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Statistics
PG2008–09

The University of Warwick
Faculty of Science

Postgraduate
Study In Statistics

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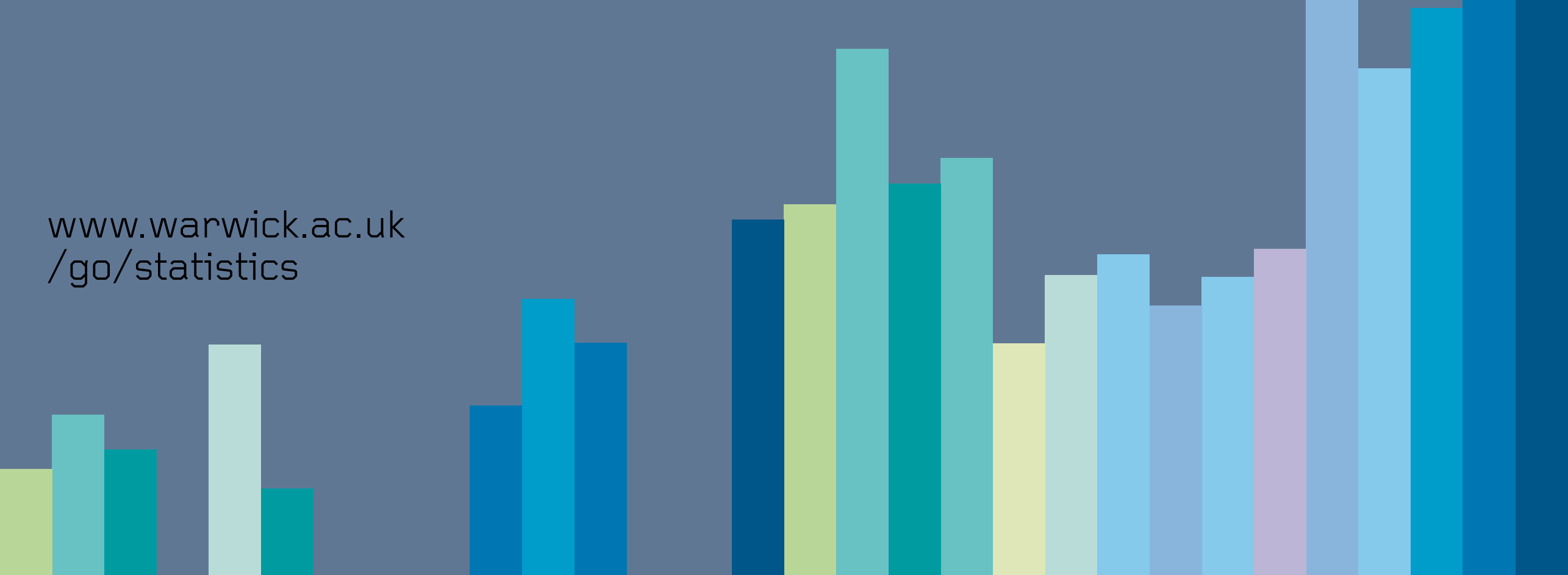

Welcome to the Faculty of Science Postgraduate Study in Statistics Prospectus 2008–09

Contents

The Department of Statistics

The University of Warwick is one of Britain's leading research universities, and many of its Departments are at the international forefront of research in their various disciplines.

The Department of Statistics is no exception, having been given the top 5* rating for its research work in the last national research assessment.

The work of the Department covers a wide range of topics in probability and statistics, both mathematical and theoretical aspects as well as applications to many different fields. The research expertise of the staff is reflected in the quality of postgraduate teaching and student supervision, as well as in the wide choice of topics on offer to students for their Master's dissertations or research theses.

The Department is located in the Maths/Statistics Building on Central Campus.

There are two computer laboratories; one equipped with high specification PC's for MSc student use and the other equipped with PC workstations for the exclusive use of PhD students.

As well as the Department's local network, most students have access to a full range of computing facilities on campus and links to outside networks. The Department provides workroom space for Master's students and shared office accommodation for research students.

All MSc and research students are welcome to use the staff common room where they can integrate with staff in an informal atmosphere. In recent years the Department has contained around 30 postgraduates of whom 10-15 are on the taught MSc programme.

For further information about the Department, its staff and students and up-to-date contact details, see the Department's web-page located at: www.warwick.ac.uk/go/statistics

Centre for Research in Statistical Methodology (CRiSM)

The Centre for Research in Statistical Methodology (CRiSM) is a new research centre at the University of Warwick, initially funded by a £4.1m grant from the UK EPSRC/HEFCE Science and Innovation Awards Initiative. The aim of CRiSM is to promote research into the methodology of statistics, interpreted broadly to include all research which contributes to the understanding and development of statistical concepts and methods.

The Centre is designed to complement our already vigorous research programmes making the Statistics Department at Warwick one of the top centres of research in Statistics in Europe. One of the aims of CRiSM is to provide an environment conducive to an excellent training programme enabling its high quality students to feed the strong demand for statisticians in universities, research initiatives and industry.

Students enjoy a vibrant visitor programme from academics and workers in industry from home and abroad. There is a wealth of topical research seminars and themed workshops to the benefit of the postgraduate community as a whole.

All postgraduate students are supported and encouraged to participate in this exciting new initiative and all research students and staff are under its umbrella. The Centre supports some fully funded 4 year PhD studentships available to the most outstanding applicants.

For more details of CRiSM and its current activities visit www.warwick.ac.uk/go/crism

Risk Initiative and Statistical Consultancy Unit (RISCU)

As well as its main academic work, the Department is active in collaborative research and consultancy with industrial and commercial companies, and with research staff both within the University and in external organisations. These activities are co-ordinated through RISCU, directed by John Fenlon. Sometimes there are opportunities for research students to contribute to specific projects as paid consultancy assistants - this is an excellent way of gaining experience of using statistics in real applications, and making contact with prospective employers. Projects taken on by RISCU can sometimes lead to research topics for PhD theses and MSc dissertations.

Risk is a major concern of almost all organisations, whether it be financial risk, risk of disease or injury, or risk of accident or environmental catastrophe. All these areas involve the use of statistics - indeed risk analysis cannot be seriously undertaken without statistics. The Risk Initiative discusses and initiates research projects in aspects of risk by bringing together statisticians, researchers from other Warwick Departments (such as the Medical School, Economics and Social Science) and other organisations.

Other recent contracts include the risks associated with lead in water (major water company), analysis of gene-flow from GM experiments (BBSRC), decision analysis for pesticide risk to non-target species (Defra / PSD), understanding the causes of non-uniformity in nursery stock production, and image analysis of bedding plant production (HDC). A project to develop medium-term weather forecasts for crop scheduling is currently being developed.

RISCU also undertakes a wide range of research and advisory tasks for outside clients covering diverse statistical applications. Recent consultancy projects have included advice on engineering experimental design, analysis of component failure rates, sample size determination for posture testing among dyslexic patients, credit risk analysis for a finance company, and several projects with Coventry and Warwickshire Hospital.

