): <http://bura.brunel.ac.uk/>

*Current Periodicals:* A, B, E, F, H, I, J, L, M, N, O, P, Q, R, S, T, U, V, X, Y, a, b, c, d, e, f, g

## 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 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 and Research Fellows*

Prof Béla. Bollobás (Trinity) (combinatorics, graph theory)

Dr. Johannes Carmesin (infinite graph theory)

Dr Thomas E. Forster (Clare Hall) (logic, set theory, combinatorics)

Dr. Vytautas Gruslys

Dr. Mark Hagen

Dr. Richard Montgomery

Dr. Bhargav P Narayanan

Dr Paul Russell (Churchill) (Ramsey theory)

Dr Matthew Tointon (additive combinatorics)

Dr. Peter Varju

Dr Lutz Warnke (random graphs, probabilistic methods)

### *Research students*

Stefan David (Prof. Bollobás)

Antonio Girao (Prof. Thomason)

Jason Long (Prof. Leader)

Ares Meroueh (Prof Thomason)

Luka Milecevic (Prof. Leader)

Marius Tiba (Prof. Bollobás)

Istvan Tomon (Prof Bollobás)

### *Lecture courses*

Numbers and Sets (24 lectures, 1<sup>st</sup> year, Prof Leader)

Graph Theory (24 lectures, 3<sup>rd</sup> year, Prof Thomason)

Coding and Cryptography (24 lectures, 3<sup>rd</sup> year, Dr Keith Carne)

Ramsey Theory (24 lectures, Part III, Prof Leader)

Concentration in discrete random processes (16 lectures, Part III, Dr Warnke)

Extremal and Probabilistic Problems in Combinatorics (16 lectures, Part III, Prof Bollobás)

Percolation and related topics (16 lectures, Part 3, Prof Grimmett and Dr Kiss)

Additive Combinatorics and Equidistribution (16 lectures, graduate, Dr Peter Varju).

### *Seminars*

Combinatorics (Thursdays at 2.30 p.m.)

Discrete Analysis (Wednesdays at 4.00 p.m.)

### **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)

Dr. A. Gagarin (combinatorics, algorithms)

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, combinatorial optimisation; computational complexity; graph theory)

*Department of Mathematics* Tait Building, Northampton Square, London EC1V 0HB. Tel 020 7040 6051. Fax 020 7040 8566

<http://www.city.ac.uk/department-mathematics>

Dr A. Cox (representation theory)

Prof J. Chuang (representation theory of finite groups)

Dr M. De Visschar (representation theory)

Prof R. Kessar (representation theory of finite groups)

Prof M. Lindemann (representation theory of finite groups)

### **UNIVERSITY OF DERBY**

*School of Computing and Mathematics* Faculty of Business, Computing and Law, University of Derby, Kedleston Road, Derby DE22 1GB. Tel: 01332 591896

Fax: +44 (0)1332 597741.

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

Dr Ovidiu D. Bagdasar (Discrete Mathematics, Optimization, Mathematical Modelling, Geometry, Complex Analysis)

Dr Anna Huber (Combinatorics)

Dr Nicholas Korpelainen (combinatorics)

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

Dr Nicholas Korpelainen (structural and algorithmic graph theory, permutation patterns)

*Research students:* None

*Lecture courses:* Graph Theory and its Applications (3<sup>rd</sup> year)

*Current periodicals:* None

## **UNIVERSITY OF DUNDEE**

**Computing** Computing, University of Dundee, Dundee DD1 4HN. Tel: 01382 388035

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

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

Dr. Saša Radomirović (Combinatorics on words, cryptographic protocols, information security)

**Division of Mathematics** University of Dundee, Dundee DD1 4HN. Tel. 01382 386986

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

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

*Lecture Courses:*

Graph Theory (level 3)

Theory of Computation (Level 3)

*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://community.dur.ac.uk/algorithms.complexity/>

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

Dr S. Dantchev (proof complexity)

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

Dr M. Gadouleau (coding, network coding, information theory and their links to combinatorics and matroid theory)

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

Prof A. Krokhin (algebra; logic; discrete mathematics; constraint satisfaction; computational complexity; temporal reasoning)

Dr. B. Martin (computation complexity)

Dr G. Mertzios (Algorithms, Complexity, Networks, Combinatorial Optimization, Algorithmic Game Theory)

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)



**Department of Mathematical Sciences** Department of Mathematical Sciences, Durham University, Science Laboratories, South Rd, Durham DH1 3LE. Tel: 0191-334-3050 Fax: 0191-334-3051

Dr Nicholas Georgiou (Probabilistic combinatorics and partial orders; modular decomposition and its connection to the Reconstruction Conjecture)

Dr Norbert Peyerimhoff (global analysis, graph theory, Riemannian geometry)

*Research Staff (in Computer Science)*

Konrad Dąbrowski (graph algorithms, parameterized complexity)

Alejandro Erickson (combinatorial algorithms, interconnection networks, mathematical art, tilings and coverings)

*Research Students*

Laurence Dawson (Prof Stewart)

Carl Feghali (graph algorithms, graph colouring, Dr Johnson)

David Kirk (Dr Dantchev)

Foad Lotfifar (Dr Johnson)

Sepehr Meshkinfamfard (Dr Friedetzky)

Anthony Stewart (graph algorithms, Dr Paulusma)

Adam Symonds (Dr Dantchev)

Dan Thomas (Dr Johnson)

Nihan Tokac (Dr Bordewich)

Chris Wastell (Dr Friedetzky)

William Whistler (Prof Krokhin).

*Lecture Courses:*

Algorithms and Data Structures (1st year, 40 lectures, Dr Friedetzky and Dr Johnson)

Logic and Discrete Mathematics (1st year, 40 lectures, Prof Krokhin and Dr Paulusma)

Algorithms and Complexity (2nd year, 20 lectures, Dr Gadouleau and Dr Mertzios)

Advanced Algorithms (3rd year, 10 lectures, Dr Johnson)

Advanced Computational Complexity (3rd year, 10 lectures, Prof Krokhin)

Algorithmic Game Theory (3rd year, 10 lectures, Dr Dantchev)

Information Theory (3rd year, 10 lectures, Dr Gadouleau)

*Seminars*

The Algorithms and Complexity Group have a weekly seminar, current webpage.