Seminars, Conferences and Reading Groups

The Department runs two seminar series, one on statistics and one on probability. Graduate students find it is extremely useful to attend these seminars as they provide a way of broadening their experience of research topics, as well as being a valuable and informal way to meet leading researchers from other universities and research institutions. The Statistics Seminar meets six times per teaching term, when outside speakers present their latest research on some theoretical or applied statistical topic.

The Department is the regular venue for the Midlands Probability Theory Seminar, which meets twice a term. At each meeting two speakers discuss topics of current interest in probability or stochastic modelling.

The Department is a participating member of the annual Gregynog Statistics Conference, a joint venture with the University of Birmingham and the colleges of the University of Wales. All staff and graduate students are invited for a weekend away during each Easter vacation at Gregynog, a fine country house in mid-Wales. This is an excellent opportunity to hear leading statisticians from the UK and overseas present and discuss their work in a relaxed atmosphere.

Alternating with the Department's statistics seminars are the more informal young researchers meetings, which meet five times per teaching term. These provide an informal forum where research students, in the department discuss research exchange ideas and learn from, and with each other. Recent topics include; Bayesian clustering of microarray gene expression data; Publication bias in meta-analysis; Missing data in survival analysis; Perfect simulation for slow Markov chains.

There are also occasional reading groups and informal seminars given by colleagues from other departments.

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Student Profile

Demetris Lamnisos

I first came to Warwick in 2004 to do my MSc in Statistics. I was attracted to the department due to both its excellent reputation and the broad content of the MSc. During my MSc course I have enjoyed doing research for my MSc dissertation and the department gave me the opportunity to do a PhD in a statistical challenging problem arisen in bioinformatics.

The department provides an excellent environment for developing our research skills. There are almost weekly seminars presented by expert statisticians and conferences with participants from the whole world. These events are ideal to meet people, discuss and present our work and get a valuable feedback. There is also every fortnight a Young researcher's meeting where PhD students from our department or other U.K universities present their work in a friendly environment. The last year three reading groups were organised in different research areas and many PhD students were happy to be involved. The department also provides for its PhD students a successful consultancy skills course taught by expert consultants. Finally, there is also the opportunity to get involved in teaching which can be both interesting and challenging experience.

The environment in the department is quite friendly. Staff and students mix daily in the common room over coffee and lunch. We have also organised a departmental football team and meet weekly for a game. It is also easy to be involved in the many societies and sport clubs ran by the student union.

I would definitely recommend coming to Warwick and doing a PhD because is a truly rewarding experience from both the academic and social perspectives.

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Research Degrees

Master of Philosophy (MPhil)
2 years full-time or 3 years part-time
Doctor of Philosophy (PhD)
3 years full-time or 4/5 years part-time

The Higher Degree Research

This programme covers the degrees of Master of Philosophy (MPhil) and Doctor of Philosophy (PhD). The total period of full-time study is a minimum of two years for MPhil, or the three-year requirement for the PhD degree.

Higher degree students engage in original research in an agreed topic under a Research Supervisor. The Research Supervisor gives training in research techniques and provides guidance and instruction in the chosen research topic. Research students are expected to attend the regular seminar series, as well as the more informal PhD seminars and reading groups.

First Year

Much of the first year of research is devoted to a directed study of the published literature on the chosen topic and to acquiring any research skills needed for the work. Research students are encouraged to fill in any important gaps in their statistical or mathematical knowledge by reading and by attending appropriate lecture courses. In particular, first-year research students in Statistics at Warwick take full advantage of the programme of intensive short courses offered by the Academy for PhD Training in Statistics (APTS), which is a new EPSRC-supported collaboration between nine leading statistics research groups (at the universities of Bath, Bristol, Cambridge, Glasgow, Lancaster, Nottingham, Oxford, Southampton and Warwick). APTS provides both a systematic coverage of research-relevant areas of probability, statistics and related mathematics, and an excellent opportunity for networking with research students at other institutions. Whilst APTS is directed and managed from Warwick, some of the short courses will be located at APTS partner institutions; the EPSRC funding for APTS includes bursaries to pay for students' travel and accommodation when taking part in such courses. In addition to APTS, research students also make use of other courses available at Warwick, for example MSc, MMathStats and MMORSE course modules, to fill in gaps or to broaden their knowledge. Students are expected to learn any necessary computing skills.

Progress is assessed by a half-hour oral presentation in September of the first year, given to a panel of academic staff including the student's supervisor and by a brief written report. Registration for the PhD requires a satisfactory assessment; and a satisfactory performance in APTS.

Second and Third Year

Substantial progress in original research is expected during the second year. PhD students are expected to have written at least one paper or research report (possibly jointly with the supervisor) by the end of the second year. The final months of the period of study are spent consolidating results and writing the work up as a thesis. Typically a PhD thesis is approximately 70,000 words but this can vary substantially depending on specific material, use of diagrams etc.

Thesis Examination

A research thesis is normally examined by two examiners: a member of the Department and an external examiner who is expert in the particular topic, usually a senior member of staff from another university. After studying the thesis the examiners will hold an oral examination when the student will be asked questions about his/her work and about his/her wider knowledge of the subject. Award of the PhD follows a satisfactory report from the examiners. Minor revisions to a PhD thesis may be required. Exceptionally, the degree of MPhil may be awarded instead of the PhD, or the candidate may be required to resubmit the thesis with or without a further oral examination.

Taught Programmes

Diploma in Statistics
(DipStat) 9 months
Master of Science (MSc)
1 year

Postgraduate Diploma and MSc in Statistics

For the nine month period from October to June, the programme requirements of the Diploma and MSc are identical. MSc students continue for a further three months working on a dissertation. Both courses can be studied part-time over a period of two consecutive years.

The Master's programme aims to provide a postgraduate course in statistical science suitable for those with a strong quantitative background. After completing the taught portion of the Master's (Diploma) the student will have acquired sufficient knowledge and understanding of topics in statistical theory and practice and in probability to provide a basis for academic research or a career as a statistician, and for Master's students to put their knowledge into practice in the dissertation.

The programme aims to cover topics most relevant to a career as a professional statistician. Prior knowledge of basic statistical theory and methods is assumed, such as would be covered in a typical first degree in mathematics or a joint degree between statistics and some other discipline.

To assist students in their preparation, along with the welcome pack, a copy of an examination on statistical practice is sent to them in September. Students are expected to ensure that they are confident in the basic topics addressed.

The programme will cover a wider range of topics than would be typical of a single honours degree in statistics, and there is a much greater emphasis on practical work and the preparation of coursework reports than would normally feature at the undergraduate level. The opportunity to pursue a dissertation topic in depth can provide particularly valuable experience for the student's subsequent career.

See our web-page located at:
www2.warwick.ac.uk/fac/sci/statistics/postgrad/msc

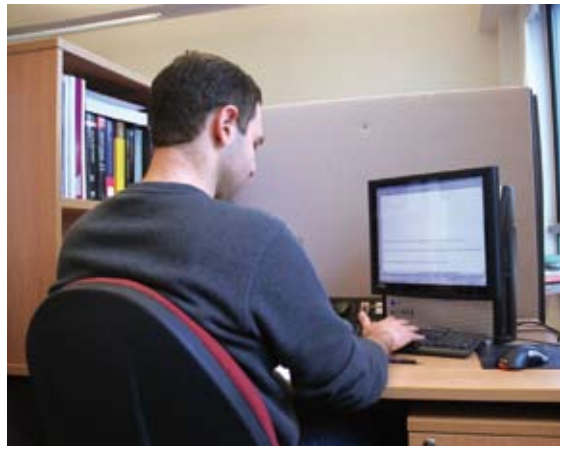
MSc in Financial Mathematics

In addition to its own postgraduate degrees, the Department contributes to the Warwick MSc in Financial Mathematics. This is run jointly by the Department of Statistics, the Department of Mathematics and the Warwick Business School. Admissions are administered by the Department of Mathematics, from whom further information is available.

See their web-page located at:
www.maths.warwick.ac.uk/
postgrad/financial_maths/index.html

or contact:
The Postgraduate Secretary,
Department of Mathematics,
University of Warwick,
Coventry CV4 7AL

Telephone: +44 (0)24 7652 4246
Email: postgrad@maths.warwick.ac.uk



Structure of the MSc Programme
Syllabus

Students for the Diploma and MSc take eight lecture-course modules, two of which are compulsory (or core) modules:

- Statistical Methods
- An Introduction to Statistical Practice

The remaining six modules are chosen from a wide range of options, to suit the interests of individual students. The options include:

- Multivariate Statistics with Advanced Topics
- Designed Experiments with Advanced Topics
- Monte Carlo Methods
- Applied Stochastic Processes with Advanced Topics
- Financial Time Series
- Medical Statistics with Advanced Topics
- Bayesian Forecasting and Intervention with Advanced Topics
- Applied Statistical Modelling
- Bayesian Statistics and Decision Theory with Advanced Topics
- Advanced Topics in Statistics

The two core modules above provide a strong foundation in statistical methods, both theoretical and practical, for the rest of the Diploma/MSc course.

The Introduction to Statistical Practice module includes an initial 'mock exam', intended for students to use as a focus for revision, and as an introduction to the UK style of written examination for those with little or no such previous experience. It also introduces statistical computing, using one of the modern systems R or S-Plus, through hands-on practical classes on the analysis of real data from a variety of scientific and other disciplines; and develops such skills as report-writing, statistical graphics, etc.

The last-listed option above, Advanced Topics in Statistics, is a module made up of a small number (typically 3) of sub-modules, each sub-module giving a rapid treatment of a specific area of current interest in statistics or probability. The particular topics vary from year to year.

Further, up-to-date information on the content and assessment of all of the modules listed above can be found at http://go.warwick.ac.uk/stats/courses/modules (listed under the "MSc" and "Final years" links on that web page).

To complete the MSc, a student also undertakes a substantial project under the supervision of a Department member, and writes a dissertation reporting the results. Such projects can be in any of the areas covered by the MSc, including applied statistics, statistical methodology, computational methods, probability, etc., subject to the approval of the MSc Tutor.

Assessment

Assessment is initially made for each module separately, some modules have an element of continuous assessment through coursework, but the majority of modules are assessed through written examinations in Term 3 and, for some modules, January.

The performance of Diploma and MSc students in their core and optional modules combined is then examined by an examinations board consisting of academic staff plus an External Examiner appointed from another university. Two pass grades are decided by the examiners, one for the Diploma and a higher one for the MSc. Students registered for the MSc who achieve the higher grade then proceed to the dissertation stage; an MSc student achieving the lower but not the higher grade is awarded the Diploma.

Dissertations are examined in the Department and then by the External Examiner. The MSc degree is awarded subject to satisfactory standard in the dissertation. Students who do outstandingly well in both the taught modules and the dissertation may be awarded the MSc with Distinction.

Research in the Department

Staff profiles (as at Oct 2008)

Staff will be happy to receive enquiries from prospective research students in their areas of expertise.

Professor Jane Hutton

Professor Jane Hutton's main areas of research are survival analysis, meta-analysis and ethics and philosophy of science. At Warwick she is a Professor and works with the Warwick Medical School. She has previously held positions at Newcastle and Liverpool and has enjoyed visiting positions at Geneva and Adelaide. She has led over 10 funded research projects and currently has a large MRC grant, on models for selection bias in trials and observational data, and an EPSRC grant on Meta-analysis with John Copas.

Recent publications include: "Bias in meta-analysis with variable selection within studies"; 'Medical ethics and statistics'.'Choice of accelerated life and proportional hazards models for survival data: asymptotic results', 'Aggregate data meta-analysis with time-to-event outcomes' Recent papers include: Local model uncertainty and incomplete data bias (with discussion) (with Eguchi, S.) JRSSB, 67, 754-765. Sensitivity analysis for informative censoring in parametric survival models (with Siannis, F. and Lu, G.) Biostatistics, 6, 77-91. Confidence intervals and P-values for meta analysis with publication bias. (with Henmi, M. and Eguchi, S.) Biometrics, 62, to appear.

Professor Gareth Roberts

Director of CRiSM

Gareth Roberts's research interests straddle Probability and Statistics, particularly Computational Statistics, Statistical Inference for Stochastic Processes, Missing Datat Statistics, Simulation of Stochastic Processes, Bayesian Inference and Infectious Disease modelling and inference. He previously held positions in Lancaster, Cambridge and Nottingham Universities having completed his PhD at Warwick.

He has written over 100 papers including "Optimal scaling for partially updating MCMC algorithms"(with P Neal), Ann. Applied Prob., 16, 2, 474-515, 2006. "Retrospective Exact simulation of diffusion sample paths with applicaitons" (with A Beskos and O Papaspiliopoulos), Bernoulli, 12, 6, 1077-1098, 2006. "Stability of the Gibbs sampler for Bayesian hierarchical models" (with O Papaspiliopoulos) to appear in Annals of Statistics, 2007. "Coupling and Ergodicity of Adaptive MCMC" (with JS Rosenthal), to appear in J. App. Prob. 2007. "Restrospective Markov chain Monte Carlo methods for Dirichlet process heirachical models (with O Papaspiliopoulos), to appear in Biometrika, 2008.

Professor John Copas

Professor John Copas works in statistical methodology and socio-medical applications. One of his current interests is the development of methods for statistical sensitivity analysis, particularly in problems of missing data, biased selection, model mis-specification, or publication bias in systematic reviews (or meta-analysis) in medical research. Other interests include advances in regression modelling and risk scoring. He holds the prestigious Guy Medal in Silver of the Royal Statistical Society, is a former chairman of the RSS Research Section and is a former Vice-President of the RSS.

Professor Wilfrid Kendall

Wilfrid Kendall's research interests lie mostly in probability theory and include random processes, stochastic geometry, stochastic calculus, computer algebra in statistics, probability and most recently an exciting development in Markov Chain Monte Carlo called `perfect simulation'. For more details of these topics visit his web-page at: www.warwick.ac.uk/go/wskendall

Professor Kendall has written about 80 papers, including a monograph on stochastic geometry. Details of his most recent publications can be found at his web-page. He is involved in a number of journals, including being Associate Editor for the Bernoulli Journal, and was Programme Chair for the Sixth World Congress of the Bernoulli Society and the IMS, in July 2004.