<http://community.dur.ac.uk/algorithms.complexity/seminars.html>

*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)

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

Dr Robert D. Gray\* (algebra and combinatorics)

Dr S. Lyle (representation theory).

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

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

**School of Computing Sciences** University of East Anglia, Norwich, NR4 7TJ, United Kingdom. Tel. +44 (0) 1603 592607. Fax. +44 (0) 1603 593345

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

Dr Katharina Huber (finite metric spaces, phylogenetics, discrete algorithms, applications of combinatorial approaches to computational biology)

Prof Vincent Moulton (finite metric spaces, phylogenetics, discrete algorithms, graph theory, applications of combinatorial approaches to computational biology)

#### *Research students*

Mr. Badr Allhadri (Dr Lyle)

Miss S. Bastkowsk (phylogenetics, Prof Moulton)

Mr. S. Greatrix (phylogenetics, Prof Moulton)

Mr. R. Suchecki (phylogenetics, Dr Huber)

#### *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 Mary Cryan\* (algorithms and complexity)

#### *Research students*

#### *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 David Branson (retired: applied probability, combinatorics of Stirling numbers)

Dr. Jessica Claridge (part-time: cryptography)

Prof Peter.M. Higgins (combinatorics of algebraic semigroup theory, cryptography)

Dr. Vanni Noferini (numerical analysis, linear algebra, graphs).

Dr David Penman\* (random and pseudo-random graphs, aspects of poset theory and additive combinatorics)

Dr Chris Saker (part-time: combinatorics on words, semigroup theory, cryptography)

Dr Abdellah Salhi (combinatorial optimisation)

Dr Alexei Vernitski (algebra, combinatorics, computer security)

Dr Gerald Williams (computational group theory)

### *Research students*

Andria Eleftheriou (reliability of graphs: Dr Penman: part-time)

Baha Tamimi (critical groups of graphs, Dr Penman and Dr Williams, part-time)

### *Lecture Courses*

Graph Theory (3<sup>rd</sup> year, Dr Martin Griffiths) (30 lectures)

Codes and Cryptography (Dr Williams, 3<sup>rd</sup> year) (30 lectures)

Combinatorial optimisation (Dr Xinan Yang, 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 (retired: representation of matroids)

### *Lecture courses*

Discrete Mathematics and Probability (1<sup>st</sup> year)

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

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

Graphs, Networks and Algorithms (3<sup>rd</sup> year)

*Current periodicals:* C, D, W

(For “Glamorgan”, see now “University of South Wales”).

## **UNIVERSITY OF GLASGOW**

*School of Mathematics and Statistics* University of Glasgow, University Gardens, Glasgow  
G12 8QQ. Tel: 0141 330 5176 Fax: 0141 330 4111

[www.gla.ac.uk/schools/mathematicsstatistics](http://www.gla.ac.uk/schools/mathematicsstatistics)

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

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

<http://www.gla.ac.uk/schools/computing/>

Dr. F. Fischer (mechanism design, optimization, algorithms)

Dr R.W. Irving (combinatorial and graph algorithms) (Honorary Research Fellow)

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

Dr K. Meeks\* (graph theory, algorithms, parameterised complexity, networks.

Dr A. Miller (combinatorial and graph algorithms)

Dr P. Prosser (combinatorial and graph algorithms)

### *Research students*

Frances Cooper (combinatorial and graph algorithms, Dr Manlove)

Ciaran McCreesh (combinatorial and graph algorithms, Dr Prosser)

Sofiat Olaosebikan (combinatorial and graph algorithms, Dr Manlove)

Craig Reilly (Parallel graph search with isomorphism elimination, Dr Miller)

James Trimble (combinatorial and graph algorithms, Dr Manlove and Dr Prosser)

### *Lecture courses*

Algorithmic Foundations 2 (Computing Science, 2<sup>nd</sup> year, 22 lectures, Dr Norman)

Algorithms and Data Structures 2 (Computing Science, 2<sup>nd</sup> year, 22 lectures, Dr. Prosser)

Algorithmics I (H) (Computing Science, 3<sup>rd</sup> year, 20 lectures, Dr Norman)

Algorithmics II (H) (Computing Science, 4<sup>th</sup> year, 20 lectures, Dr. Fischer and Dr Manlove)

Constraint Programming M (Computing Science, 4<sup>th</sup> year, 20 lectures, Dr Prosser)

Graphs and Networks (Maths, 22 lectures, 2<sup>nd</sup> year)

Topics in Discrete Mathematics (Maths, 21 lectures, 2<sup>nd</sup> year)

Seminars: Formal Analysis, Theory and Algorithms (Tuesday, 1 pm, during semester time).  
(Dr Michele Sevegnani)

<http://www.gla.ac.uk/schools/computing/research/researchoverview/fata-section>

*Current periodicals:* C, O, i (paper only)

M, N, Q, R, V, X, Y, b, c, h (paper and electronic)

A, B, F, H, I, L, P, S, T, U, Z, a, d, e, f, g (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**

Hubble Road, Cheltenham, GL51 0EX. Tel: 01242 221491 Fax: 01242 226816

<http://www.gchq.gov.uk/>

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. Laura Ciobanu (group theory, combinatorics, formal languages)

Dr M.V. Lawson (semigroup theory, combinatorics on words)

*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)

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

## **UNIVERSITY OF HERTFORDSHIRE**

**School of Physics, Astronomy and Mathematics.** University of Hertfordshire, College Lane, Hatfield, Hertfordshire, AL10 9AB  
Tel. +44 (0)1707 284394  
<http://www.herts.ac.uk/apply/schools-of-study/physics-astronomy-and-mathematics>  
Dr Catarina Carvalho (algebra, combinatorics, theoretical computer science)  
Dr Yann Peresse (algebra, combinatorics)

**ROYAL GRAMMAR SCHOOL, HIGH WYCOMBE.**

Dr Richard I Shreeve (retired) (combinatorics in general, specifically enumeration of 3-topes and  $n$ -topes).

*Lectures:* Occasional lectures to Oxbridge applicants.

**UNIVERSITY OF HULL**

**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:* T. Electronic access to H, J, P, Q, R, S, U, V, X, Y, a, b, d

**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>

Dr John Britnell (group theory, algebraic combinatorics)  
Prof D. M. Evans (permutation groups, automorphism groups of infinite structures)  
Prof A. Ivanov (distance-transitive graphs)  
Prof M. W. Liebeck (group theory, algebraic combinatorics)  
Dr O. Pretzel (combinatorics)  
Dr Alexander Kasprzyk (algebraic geometry, combinatorics of convex lattice polytopes).

**Department of Electrical Engineering**

Dr Moez Draeif (applied probability including random graphs).

**KEELE UNIVERSITY**

**School of Computing and Mathematics** Keele University, Keele, Staffordshire ST5 5BG.  
Tel: 01782 733258 Fax: 01782 734268  
<http://www.keele.ac.uk/scm/>

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

Dr J. Preater (applied probability, random graphs)  
Dr. P. Truman (Algebraic number theory and combinatorics)

*Lecture courses*

Advanced Combinatorics (40 lectures, 4<sup>th</sup> year, Dr Bedford)  
Codes and Cryptography (30 lectures, 3<sup>rd</sup> year, Dr Truman)

**UNIVERSITY OF KENT**

*School of Mathematics, Statistics and Actuarial Science* Sibson Building, University of Kent, Canterbury, Kent CT2 7FS. Tel: 01227 827181 Fax: 01227 827932

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

Dr. C. D. Bowman (combinatorics and representation theories of diagrammatic algebras)  
Prof P. Fleischmann (algebraic combinatorics, root systems, Mobius function)  
Prof. S. Launois ( $q$ -calculus)  
Dr B. Lemmens (applications of discrete geometry in dynamics and analysis)  
Dr. A. F. Loureiro (orthogonal polynomials)  
Dr R. E. Paget\* (representation theory of symmetric groups and related algebras, plethysm)  
Dr. C. M. A. Pech (cluster algebras)  
Dr R. J. Shank (modular invariant theory)  
Dr C. F. Woodcock (orthogonal Latin squares)  
Dr M. Towers (representation theory of quantum algebras)

*Research students*

Reuben Green (Dr Paget)  
Brendan Nolan (Prof Launois)  
Alexandra Rogers (Prof Launois)

*Lecture courses*

Discrete mathematics (36 lectures, 3<sup>rd</sup> year, Dr Woodcock)  
Graphs and combinatorics (36 lectures, 3<sup>rd</sup> year / M.Sc., Dr Lemmens)  
Symmetries, Groups and Invariants (3<sup>rd</sup> year / M.Sc., Prof Fleischmann)  
*Current periodicals*: electronic access to A, B, E, F, H, J, L, M, N, O, 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)  
Dr Tomasz Radzik (algorithms, combinatorial algorithms etc.).

*Research Fellow*

Dr. Andrew McDowell (Combinatorics)

## **KINGSTON UNIVERSITY**

*Faculty of Science, Engineering and Computing* Kingston University,  
Penrhyn Road, Kingston-upon-Thames, KT1 2EE  
<http://sec.kingston.ac.uk/>

### *School of Mathematics*

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)

### *School of Computing and Information Systems*

Prof Les Hatton (forensic software engineering).  
Dr Luke Hebbes (software, turbocodes)  
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>

Dr. Natasha Blitvic (algebraic combinatorics, q-series and combinatorics of mathematical  
physics)  
Prof A.G. Chetwynd (combinatorial applications in statistics)  
Dr. Jan Grabowski (cluster algebras, quantum spaces and the combinatorics of their torus-  
invariant prime ideal spectrum)  
Dr Lukasz Grabowski (graph limits)  
Dr. Derek Kitson (geometric and combinatorial rigidity, operator theory, analysis)  
Dr. Nadia Mazza (representation theory)  
Dr Tony Nixon\* (combinatorial rigidity, discrete geometry, graph theory, matroid theory)  
Dr Bernd Schulze (discrete geometry, rigidity and flexibility of geometric constraint systems,  
graph theory, matroid theory)  
Prof. Stephen Power (combinatorial rigidity, geometric constraint systems, rigidity  
operators).

Research Students:

Thomas Booker Price (Dr Grabowski)  
Hattie Serocold (Dr Schulze)



Lecture courses:

Discrete Mathematics (1st year)  
Combinatorics (3rd year)

*Current periodicals:* E, F, T, U., 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 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, logic)

Prof R. J. Marsh (Cluster algebras and related combinatorics, Coxeter groups, Representation Theory)

Prof P. P. Martin (Representation theory, connections to Combinatorics)

Dr A. E. Parker (Representation theory and connections to Combinatorics)

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

**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 Müller\* (algorithms, graph theory)

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

Prof Kristina Vušković (graph theory, algorithms and combinatorial optimisation)

### *Research Students*

Lokush Agarwal (Prof Truss)

Chwas Ahmed (Dr Parker, Prof Martin)

Andres Aranda Lopez (Prof MacPherson)

George Atthesis (Prof MacPherson)

Robert Barham (Prof Truss)

Ricardo Bello Aguirre (Prof MacPherson)

David Bradley-Williams (Prof MacPherson and Prof Truss)

Heather Burke (Prof Martin, Prof Crawley-Boevey)

Cong Chen (Prof Truss)

Ragab Elageili (Prof Truss)

Anastasia Grekoiti (Dr Shakhlevich)

Mufida Hmaida (Prof Martin)

Ahmed Hussein (Dr Parker, Prof Martin)

Tristram Jenkinson (Prof Truss)

Mayra Montalvo Ballasteros (Prof Truss)

Andrew Reeves (Prof Martin, Prof Crawley-Boevey)

Samuel Wilson (Dr Müller)

Daniel Wood (Prof MacPherson)

*Lecture courses*

Introduction to Discrete Mathematics (22 lectures, 2<sup>nd</sup> year, Dr Penazzi)

Graph theory (33 lectures, 3<sup>rd</sup> year, Prof MacPherson)

Advanced Graph Theory (44 lectures, 4<sup>th</sup> year/M.Sc., Prof MacPherson)

Coding Theory (22 lectures, 3<sup>rd</sup> year, Prof Read)

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

Mathematics for Computing (22 lectures, 1<sup>st</sup> year, Prof Vušković)

*Current periodicals:* (all online only): E, F, M, N, P, Q, T, V, X, Y, b,c,d,e,g,h.