Together with David Firth, he is a director of the new EPSRC-funded Academy for PhD Training in Statistics, a collaboration of nine highly rated UK Statistics departments which will provide national training modules for PhD-level statistics researchers.

Professor Jim Smith

Jim Smith is interested in a wide range of topics in Bayesian statistics, both theoretical and applied. Current interests include graphical representatives of Bayesian models, chain events graphs, dynamic Bayesian networks, causality, formulation of statistics, Bayes classifications of biological regulatory networks and forensic inference.

Recent publications include: "Discontinuity in decision-making when objectives conflict: a military command decision case study", L. Dodd, J. Moffat and J.Q. Smith, Journal of the Operational Research Society (2006) 57, 643-654. "Second Order filter distribution approximations for financial time series with extreme outliers", J.Q. Smith and A.A.F. Santos, Journal of Business and Economic Statistics Vol. 24, No. 3, 329-337 Daneshkhah, A. & Smith, J.Q. (2004) "Multicausal prior families, Randomisation and Essential Graphs" Advances in Bayesian Networks, Physica-Verlag, 1-17 D.M.Q., Smith, J.Q. and Van Straten, D. (2003) "Stochastic factorisations,

sandwiched simplices and the topology of the space of explanations" Proc. R. Soc. London. A 459, 2821-2845

Dr John Fenlon

Director of RISCU

John Fenlon is a Reader in Statistics and Director of RISCU. His research interests are in experimental design, the analysis of discrete data and stochastic modelling in biological systems. He currently holds research contracts with BBSRC (analysis of gene-flow from GM experiments, and ecological profiling to measure predator biodiversity), and has recently completed two contracts with Defra (stochastic modelling of predator-prey systems, and risk analysis of pesticides to non-target species), and one for HDC (understanding the causes of non-uniformity in nursery stock production).

Recent publications include 'Risk assessment with time to event models' (edited with Crane M, Newman MC and Chapman PF), Lewis Publishers (2002).

Professor David Firth FBA

David Firth works on statistical theory, methods and computation, and applications in many disciplines, especially the social sciences. David is co-Director of the ESRC National Centre for Research Methods, Lancaster-Warwick node, and co-Director of the Academy for PhD Training in Statistics (APTS). He is a member of the editorial boards of the journals Sociological Methodology and Political Analysis, and an Associate Member of Nuffield College, Oxford. Other recent activities have included chairing the RSS Research Section, and membership of the National Statistics Methodology Advisory Committee.

Recent publications include Ultraviolet signals ultra-aggression in a lizard (with M Whiting et al), Animal Behaviour, 2006. Relative index of inequality: Definition, estimation and inference (with J Sergeant), Biostatistics, 2005. Bradley-Terry models in R. Journal of Statistical Software, 2005. Quasi-variances (with R de Menezes), Biometrika, 2004.

Professor Mark Steel

Postgraduate Director Mark Steel is interested in theoretical and applied Bayesian statistics, including multivariate distribution theory, inference robustness, Bayesian model averaging, spatial statistics, non- and semiparametric inference, stochastic frontier models, contingent valuation and stochastic volatility models. Part of his interests stem from his background in economics: he held a Chair in Economics at the University of Edinburgh from 1998-2000. He then moved to a Chair of Statistics at the University of Kent at Canterbury and joined the University of Warwick in 2003. He was Associate Editor of the Journal of the Royal Statistical Society B and the Journal of Business and Economic Statistics and is currently Associate Editor of the Journal of Productivity Analysis and a Fellow of the Journal of Econometrics. He has had a variety of roles in the International Society for Bayesian Analysis and in the Royal Statistical Society.

Recent publications include "Inference with non-Gaussian Ornstein-Uhlenbeck processes for stochastic volatility", with J Griffin, Journal of Econometrics, 134, (2006), 605-644. "Modelling directional dispersion through hyperspherical log-splines", with J.T. Ferreira, Journal of the Royal Statistical Society, B 67, (2005), 599-616 "Order-based dependent Dirichlet Processes", with J. Griffin, Journal of the American Statistical Association, 101 (2006), 179-194. "A Constructive representation of univariate skewed distributions", with J.T. Ferreira, Journal of the American Statistical Association, 101, (2006), 823-829. "Non-Gaussian Bayesian geostatistical modeling", with M.B.Palacios, Journal of the American Statistical Association, 101, (2006), 604-619. "Model comparison of coordinate-free multivariate skewed distributions with an application to stochastic frontiers", with J.T.Ferreira, Journal of Econometrics, 137, (2007), 641-673. "A New Class of Skewed Multivariate Distributions with Applications to Regression Analysis", with J.T.Ferreira, Statistica Sinica, 17, (2007) 505-529.

Professor Saul Jacka

Chair of Department

Saul Jacka is a Professor in Statistics at the University of Warwick. His research is in many areas of probability theory with special interests in mathematical finance, stochastic processes, stochastic control, optimal stopping, conditioned processes and probability on trees and related structures.

Saul is currently Editor-in-Chief of the international journal Stochastics and Stochastic Reports. Some recent publications include: 'Arbitrage-free term structure models', 'Control of measure value diffusions' and 'On shuffling an infinite pack of cards'.See www2.warwick.ac.uk/go/sdjacka or further details.

Recent publications include Saul Jacka and Jon Warren, Random orderings of the integers and card shuffling Stoch. Proc. and Appl. 117, 708-719 (2007). Saul Jacka and Abdel Berkaoui, On the density of properly maximal claims in financial markets with transaction costs. Ann. Appl. Prob. 17 (2), 716-740 (2007). Saul Jacka, Zorana Lazic and Jon Warren, 'Conditioning an additive functional of a Markov chain to stay non-negative I: survival for a long time'. Adv. Appl. Prob . 37 (4), 1015-1034 (2005).

Professor Tony Lawrance

Professor Tony Lawrance came to Warwick in 2004. From 1988 he was Head of the Statistics & Management Mathematics Group of the School of Mathematics & Statistics at the University of Birmingham where he was previously Lecturer, Senior Lecturer and Reader. He has served as a Vice-President of the Royal Statistical Society and Honorary Secretary of its Research Section, and is currently Chairman of the West Midlands group. He is a fellow of the American Statistical Association and an elected member of the International Statistical Institute.

Tony did his PhD research on stochastic point processes and computer failure analysis while lecturing at the University of Leicester. During this period and since, he has frequently held visiting research appointments in the USA, Australia, Hong Kong and Japan. Research areas have included time series, stochastic hydrology, likelihood theory of statistical diagnostics and statistical aspects of finance. Currently his most active topic is chaos-based communication modelling; this is concerned with broadband systems which transmit binary bit messages embedded in chaotic sequences instead of sinosoidal waves; there are potential advantages in channel capacity, security and bit error. Theory for the efficient transmitting and receiving, in spite of channel noise and interference, is being developed in association with communication engineering researchers. This is an instance where statistical theory is instrumental in another subject; in chaos communications it facilitates efficient design and accurate assessment of performance, taking into account the statistical aspects of both channel noise and dynamical behaviour.