**UNIVERSITY OF LEICESTER**

**Department of Informatics** University of Leicester, University Road, Leicester LE1 7RH.

Tel: 0116 252 3887 Fax: 0116 252 3604

<http://www2.le.ac.uk/departments/informatics>

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

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

*Research Students*

Anastasia Ioannou (modelling systems via Petri nets, Prof Thomas)

Matthew Radoja (algorithmic game theory, Prof Erlebach)

*Lecture courses*

Discrete Structures (14 lectures, 1st year, Prof Thomas)

Automata, Languages and Computation (30 lectures, 2nd year, Prof Thomas)

Analysis and Design of Algorithms (30 lectures, 3rd year, Dr Fung)

Cryptography and Information Security (30 lectures, 3rd year, Dr Fung and Dr Tuosto)

Discrete Event Systems (24 lectures, M.Sc., Dr Hoffmann)

Algorithms for Bioinformatics (24 lectures, M.Sc., Dr. Fung)

Game Theory in Computer Science (24 lectures, M.Sc., Dr de Vries)

*Seminars* There is a regular seminar program, see

<http://www2.le.ac.uk/departments/informatics/news/researchevents>

**Department of Mathematics**, University of Leicester, University Road, Leicester LE1 7RH.

Tel: 0116 252 3917 Fax: 0116 252 3915

<http://www2.le.ac.uk/departments/mathematics>

Dr S. Schroll (representation theory of algebras, homological algebra, matroids and hypergraphs)

Dr. J. Semeraro (combinatorics, group theory, representations).

Research students

Drew Duffield (Brauer graph algebras, Dr Schroll)

Dr. Schroll also has a joint PhD student with Duardo Marcos in Sao Paolo, Brazil.

Seminars There is a regular seminar program, see

<http://www2.le.ac.uk/departments/mathematics/research/pure/colloquium>

[http://www2.le.ac.uk/departments/mathematics/research/applied/applied\\_seminar](http://www2.le.ac.uk/departments/mathematics/research/applied/applied_seminar)

*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 P. Dunne (Complexity theory and algorithm design)

Prof L. Gasieniec (Distributed and parallel computing; network communication; algorithmic agent design; string matching)

Prof D. Kowalski (Distributed computing; network communication algorithms; fault tolerance; combinatorial and randomized data structures)

Prof P. Krysta (algorithmic game theory, Algorithmic mechanism design, Combinatorial optimisation, Approximation algorithm)

Prof P. Spirakis (Algorithms & Complexity, Probabilistic methods in algorithms, algorithmic game theory)

Dr A. McCabe (auctions and mechanism design).

Dr I. Biktasheva (Computational mathematics; computational biology; autowaves and autowave vortices; computer modeling for cardiology; high performance computing)

Dr G. Christodoulou (Algorithmic game theory, Inefficiency of equilibria, Algorithmic mechanism design)

Dr M. Gairing (Algorithmic Game Theory, Approximation Algorithms)

Dr R. Martin (Distributive computing, randomized algorithms, enumerative combinatorics)

Dr I. Potapov (Design and analysis of algorithms; computational models and automata theory; decidability issues)

Dr R. Savani (Algorithmic Game Theory, Equilibrium Computation, Automated and Algorithmic Trading)

Dr D. Wojtczak (stochastic games, Markov chains, algorithmic game theory, control theory, modelling of biological and queueing systems)

Dr P. Wong (combinatorial algorithms, scheduling, packing, computational biology)

Dr M. Zito\* (algorithms and complexity, random structures)

### *Research Fellows*

Dr John Fearnley (Algorithmic Game Theory. Logic and Computation).

Dr. Pavel Semukhrin (reachability problems, automatic structures, computational learning theory, computability theory)

Dr Jinshan Zhang (Algorithmic game theory, Algorithmic mechanism design)

### *Research Students*

Eleni Akrida (algorithms, graph theory, random graphs)  
Athraa Al-Krizi (network security)  
Sultan Alshamrani (cloud computing, network patrolling)  
Eleftherios Anastasiadis (Algorithmic game theory, Mechanism design)  
Mohamed Arikiez (Smart home energy management systems)  
Mihai Burcea (Energy-efficient algorithms; energy-efficient scheduling; windows scheduling; dynamic bin packing)  
Thomas Carroll (String algorithms, Combinatorics, Bioinformatics, GPU Computing)  
Argyrios Deligkas (Mechanism design, Revenue maximisation)  
Keren Dong (Automated and Algorithmic Trading)  
Ashley Farrugia (Dynamic vehicle routing mechanisms; off-line and online time series analysis of vehicle data)  
Thomas Gorry (Distributed computing; algorithmic agent design; rendezvous)  
David Hamilton (visualisation and animation mechanisms for large networks)  
Tobenna Peter Igwe (Algorithmic Game Theory)  
Hsiang Hsuan Liu (algorithm design, parameterized complexity)  
Jie Min (recognition of structural properties in complex networks)  
Reino Niskanen  
Jude-Thaddeus Ojiaku (Energy efficient algorithms, GPU computing)  
Pavan Sangha (Random graphs)  
Alkmini Sgouritsa (Algorithmic Mechanism Design, Algorithmic Game Theory, Algorithms, Complexity)  
Tao Shang (migration mechanisms in social networks)  
Bo Tang (Algorithmic game theory)

*Lecture courses:*

Comp108: Algorithmic Foundations (1<sup>st</sup> year)  
Comp109: Foundations of Computer Science (1<sup>st</sup> year)  
Comp202: Complexity of Algorithms (2<sup>nd</sup> year)  
Comp218: Decision, Computation and Language (2<sup>nd</sup> year)  
Comp309: Efficient Sequential Algorithms (3<sup>rd</sup> year)  
Comp323: Introduction to Computational Game Theory (3<sup>rd</sup> year)  
Comp324: Complex Information and Social Networks (3<sup>rd</sup> year)  
Comp523: Advanced Algorithmic Techniques (Master's)  
Comp526: Applied Algorithmics (Master's)  
Comp557: Optimisation (Master's)  
Comp559: Computational Auctions and Mechanism Design (Master's)

*Seminar:*

Each research group holds regular seminars.

With strong mathematical interests is also the NeST initiative:

<http://www.liv.ac.uk/network-science-technologies>

**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://www2.lse.ac.uk/math>

Dr Peter Allen (extremal graph 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)

Dr Julia Böttcher (extremal graph theory)

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

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

Prof Jozef Skokan (quasi-randomness, applications of the regularity lemma, Ramsey theory, extremal set theory, probabilistic combinatorics)

Prof Bernhard von Stengel (game theory and complexity)

Dr Konrad Swanepoel (combinatorial and discrete geometry, finite geometries, extremal combinatorics)

Dr Laszlo Vegh (approximation algorithms, combinatorics)

Dr Giacomo Zambelli (combinatorics, combinatorial optimization)

**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/>

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

Prof Gregory Sorkin (combinatorial optimisation).

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

Prof Paul Williams (Emeritus: linear and integer programming)

#### *Research students*

Marta Casetti (Prof von Stengel)

Ewan Davies (Dr Skokan)

Nora Frankl (Dr. Skokan and Dr. Swanepoel)

Matthew Jensen (Dr Böttcher and Skokan)

Aaraon Lin (Dr. Swanepoel and Prof. von Stengel)

Daniel Quiroz (Prof. van den Heuvel and Dr. Batu)

Barnaby Roberts (Dr Skokan and Dr. Allen)

Pongphat Taptagaporn (Dr. Batu and Dr. Anthony)

#### *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  
CDAM Informal Workshop, Fridays 12:00  
<http://www2.lse.ac.uk/math/Seminars>

## **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 Elroy Benjamin

Dr Carrie Rutherford\* (graph and matroid theory)

### *Lecture courses*

Discrete mathematics occurs in the first year of all the computing courses (Dr Benjamin). Applications of combinatorics appear in the 2<sup>nd</sup> year module Business Management with Analytics (Dr Rutherford)

### *Study group/working paper series:*

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

*Current periodicals:* A B H J L M a c d N O P Q R S T U X Y Z f

## **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/>

Dr Y. Bazlov (representation theory, including interactions with combinatorics)

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

Prof D. S. Broomhead (applied tropical algebra and geometry, dynamics on graphs)

Prof R. M. Bryant (emeritus: groups, Lie algebras)

Dr J. Hook (stochastic processes on graphs)

Dr M. Johnson\* (tropical algebra and geometry, free Lie algebras and Young tableaux)

Prof. M. Kambites (tropical algebra and geometry, 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)

Dr. S. Prendiville (additive combinatorics)

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

Prof P. J. Rowley (group theory)

Dr R. Sandling (Steenrod algebra: lattices)

Prof R. Stöhr (Group theory and Lie algebras, including combinatorial aspects and methods).

*Lecture courses*

Discrete Mathematics (24 lectures, 2<sup>nd</sup> year, Dr Mark Muldoon)  
Coding Theory (24 lectures, 3<sup>rd</sup> year, Dr Bazlov)  
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)  
Computation and 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.

**MANCHESTER METROPOLITAN UNIVERSITY**

*School of Computing, Mathematics & Digital Technology* John Dalton Building,  
Manchester Metropolitan University, Chester Street, Manchester M1 5GD  
0161 247 1677  
<http://www.scmdt.mmu.ac.uk/>

Dr. Jan Foniok\* (discrete mathematics)

**MIDDLESEX UNIVERSITY**

*Design Engineering and Mathematics Department* School of Science and Technology,  
Middlesex University The Burroughs, London NW4 4BT  
Tel: 020 8411 5137  
<http://www.mdx.ac.uk/aboutus/Schools/science-and-technology/index.aspx>

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

*Lecture Courses*

Logic and Structures (1<sup>st</sup> year)  
Combinatorics (3<sup>rd</sup> year)  
Discrete Mathematics and Geometry (2<sup>nd</sup> year)

*Current Periodicals:* F, I, P, S, V, X, Y, b, e

**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 Vdovina)

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

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

*Current periodicals:* A, B, F, H, I, J, L, M, N, P, Q, R, S, T, U, V, X, Y, Z, a, b, c, d, e, f, g.  
Almost all current issues are electronic access only.

**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)

*Lecture courses*

Graph Theory (20 lectures, 3<sup>rd</sup> year, Dr Diamantis)

Coding and cryptography (20 lectures, 3<sup>rd</sup> year, Dr Stromberg)

*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)

Prof Nadia. Chuzhanova (bioinformatics, combinatorics on words)

Dr Jonathan J. Crofts (computational graph theory, complex networks, combinatorics, data-mining, computational biology)

Dr Timothy J. Hetherington\* (graph theory, particularly graph colourings)

Dr Colin M. Willmott ((Algebra, combinatorics, geometry, quantum coding, quantum cryptography and entanglement theory)

*Research students:*

Daniel Buxton (applications of complex networks: Prof. Chuzhanova).

*Lecture courses:*

Topics in Pure Mathematics: Graph Theory (12 lectures, 3<sup>rd</sup> year, Dr Hetherington).

Coding Theory and Cryptography (24 lectures, 3<sup>rd</sup> and 4<sup>th</sup> year, Dr Wilmott and 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 Silvia Barbina (permutation groups, automorphism groups of countable structures)



Dr Robert Brignall (permutation classes, relational structures, graph theory, well quasi order)  
Dr Katie Chicot (infinite combinatorics)  
Prof Mike Grannell (Emeritus: combinatorial design theory, combinatorial computing, Steiner systems, topological design theory)  
Prof Terry Griggs (Emeritus: combinatorial design theory, combinatorial computing, Steiner Systems, topological design theory)  
Prof Uwe Grimm (enumerative combinatorics, words, tilings, applications to physics)  
Dr Fred Holroyd (retired: fractional graph colourings, graceful and related tree labellings, Erdős-Ko-Rado properties of graphs)  
Dr Kathleen Quinn\* (designs and their applications)  
Prof Jozef Širáň (topological graph theory, Cayley graphs)  
Dr Bridget Webb (automorphisms of designs, Latin squares, infinite designs)  
Prof Robin Wilson (Emeritus: history of graph theory and combinatorics, graph colourings)

#### *Visiting research fellows*

Dr Tony Forbes (Mathematics: combinatorial designs)

#### *Research students*

Grahame Erskine (vertex-transitive and Cayley graphs in the degree-diameter and the degree-girth problem: Prof Širáň and Dr Webb)  
James Fraser (Prof Širáň)  
Robert Lewis (analysis and construction of extremal highly symmetric graphs with given metric properties: Prof Širáň and Dr Webb: part-time)  
David Marchant (permutation patterns: Dr Brignall, part time)  
Jakub Sliacan (permutation patterns: Dr Brignall)  
James Tuite (vertex-transitive and Cayley graphs and embeddings: Prof Širáň)

#### *Courses*

MT365: Graphs, networks and design (3<sup>rd</sup> year)  
M836: Coding Theory (M.Sc.).  
M840: Dissertation in mathematics (algebraic graph theory option) (M.Sc.).