Recent publications include 'Exact calculation of bit error rates in communication systems with chaotic modulation', with G. Ohama, IEEE Transactions on Circuits and Systems -I: Fundamental Theory and Applications, 2003, 50, 1391-1400, 'The dynamics and statistics of bivariate chaotic maps in communications modelling', with R. M. Hilliam, Int. J. Bifurcation and Chaos, 2004, 14, 4, 1177-1194 'Bit error probability and bit outage rate in chaos communication', with G Ohama, Circuits, Systems and Signal Processing, 2005, 24, 519-534 'Performance analysis and optimisation of multi-user differential chaos-shift-keying communication systems', with J Yao, IEEE Transactions on Circuits and Systems -I: Fundamental Theory and Applications, 2006, 53, 1-17.

Dr Joanne Kennedy

Jo Kennedy is a Senior Lecturer in Statistics at Warwick, having joined the department in 1998. She previously held positions at the University of Oxford and Bristol. She gained her PhD in probability theory at the University of Cambridge after completing her undergraduate and MSc degrees at the University of Sydney. In recent years her research activities have focused on interest rate derivatives with particular attention to the modeling requirements of market practitioners. She is co-author with Phil Hunt of Financial Derivatives in Theory and Practice, John Wiley & Sons, 2nd Edition, 2004.

Recent references include 'A comparison of Markov-functional and market models: The one-dimensional case', with Mike Bennett and 'Longstaff-Schartz, effective model dimensionality and reducible Markov-functional models' with P. Hunt.

Dr Robin Reed

Dr Robin Reed is an experienced lecturer listing research interests in queues, stochastic models in biology and aspects of probability theory. He is also an expert in statistical computing and the teaching and application of many statistical computer packages to large and small data sets.

Dr Ewart Shaw

Ewart Shaw worked for several years in a medical school before studying for a PhD and then moving to Warwick. He has research interests in Bayesian inference, survival analysis and other aspects of medical statistics, coding theory and related methods for numerical integration, and other areas of computational statistics such as MCMC, splines, and symbolic computation. Currently he is supervising PhD theses on realistic survival models and on diagnostic testing.

Dr Jon Warren

Jon Warren became a Lecturer in Statistics at Warwick after completing his PhD and post-doctoral work at the University of Bath. His research interests lie in probability theory and include branching processes, quantum mechanics, ergodic theory and the fine properties of Brownian motion.

Some recent publications include: A stochastic flow arising in the study of local times. Probability Theory and Related Fields, 133, no 4 (2005), 559-572. 'On the Spectra of Harris flows', 2004.

Dr Bärbel Finkenstädt

Bärbel Finkenstädt is an Associate Professor in Statistics at Warwick, she completed her doctorate in Berlin and continued with postdoctoral work at the University of Cambridge. She is interested in the analysis of time series and its interface with dynamical systems theory in the area of molecular biology, ecology and epidemiology.

She is collaborating with biologists and mathematicians at the Systems Biology Centre at Warwick. Current interests are inference about regulatory networks of genes, in particular molecular clocks, and the reconstruction of gene transcription, dynamics from the reporter gene time series data. The statistical and probabilistic modeling approachs

make use of ordinary and stochastic differential equations, Bayesian hierarchical modelling and inference using computational simulation methods such as MCMC.

Recent publications include Lekone, P.E. and Finkenstädt, B. F., (2006) Statistical Inference in a stochastic epidemic SEIR model with control intervention: Ebola as a case study. Biometrics, 2006 (62), 1170-1177. Morton, A.M. and Finkenstädt, B. F. (2005) Discrete-time modelling of disease incidence time series by using Markov Chain Monte Carlo methods, Applied Statistics, 54 (3), 575-594 Heron, E., Finkenstädt, B. F. and Rand, D.A., Statistical Inference for delayed transcriptional gene regulation, an application to the Hes1 system. In progress.

Dr Elke Thönnes

Dr Thönnes holds a joint lecturing position between the Department of Statistics and the Centre for Scientific Computing. After obtaining her PhD in Statistics from the University of Warwick in 1998, she worked as a research assistant in the School of Mathematics at Chalmers Technical University in Gothenburg as a research fellow in the European Network for the computational and statistical analysis of spatial data. In 1999 she returned as a research assistant to the Department of Statistics at Warwick. Her research interests lie in computational statistics with emphasis on Markov Chain Monte Carlo, in particular for models in Stochastic geometry, and statistical image analysis.

Dr Larbi Alili

Before joining the Department of Statistics at the University of Warwick as a lecturer, Larbi Alili worked as a research associate at the Suisse Federal Institute of Technology (ETH-Zürich). He previously held positions at the Université Paris VI, the University of Manchester and Vienna Technical University. He obtained his PhD in probability theory at the Laboratoire de Probabilités et Modèles aléatoires of Université Pierre et Marie Curie (Paris VI). His research interests lie in probability theory and include fluctuation theory, exit problems for Markov processes and fine properties of diffusions and Lévy processes. Some recent publications include: 'On some hyperbolic principal values of Brownian local times', 1997 and 'Martin boundaries associated with a killed random walk' with R. Doney, 2001.

Dr Sigurd Assing

Sigurd Assing became a Lecturer in Statistics at Warwick in 2004. He mainly works in probability theory, with particular interest in: random processes, stochastic analysis, statistical mechanics and stochastic simulation. His current research is about Central Limit Theorems for scaling limits of interacting particle systems.

He gained a PhD in probability theory from the University of Jena and gained the Doctor in Science (Habilitation) at the University of Bielefeld. He previously held positions at the University of Bielefeld and Edinburgh.

Recent publications include: 'Infinite dimensional Langevin equations: uniqueness and rate of convergence for finite-dimensional approximations' and 'A pregenerator for Burgers equation forced by conservative noise'. For more details visit his web-page at: www.warwick.ac.uk/go/sassing

Dr Anastasia Papavasiliou

Anastasia got her PhD from Princeton University in 2002, working on stability questions for stochastic filtering and particle filters. Before coming to Warwick, she taught at Columbia University for a couple of years and spent another year in Princeton, working on efficient simulation methods for multiscale stochastic systems. Stochastic filtering, ultiscale systems and, stochastic simulations are still some of her research interests, while she is also working on applying ideas coming from the theory of rough paths and machine learning to the problem of speech recognition. Anastasia joined the Department of Statistics as a Lecturer in 2005.

Dr Vassili Kolokoltsov

Reader in Probability from June 2006. General research interests: probability and stochastic processes, mathematical physics, differential equations and analysis, optimization and games with applications to business, biology and finances. Publications: about 80 papers including three monographs (see details and selected reprints on the web-page).

Recent publications include V.N. Kolokoltsov. Path integration: connecting pure jump and Wiener processes. In: Waymire, J. Duan (Eds.). "Probability and Partial Differential Equations in Modern Applied Mathematics" (2005), p.163-180; Z. Hucki, V. Kolokoltsov. Pricing of rainbow options: game theoretic approach. To appear in International Game Theory Review, 2007; V. Kolokoltsov. On the regularity of solutions to the spatially homogeneous Boltzmann equation with polynomially growing collision kernel. Advanced Stud. Contemp. Math. 12:1 (2006) V.N. Kolokoltsov, A.E. Tyukov. On boundary Value Problems for Hamiltonian Systems and Absolute Minimizers in Calculus of Variations. Electronic J. Dif. Eqns. 2006 (2006), n. 90, 1-21.1

Professor David Hobson

David Hobson moved to Warwick in January 2007 from a position as Professor of Probability at the University of Bath. His main interests are in probability, mathematical finance and the interface between these two fields and he was awarded the 2003 Adams Prize by the University of Cambridge for his research in Mathematical Finance.