*Current periodicals:* A, B, C, D, E, F, H, I, J, L, M, N, P, Q, R, S, T, U, V, W, X, Y, Z, a, b, c, d, e, f, g, h, i (some electronic access only).

### **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>

Prof David Conlon (graph theory and combinatorics)  
Prof Ben Green (additive combinatorics)  
Dr Raphael Hauser (continuous optimization, applied probability)  
Prof Peter Keevash (extremal and probabilistic Combinatorics)  
Dr Robert Leese (channel assignment problems)

Dr Mason Porter (applications of networks)  
Prof Oliver Riordan (combinatorics, graph theory)  
Dr Tom Sanders (additive combinatorics)  
Prof Alex Scott (combinatorics, graph theory)  
Prof Dominic J. A. Welsh (retired: combinatorics, applied probability, complexity)

*Research fellows/assistants*

Dr. Annika Heckel (combinatorics)  
Dr. Eoin Long (combinatorics)  
Dr Michal Przykucki (probabilistic combinatorics)  
Dr. Yufei Zhao (combinatorics)

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

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

Prof Christina Goldschmidt (probability theory and combinatorics)  
Prof Colin 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).

**Department of Computer Science** Wolfson Building, Parks Road, Oxford OX1 3QD Tel: 01865 73838 Fax: 01856 73839

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

Prof Peter Jeavons (algorithms and complexity, constraint satisfaction)  
Prof Leslie.A. Goldberg (combinatorial algorithms, complexity of counting and sampling)  
Prof Paul Goldberg (algorithms, game theory)  
Prof Georg Gottlob (algorithms and complexity)  
Dr Stanislav Živný (discrete optimisation, constraint satisfaction, generalisations of submodularity)

*Research students*

Hannah Guggiari  
Jakub Konieczny (Prof. Green)  
Sofia Lindqvist (Prof. Green)  
Przemyslaw Mazur (Prof. Green)  
Natasha Morrison (Prof Scott)  
Alexander Roberts (Prof Scott)  
Aled Walker (Prof Green)

*Lecture courses*

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 (8 lectures, 2<sup>nd</sup> year, Prof McDiarmid)  
Graph Theory (16 lectures, 4<sup>th</sup> year, Prof Riordan)  
Probabilistic Combinatorics (16 lectures, 4<sup>th</sup> year, Prof McDiarmid)

*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 Computing, Electronics and Mathematics* University of Plymouth, Drake Circus, Plymouth. PL4 8AA. Tel: +44 (0)1752 586888.

<http://math-sciences.org/research-groups/research-pure-mathematics>

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

### *Research students*

Mary Griffiths (Prof. Huggett).

### *Lecture courses*

Optimisation, Networks and Graphs (3rd year, 12 weeks, 6 hours per week of which 3 are on discrete topics).

### *Seminars*

Pure Mathematics Seminar (weekly).

## **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 Murad Banaji (graph theory and applications to chemical reactions).

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

Prof Rosemary A. Bailey (design of experiments, latin squares and their generalisations, designs for complicated block structures, association schemes, partition species)

Dr John N. Bray (group theory)

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

Dr David Ellis (combinatorics, especially its interaction with other parts of mathematics)

Dr Dvir Falk (Combinatorics)

Dr Matt Fayers (representation theory and Combinatorics)

Dr Alex Fink (Combinatorics and tropical geometry)

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)  
Prof Malwina Luczak (probability, including combinatorial probability)  
Prof Thomas Müller (group theory, combinatorics, analysis)  
Prof Thomas Prellberg (statistical mechanics, dynamics, enumerative combinatorics)  
Prof Leonard H. Soicher (computational group theory, graph theory, finite geometry, design theory)  
Dr Dudley S. Stark (probability and combinatorics)  
Dr Mark Walters (probabilistic combinatorics, percolation, extremal problems)  
Prof Robin Whitty (combinatorics)  
Prof Rob A. Wilson (computational group theory)

#### *Researchers*

Dr. Heng Guo  
Dr Emil Vaughan (graph theory and statistics)

#### *Research students*

Jack Bartley (Dr. Walters)  
Katie Clinch (Prof. Jackson)  
Nick Day (Dr. Johnson)  
Hakan Guler (Prof Jackson)  
Teerasak Khoploykang (Prof. Jackson)  
Trevor Pinto (Dr. Johnson)  
Anitha Rajkumar (Prof. Jackson)  
Adthasit Sinna (Prof. Jackson)

#### *Lecture courses*

Algorithmic Graph Theory (36 lectures, 2nd year)  
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)  
Extremal combinatorics (24 lectures, M.Sc)

*Seminars* Combinatorics study group (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 P. Grindrod (applications of graph theory and networks)

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)

*Lecture courses*

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

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

**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 Simon R. Blackburn\* (group theory, algebra and combinatorics of data communications, coding theory, cryptography)

Prof Carlos Cid (cryptography, security, computational algebra)

Prof Jason Crampton (applications of discrete mathematics to access control)

Dr Rainer Dietmann (analytic number theory, diophantine equations, additive combinatorics)

Prof John 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 Stefanie Gerke (graph theory, combinatorics, random structures and algorithms)

Prof Keith M. Martin (cryptography and information security)

Prof James McKee (Salem numbers, Pisot numbers, Mahler measure, elliptic curves, computational number theory)

Prof Chris Mitchell (cryptography and information security)

Dr Iain Moffatt (algebraic combinatorics, topological graph theory, knot theory)

Prof Sean P. Murphy (spatial probability, cryptography)

Dr Siaw-Lynn Ng (combinatorics, finite geometry, applications to information security)

Prof Kenneth G. Paterson (cryptography and coding)

Dr Mark Wildon (representation theory, group theory, combinatorics)

*Visiting Professors* Prof Nelson Stephens, Prof Mike Walker (Vodafone Chair in Communications)

***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 Dave. Cohen (constraint satisfaction, graphs and hypergraphs)

Prof Gregory Gutin (graphs and combinatorics, combinatorial optimisation, access control)

Dr Iddo Zameret (theory of computation);

Dr Magnus Wahlström (combinatorial algorithms)

*Postdoctoral researchers*

Dr Chris Dowden (graph theory and communication theory)

Dr Mark Jones (combinatorial algorithms)

Dr Rémi Watrigant (combinatorial algorithms)

### *Research students*

James Alderman (access control and cryptography, Prof Crampton)  
Elizabeth Berners-Lee (cryptography, Prof. Cid)  
Jonathan Cooley (number theory, Prof McKee)  
Alex Davidson (cryptography, Prof. Cid)  
Naomi Farley (access control, Prof Crampton and Prof Gutin)  
David Hutchinson (cryptography, Prof Paterson)  
Christian Janson (cryptography, Prof Cid)  
Thalia Laing (cryptography, Prof Martin)  
Thyla van der Merwe (cryptography, Prof Paterson)  
Mwawi Nyirenda (combinatorial applications to cryptography, Prof Martin, Dr Ng)  
Bill O'Donovan (representation theory, Dr Wildon)  
Laurence O'Toole (DES, MARS, feistel networks)  
Rachel Player (learning with errors-based schemes, Prof Cid)  
Ricardo Villanueva Polanco (cryptography, Prof Paterson)  
Gordon Procter (cryptography, Prof Cid)  
Sam Scott (cryptography, Prof. Paterson)  
James Sellwood (access control, Prof Crampton)  
Aleen Sheikh (number theory, Prof Blackburn)  
Bin Sheng (combinatorial algorithms, Prof Gutin)  
Dale Sibborn (cryptography, Prof Paterson)  
Benjamin Smith (graph theory, Dr Moffatt)  
Conrad Williams (access control, Prof Crampton)  
Joanne Woodage (cryptography, Prof. Paterson)  
Pavlo Yatsyna (matrices and polynomials, Prof McKee).

### *Lecture courses*

Graphs and Optimisation (33 lectures, 2<sup>nd</sup> year)  
Cipher systems (33 lectures, 3<sup>rd</sup> year)  
Error correcting codes (33 lectures, 3<sup>rd</sup> year)  
Theory of error correcting codes (44 lectures, p/g)  
Channels (33 lectures, p/g)  
Combinatorics (33 lectures, p/g)  
Principles of Algorithm Design (33 lectures, p/g)  
Public Key Cryptography (33 lectures)  
Advanced Cypher Systems (44 lectures, p/g)  
Applications of Field Theory (33 lectures, p/g)

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 Moffatt, Dr. Martin Widmer) (Tuesdays at 2.00 p.m. in room 219).

Information Security Seminar (Dr Lorenzo Cavallaro) (Thursdays 11.00 in Room C229).

*Current periodicals:* E, F, H, J, M, N, P, S, T, X, b, h (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>

Prof R. A. Bailey (design of experiments, latin squares and their generalisations, designs for complicated block structures, association schemes, partition species)

Dr C. Bleak (geometric group theory, automatic structures)

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

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

R. L. Constable (combinatorics)

Prof K. J. Falconer (combinatorial geometry)

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 T. Kempton

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

Dr J. D. Mitchell (combinatorial and topological applications of group and semigroup theory)

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

Prof L. Olsen (analysis and combinatorics)

Dr M. R. Quick (group theory)

Prof I. Rivin (combinatorics, number theory, geometric topology, 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, geometric group theory)

Prof N. Ruškuc (combinatorics of words, mappings, permutations: combinatorial semigroup theory)

Dr. L. Theran

Dr M. Todd (ergodic theory)

### *Research Students*

Mr. D. Bennett

Miss E. Bieniecka

Mr. T. Bourne

Miss R. Carey

Mr. A. Clayton

Miss N. Khalid

Mr. M. McDevitt

Mr. V. Mijovik

Mr. C. Millar

Mr. A. Mordcovich

Mr. C. Russell

Mr. M. Torpey

Mr. S. Troscheit

Mr. W. Wilson

### *Lecture courses*

Combinatorics and Probability (24 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)  
Advanced combinatorics (24 lectdure, 4<sup>th</sup>/5<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  
CIRCA Seminar 1pm Thursdays

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

Tel: 01334 463253 Fax: 01334 463278

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

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

Dr A. B. Kononov

Dr M. Pfeiffer (automatic structures)

*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>

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

*Current periodicals:* T

## **UNIVERSITY OF SHEFFIELD**

***School of Mathematics and Statistics*** University of Sheffield, Hicks Building, Hounsfield Road, Sheffield S3 7RH. Tel: 0114 222 3752. Fax 0114 222 3809

Prof Chris Cannings (evolutionary conflicts, random graphs, stochastic processes, mathematical genetics)

Dr Paul Johnson (algebraic geometry, combinatorics)

Dr Jonathan Jordan (probability, random graphs)

## **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 (retired: 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

**UNIVERSITY OF SOUTH WALES**

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

<http://www.southwales.ac.uk/math/research/>

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

Dr S. Jones\* (properties of Sudoku puzzles and their variants)

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

Prof D. H. Smith (emeritus professor: coding theory, permutation codes, DNA codes, frequency assignment)

*Research students*

Liam Harris (combinatorial problems on the chessboard, Dr Perkins)

*Lecture courses*

Codes and Information (3rd year, Dr Perkins, Dr Hunt)

Combinatorics and Network flows (2nd year, Dr Perkins and Dr Jones)

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

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

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

Dr J Enright (graph theory, contagion on graphs)

Dr P. S. Jackson (algebraic graph theory)

Prof P. Rowlinson\* (Emeritus: algebraic graph theory) <http://www.cs.stir.ac.uk/~pr/>

*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, J, M, N, P, R, S, U, V, X, Y, b, d (all electronic).

**STRATHCLYDE UNIVERSITY**

*Department of Computer and Information Sciences* Livingstone Tower, 26 Richmond Street, Glasgow G1 1XH. Tel: 0141 548 2934 Fax: 0141 548 4523

<http://www.strath.ac.uk/cis/>

Dr. David Bevan\* (enumerative combinatorics, permutation patterns)

Dr Sergey Kitaev (combinatorics, discrete analysis, graph theory, formal languages)

Prof Einar Steingrímsson (algebraic and enumerative combinatorics)

*Research associates*

Dr. Thomas Selig (enumerative combinatorics, graph theory)

Dr. Jason Smith (topological combinatorics, posets, permutation patterns)

*Honorary Senior Lecturer*

Dr. Mark Dukes (combinatorial and discrete mathematics, statistical mechanics, applied probability)

*Research students*

Marc Glen (graph theory, formal languages)

*Lecture Courses*

Combinatorics for Computer Science 1 (1<sup>st</sup> year)

Combinatorics for Computer Science 2 (2<sup>nd</sup> year)

*Department of Mathematics and Statistics* Livingstone Tower, 26 Richmond Street, Glasgow G1 1XH. Tel: 0141 548 3804 Fax: 0141 548 3345

<http://www.mathstat.strath.ac.uk/>

Prof Des Higham (small-world graphs, applications, links to numerical analysis)

Dr Andrew Wade (applied probability, including random graphs).