Recently he has published extensively on the Skorokhod Embedding Problem, and his work in finance includes study of stochastic volatility models, option pricing in incomplete markets and model-independent pricing and hedging.

Dr Julia Brettschneider
After earning my Diploma at University Bonn with a thesis on measure valued diffusions I completed PhD at Humbold University Berlin on large deviations in models motivated by statistical mechanics. I worked as a postdoctoral fellowship at Eurandom, as a visiting assistant professor and as a research statistician at University of California at Berkeley, and as an assistant professor at Queen's University in Canada. I started my position as lecturer in the Warwick statistics department in September 2007.

I am primarily working on pre-processing and inferential methods for high-dimensional molecular data with a special emphasis data quality assessment. This requires the application and further development of methods from exploratory data analysis, robust statistics, data validity analysis and discrete random fields. I am also involved in transdisciplinary projects involving statistical questions arising in microarray based medical and biological research, and about communication of cancer risks based on high-dimensional molecular data. Furthermore, I have been working on project in probability theory and ergodic theory. This includes large deviations bounds in the case of phase transitions for models inspired by statistical mechanics and ergodic theorems for a certain class of skew products.

Dr Sach Mukherjee
Dr Sach Mukherjee obtained a DPhil at Oxford in 2005, and was a Fulbright Postdoctoral Fellow at the University of California, Berkeley until 2007. His research focuses on statistical problems in computational biology, with a particular emphasis on questions which are biologically important, yet rich enough to provide novel and challenging problems in machine learning and computational statistics. His current work focuses mainly on biological networks in cancer and the analysis of high-dimensional data from biochemical assays.

Dr David Croydon
David Croydon works in probability theory, with his main research interest being in diffusions on random fractals and how such processes can be constructed as scaling limits of related random walks on random graphs. He joined the Department of Statistics in 2006, after having completed his DPhil at the University of Oxford. Recent publications include "Random walks on Galton-Watson trees with infinite variance offspring distribution conditioned to survive", "Self-similarity and spectral asymptotics for the continuum random tree" and "Volume growth and heat kernel estimates for the continuum random tree".

Dr John Aston
John Aston arrived at Warwick in March 2008 from Academia Sinica, Taipei, Taiwan. His research interests relate to applied probability and statistics problems in time series for brain imaging, genetic sequence analysis, and linguistic data. Of particular interest are using hidden Markov models for segmentation and change point detection, and the use of functional data analysis in applications with large data sets. Some representative publications are "Distributions associated with general runs and patterns in hidden Markov models." (2007) Annals of Applied Statistics, 1:585-611 (with DEK Martin) and "HBM FIAC data analysis in wavelet space." (2006) Human Brain Mapping, 27:372-379 (with FE Turkheimer and M Brett).

Dr Adam Johansen
Adam Johansen joined the University of Warwick as a lecturer after working as a research fellow at the University of Bristol. His research is focused upon the development and analysis of computational methodology, especially sequential and population-based Monte Carlo methods in addition to Markov Chain Monte Carlo methods. His interests also include various aspects of Bayesian statistics and statistical signal processing, particularly in time-series contexts.

Recent publications include "Particle methods for maximum likelihood parameter estimation in latent variable models" with A. Doucet and M. Davy and "Convergence of the SMC implementation of the PHD filter" with S. S. Singh, A. Doucet, and B.-N. Vo.

Dr Fabio Rigat
Dr Fabio Rigat is an assistant professor working within the department of Statistics and the Warwick Centre for Analytic Science. Upon graduating from the department of Statistical Science at Duke University, Dr Rigat spent two years at EURANDOM (www.eurandom.nl) as a post-doctoral fellow developing statistical models for multiple-spike trains recordings and two years at CRiSM (Centre for Research in Statistical Methodology) as a research fellow. His current main research interests include the development of: multiple chains Markov chain Monte Carlo methods for Bayesian inference, with emphasis on model uncertainty, non-parametric models for survival data, network models for dynamic neural systems, non-parametric dynamic regression models, Bayesian CART models for genomic data, pathway modelling for hypoxia adaptation.

Publications:

1) "Gene Expression Phenotypes of Atherosclerosis" by D. Seo, T. Wang, H. Dressman, E. E. Herderick, E.S. Iversen, C. Dong, K. Vata, C.A. Milano, F. Rigat, J.Pittman, J.R. Nevins, M.West, P.J. Goldschmidt-Clermont, in "Arteirosclerosis, Thrombosis and Vascular Biology", 2004; 24:1922-1927;

2) "Bayesian Modelling and Analysis of Spatio-Temporal Neuronal Networks" by F.Rigat, M. de Gunst, J. van Pelt. Bayesian Analysis, 2006:1;pp.733-764.

3) "Beta-Stacy survival regression models" by F.Rigat and P. Muliere; CRiSM discussion paper 07-06.

4) "Sequential change-point detection for time series models: assessing the functional dynamics of neuronal networks"; CRiSM discussion paper 07-07.

Dr Dario Spano
I am assistant professor and CRiSM member at Warwick since January 2008. My research interests are in combinatorial stochastic processes and special functions with applications in Population Genetics and Bayesian Nonparametric Statistics. I have been using properties of a wide class of exchangeable random partitions and of multidimensional orthogonal polynomials to understand and construct old and new measure-valued stochastic processes.Selected publications:

- Multivariate Jacobi and Laguerre polynomials, infinite-dimensional extensions, and their probabilistic connections with multivariate Hahn and Meixner polynomials (with R.C. Griffiths), submitted Aug 2008.

- Fragmenting random permutations (with C. Goldschmidt and J. Martin) Electr. Comm. in Probab., Vol. 13 (2008), pp. 461-474.

- Record indices and age-ordered frequencies in Gibbs random partitions (with R.C. Griffiths), Electr. Jour. of Probab., Vol. 12 (2007), paper no. 40, pp. 1101-1130.

- On transition functions with Dirichlet and Poisson-Dirichlet stationary distributions (with R.C. Griffiths), Oberwolfach Reports, Vol. 3 (2005), no. 2, pp 2289-2292.

Dr Nikolaos Zygouras
Nikos Zygouras joined the Statistics Department of Warwick University on September 2008. Prior to this he held an Assist. Prof. (Non Tenure Track) position at the University of Southern California and a postodoc position at ETH-Zurich. He did his PhD at the Courant Institute under the supervision of S.R.S. Varadhan. His research interests include motion in random media (random polymers, random walks in random environments and random potentials) and stochastic PDEs. He is also interested in problems arising from the broader field of mathematical physics and statistical mechanics, as well from partial differential equations."

Research Staff
Research Interests

Dr Geoff Freeman
Design of experiments. Combinatorics. Biological applications.

Dr Karla Hemming
Survival analysis, in particular non-proportional hazards models, random effects and missing data. Applications in cancer and cerebral palsy.

Dr Heather Turner
Plaid models for gene expression data. Statistical methods for social science.

Dr Wenjuan Zhang (RISCU)
Reliability. Condition based maintenance. Survival analysis. Stochastic modelling of maintenance problems.

Dr Xavier Didelot (CRiSM)
Statistical methods to elucidate the history of bacterial populations using DNA sequence.

Dr Ioannis Kosimdis (CRiSM)
Generalized linear and non-linear models, Pseudo-likelihood methods in estimation. Distribution theory and simulation. Asymptotic theory and tensor methods in statistics. Statistical computing.

Dr Yvo Pokern
I am interested in nonparametric inference for diffusion processes, sampling and inference for hypoelliptic diffusions and the application of these techniques to problems from physics and engineering, in particular to molecular dynamics

Dr Peter Thwaites
Bayesian statistics. Probabilistic graphical models and causality.

Dr Chiara Mazzetta (CRiSM)
Bayesian inference, MCMC, state space models, capture-recapture, time series, ecology, biostatistics, epidemiology.

Dr Krzysztof Latuszynski (CRiSM)
Markov chain Monte Carlo, adaptive Monte Carlo, stochastic simulations and Bayesian statistics

Dr Natesh Pillai (CRiSM)
Stochastic differential equations, Monte Carlo methods. Infinite dimensional sampling. Bayesian nonparametrics. Machine learning, diffusion processes.

Emeritus Professor

Professor P J Harrison
Bayesian Forecasting.

Funding and How to Apply

Funding

UK and EU students:
Most UK research students are funded by the Engineering and Physical Sciences Research Council (EPSRC) research studentships - these pay fees plus a bursary to cover living expenses. Students from other EU countries can also be funded by the EPSRC, but on a fees-only basis. These grants are applied for through the Department and not by the student directly, and under present EPSRC arrangements the confirmation of an award can only be made after the first degree results are known in July. Studentships are awarded by the EPSRC competitively, and the success of an application cannot be guaranteed in advance. However, the Department would expect to be successful in obtaining an award for any student who has or expects to obtain a first class degree in a relevant subject.

In addition, the Department is able to support research students through sponsorship by the Department itself or CRiSM. Suitably qualified PhD applicants will be advised if any such scholarships are available.

Scholarships for MSc students are much less readily available, and most MSc students have been self-funded, either privately or through individual sponsorship. A department bursary might be available. The Postgraduate Prospectus 2008 provides information on the loans available for taught master's students.

Warwick Postgraduate Research Scholarships:
The University of Warwick also offers Warwick Postgraduate Research Scholarships each year for full-time study for a PhD. These awards pay for academic fees in full (at the home/EU rate) and provide a maintenance allowance above the standard rate offered by UK Research Council studentships.

International students
Suitably qualified international PhD students can apply for departmental or CRiSM support. Many international graduate students come to Warwick with sponsorship from their own countries, either with government scholarships or funding through their employers. The University has a number of partial scholarships for students from specific countries, and also has access to international schemes such as the Fulbright Scholarships for graduate students from the US. The Postgraduate Prospectus 2008 gives a list of schemes available, with advice on their applications procedures, available on the web at: www.warwick.ac.uk/study/postgraduate/funding/international (or contact the International Office on +44 (0)24 7652 3706). The availability of grants under these schemes is, however, strictly limited.

Overseas Research Scholarships (ORS):
This is a UK-wide scheme to support exceptionally able international PhD students from countries outside the EU. Warwick has an annual quota of studentships to which departments nominate candidates by competition. The scheme pays the difference between the fees level for non-EU and EU students. Further details may be found in the Postgraduate Prospectus 2008.

Entry Requirements

All applicants to the graduate programme should have, or expect to obtain, a bachelor's degree in mathematics or in statistics or in a subject containing a substantial mathematical component. The normal entry requirement is a good upper second class degree for Master's students and an upper second for research applicants, or equivalent grades from universities outside the UK. Exceptions can be made in particular cases, for example for an applicant with practical experience of statistical methods through his or her employment, but ability in mathematics is essential for an understanding of the MSc programme or for technical aspects of PhD research. UK research applicants should note

that an upper second is the minimum requirement to gain admission to the course although it does not guarantee an EPSRC award. The level of competition for EPSRC studentships is such that a first class degree is needed for a good chance of success in obtaining these awards.

There is an English language requirement for students enrolling on the graduate programme from non-English speaking countries. The minimum formal requirement is a score of 620 on TOEFL or 6.5 on IELTS. However, the University provides a programme of English language courses and classes, and attendance at a 5 week pre-sessional course may be required if students do not quite meet these criteria. The Postgraduate Prospectus 2008 gives further information on the English requirements and the availability of such courses.

Fees

Annual academic fees for 2008/2009 are as follows:

PG Diploma/MSc in Statistics

	UK/EU	Overseas
Full-time	£5,330	£10,250

MSc by Research/MPhil/PhD

	UK/EU	Overseas
Full-time	£3,300	£10,250
Part-time	£1,980	£6,150

How to Apply

The Postgraduate Director in the Department of Statistics is the usual first point of contact for anyone interested in the graduate programme. Those interested in applying for the programme will be sent an information pack containing the Postgraduate Prospectus 2008, Postgraduate Study in Statistics Handbook plus an application form. Informal enquiries are welcome at any time, and the Postgraduate Tutor will be pleased to give advice on the graduate programme and entry qualifications, as well as answer any queries. Email: statspg@warwick.ac.uk

We encourage you to use our online application form because it is the quickest and most efficient method for applying for admission to postgraduate courses. The online application form can be found at: www.warwick.ac.uk/go/pgapply

If you require a printed copy of the postgraduate application form please e-mail: pg.prospectus@warwick.ac.uk remembering to include your postal address or telephone +44 (0)24 7657 4052. Ensure you enclose the following information with your application form or, if you are applying online, make sure it is forwarded to the Postgraduate Admissions Team, not the Department, as soon as possible:

- 2 academic references
- Certified Degree transcripts
- English Language certificate
- Research proposal (if appropriate)

There is a non-refundable application fee for taught postgraduate courses. For an on-line application it will be £20 and for a paper application it will be £30. We will not be able to consider applications until the application fee is paid.

The decision on admission cannot be made until all the information has been supplied by the applicant. If there are difficulties in providing the necessary information (e.g. English language test yet to be taken) then indicate this on the application form.

In considering MPhil/PhD applications it is necessary to check the availability of a supervisor with a specialist interest in the topic in which the student may wish to study and so research applicants are asked to indicate, at least in broad terms, the topic or topics of interest to them. The lists of staff interests and PhD topics given earlier indicate some of the research areas in which the Department is active. Research applicants in the UK who seem likely to meet the entrance requirements will often be invited to visit the Department for informal discussions with the Postgraduate Director and other members of staff, as well as to meet some of the current students. The procedure for applying for EPSRC funding can also be discussed at this stage.

Applicants wishing to be considered for one of the studentships mentioned above should indicate this in the funding section of the application form. No special application forms for these studentships are required at this stage but please also see the university website for the latest information. Applicants offered admission onto the postgraduate programme will then be notified individually by the Department of any further information needed.