## 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 rings (33 lectures, 2<sup>nd</sup> year, Dr D. Fisher)

Advanced Algebra (33 lectures, 3<sup>rd</sup> year, Dr D. Fisher)

Galois theory (33 lectures, 3<sup>rd</sup> year, Dr D. Fisher)

Algebra and codes (33 lectures, 2<sup>nd</sup> year, Dr D. Fisher)

Graphs and networks (33 lectures, 3<sup>rd</sup> year, Dr D. Fisher in 2014/15 session)

Experimental design (33 lectures, 3<sup>rd</sup> year (alternate years), Dr J. D. Godolphin)

*Current periodicals:* C, i (paper).

## UNIVERSITY OF SUSSEX

**Department of Mathematics** University of Sussex, Brighton, East Sussex BN1 9QH. 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*

Awss Jabbar (finite geometry, Prof. Hirschfeld)

Salam Alabdullah (finite geometry, Prof Hirschfeld)

Zainab Hamed (finite geometry, Prof Hirschfeld)

Mohammad Hazzari (finite geometry, Prof Hirschfeld)

Fatma Karaoglu (finite geometry, Prof Hirschfeld)

### *Lecture courses*

Galois Theory (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, Dr R. A. Fenn)

Coding Theory (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, Prof Hirschfeld)

Cryptography (36 lectures, 3<sup>rd</sup>/4<sup>th</sup> year, Dr K. Blyuss)

*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 I. Bárány (Visiting professor: convex geometry, geometry of numbers, theory of integer programming)

Prof. A. Granville (number theory, combinatorics)

Dr. J. A. Haight (Combinatorics)

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)

### *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.com>

Dr S. Babbage\*

Dr N. Bone

Prof M. Walker

R. Wright

The group is interested in cryptography, randomness, statistics, auctions and game theory.

*Current periodicals: Z*

## **UNIVERSITY OF WARWICK**

Coventry, CV4 7AL

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

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

Dr. Golnaz Badkobeh (Combinatorics on words, algorithms)  
Prof Graham Cormode (managing and working with large amounts of data, with particular emphasis on privacy and anonymization, and large scale analytics)  
Prof Artur Czumaj (analysis and design of algorithms and data structures, randomized algorithms, graph theory, game theory)  
Dr Alina Ene (approximation algorithms for combinatorial optimisation problems)  
Dr Matthias Englert (analysis and design of algorithms and data structures, approximation algorithms)  
Dr Ping Hu (extremal and probabilistic graph theory)  
Dr Tamas Hubai (graph limits and extremal combinatorics)  
Dr Marcin Jurdziński (algorithmic game theory, logic in computer science, optimization)  
Dr Ranko Lazić (computer science and combinatorics)  
Dr. Filip Mazowiecki (automata, FO2 and bidon theory)  
Dr Andrzej Murawski (semantics of programming languages and its applications to program verification)  
Prof Mike Paterson (computational complexity, analysis and design of algorithms)  
Dr Marcin Pilipczuk (graph algorithms, fixed parameter tractability and exact computations of NP-hard problems, approximation algorithms)  
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 Steve Alpern (game theory, search games)  
Prof Jurgen Branke (combinatorial optimisation)  
Prof Bo Chen (combinatorial optimisation: game theory)  
Dr Vladimir Deineko (combinatorial optimisation, polynomially solvable cases of NP-hard problems)  
Dr Xuan Vinh Doan (combinatorial optimisation)  
Dr Nalan Gulpinar (combinatorial optimisation)  
Dr Arne Strauss (combinatorial optimisation)

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

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

Dr Angelos Georgakopoulos (random walks, electrical networks, infinite graphs)  
Dr. John Haslegrave (random and extremal graphs)  
Prof Roman Kotecký (Probability; statistical physics; theory of phase transitions)  
Prof Daniel Král' (extremal and probabilistic combinatorics)  
Dr. Hong Liu (extremal combinatorics, Ramsey theory and random graphs)  
Prof Vadim Lozin (algorithmic and structural graph theory)  
Prof Oleg Pikhurko\* (Extremal combinatorics)  
Dr Katherine Staden (extremal combinatorics)  
Dr. Victor Zamaraev (graph classes, algorithms)

Postdocs

Christoph Koch (Phase transitions, percolation processes, real-world networks, structural and extremal graph theory)

Florian Lehner (Infinite, locally finite graphs; connections between groups and graphs; games on graphs; random structures and probabilistic methods)

Maryam Sharifzadeh (Extremal combinatorics)

**Department of Statistics** Tel. 024 7657 4812 Fax: 024 7652 4532

Dr Elisabetta Candellero (random graphs)

Dr David Croydon (random graphs)

Dr Ben Graham (percolation)

*Research Students*

Ostap Chervak (extremal combinatorics, graph limits, Prof Pikhurko)

Andrew Collins (Prof Lozin)

Peter Davies (algorithms, Prof Czumaj).

Michail Fasoulakis (algorithmic game theory, Prof Czumaj and Marcin Jurdzinski)

John Fearnley (algorithmic game theory, Dr Jurdzinski)

Bruno Federici (Dr Georgakopoulos)

Matthew Fitch (extremal combinatorics, Prof Pikhurko)

Sarah Gunnels (product portfolio, Prof Chen)

Fei Liu (electricity market, Prof Chen)

Taisa Lopes Martins (extremal combinatorics and flag algebras, Prof Král')

Nicolaos Matsakis (algorithms; Matthias Englert)

Mahdi Noorizadegan (facility location and vehicle routing, Prof Chen & Dr Gulpinar)

Chenlan Wang (network routing, Prof Chen & Dr Doan)

*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)

Algorithmic Graph Theory (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)

Combinatorics II (3<sup>rd</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)

Random Discrete Structures (3<sup>rd</sup> year)

Graph Theory (4<sup>th</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)

Some of 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.

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<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