The University of Warwick

Founded in the mid-60s, the University of Warwick is firmly established as one of the UK's leading universities with an excellent reputation for research, teaching and innovation. In the last Research Assessment Exercise, it was ranked fifth in the UK for research quality, and in the league tables compiled by the press, has maintained its position in the top ten UK universities. Of the 24 departments assessed for quality of teaching, 22 have been graded 'excellent'. The University has an excellent postgraduate employment record, in the last few years only 4.1% were known to be unemployed six months after graduating.

In the academic year 2008/2009 Warwick had around 20,700 students, of whom around 55% were postgraduate students, 4,200 came from overseas with more than 148 nationalities represented.

Academic life is organised in four faculties (Humanities, Science, Medicine, and Social Sciences) and around 50 interdisciplinary research centres and institutes. The University has over 4800 members of staff, of whom now 1800 are academics and researchers. Teaching and learning are supported by the excellent study facilities in the Library and departments/centres and there is a thriving culture of interdisciplinary as well as departmental conferences, seminars, workshops and reading groups, many of them student-led.

In addition, University House, which became University property in 2003, is home to the Learning Grid. Work on this facility is ongoing and the vision is for an integrated, informal and flexible learning space which will support students in individual and group based study. Warwick was one of the first UK universities to establish a Graduate School, which works with the Postgraduate Committee to monitor and enhance all aspects of graduate life at the University - academic, social and pastoral.

Warwick's 292 hectare landscaped campus is completely self-contained with its own shops, banks and restaurants. Sports facilities are excellent - swimming pool, a Sports Centre (which includes a climbing room), generous provision for outdoor sports, including a Sports Pavilion, a trimtrack with exercise stations and an all weather running track. The campus itself, with its gardens, woods and lakes, offers many opportunities for walking and recreation. Cultural life revolves around the stylish Arts Centre - the largest of its kind outside London - which includes two theatres, a concert hall, cinema, art gallery, café, giftshop and restaurant and attracts national and international performers.

There are over 1,200 rooms for postgraduates in purpose-built residences on campus, which are available for 39-50 weeks of the year. Over 60% of all new postgraduates are housed on campus. Warwick Accommodation also manages over 1,600 bed spaces in the local area, and will assist students with finding suitable accommodation off campus. Purpose built flats and houses are also available on campus for postgraduate couples and families. Further information about your accommodation options and details about how to apply can be found at www.warwick.ac.uk/accommodation. The cost of living for Warwick graduate students is considerably lower than for those at competing London institutions. Warwick's location in the heart of England makes it easy to reach from all parts of the UK and abroad. London is within 70 minutes by train and within easy reach by motorway. Stratford-upon-Avon (with the Royal Shakespeare Theatre) is a half-hour's drive, Oxford is an hour away by train or motorway, and Birmingham International Airport can be reached in 20 minutes.

Student Profile

Theodore Papamarkou

I studied Mathematics at undergraduate level in Greece. The concept of probability attracted my attention since then, as I found appealing the intuition behind such notion. I was also impressed by the idea of fitting statistical models to the "real world" with the prospect of forecasting. Generally speaking, I found it exciting that the complexity of dynamic systems, which can not always be fully described deterministically, could be approached with stochastic tools instead.

Having decided to study Statistics as a postgraduate student, I started my Msc degree in 2004 at Warwick. The broad spectrum of statistical modules I attended made me realize how far Statistics has advanced nowadays; Marco Chain Monte Carlo (MCMC), Generalized Linear Models (GLM), Design of Experiments and Meta-Analysis were some of the courses that confronted me with a new perspective on how problems could be modelled and tackled.

After completing my MSc dissertation, I decided to have my PhD too at the Statistics Department of Warwick University. The transition for me was smooth as my cooperation with my supervisor in completing the dissertation was excellent. He has offered me his advice and experience through long discussions on my research topic.

Besides the support on my own research, the Statistics Department helped me develop my academic skills in numerous ways. I had discussions with other members of academic staff as well, which were of valuable assistance for a wider understanding of my own work and of Statistics more generally.

Various seminars are held by my Department on a weekly basis offering opportunities to interact with academics from other universities and countries. These seminars offered me the chance to discuss with the speakers and enriched my knowledge about applications of Statistics outside my research field.

This is my fifth year in Warwick and I consider it to be an important life experience for one more reason. Warwick is a multicultural university. I had the opportunity to come in touch with people from other countries, to get to know their culture and way of thinking. Such interaction helped me think from another viewpoint and adopt foreign ideas that I considered to be creative or beneficial in some way. In that sense, one might say that the environment of my university enhanced my personality.

Finally, I could not neglect the Students' Union. It consists of over 220 societies making it one of the largest students' organizations in UK. Having been involved in activities and having been an exec member of several societies, I gained experience in terms of time management, interpersonal, organizational and social skills.

From my own experience, I would recommend the Statistics Department of Warwick University to anyone who like Statistics and wants to have an MSc or PhD on that field. I would also say that Warwick offers a wonderful opportunity for your personal development...

Warwick Graduate School

Postgraduate education at Warwick is co-ordinated by the University's Graduate School. The School works closely with academic departments to ensure that our postgraduate courses are of the highest quality. All graduate students are members of the Graduate School and the interests of these students lie at the centre of the University's priorities. The Graduate School works in partnership with the Postgraduate Committee of the Students' Union to monitor the academic and social facilities that are available to all graduate students at Warwick. This ensures that the educational experience for postgraduates at Warwick is of a standard to be expected from one of the country's leading research universities.

Equal Opportunities

In 1986 the University Council agreed the following Equal Opportunities Policy Statement: "The University of Warwick, in conformity with the general intention of its Charter, confirms its commitment to a comprehensive policy of equal opportunities in employment in which individuals are selected and treated on a basis of their relevant merits and abilities and are given equal opportunities within the University. The aim of this policy is to ensure that no job applicant or employee should receive less favourable treatment on any grounds not relevant to good employment practice. The University is fully committed to a programme of action to make this policy effective."

Further Information

The Postgraduate Prospectus 2008 contains a wealth of information about the University and facilities for postgraduate study. Information about the Graduate School, as well as details of many other activities at Warwick, can also be accessed through the University's website: www2.warwick.ac.uk/services/academicoffice/gsp/

Enquiries can be addressed to:
Postgraduate Admissions
Student Recruitment and Admissions Office
University of Warwick
Coventry
CV4 8UW

Tel: +44 (0)24 7652 4585
Fax: +44 (0)24 7652 4649
Email: pgadmissions@warwick.ac.uk

For enquiries about the Statistics Graduate Programme, contact:
The Postgraduate Director
Department of Statistics
University of Warwick
Coventry
CV4 7AL

Tel: +44 (0)24 7615 0886
Fax: +44 (0)24 7652 4532
Email: statspg@warwick.ac.uk

The Department's website is at:
www.warwick.ac.uk/go/stats

Applicants are welcome to visit the Department by arrangement with the Postgraduate Director. A map showing the location of the Department can be found on our website.

For the benefit of applicants, this guide is produced at the earliest date possible.

The University, however, reserves the right to modify or cancel any statement in the guide, and accepts no responsibility for any consequences of such modification or cancellation.

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