

PhD at the University of Kent

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Director of Graduate Studies

Mathematics, Statistics & Actuarial Science



University of Kent

- Granted Royal Charter in 1965
 - Has grown from 500 to 19,000 students
 - 16,463 undergraduates
 - 2,536 postgraduates
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- Canterbury, Medway (Tonbridge, Paris, Brussels)

University of Kent

Three faculties

- **Humanities** Architecture; Arts; English; European Culture and Languages; History
- **Sciences** Biosciences; Computing; Engineering and Digital Arts; **Mathematics, Statistics and Actuarial Science**; Pharmacy; Physical Sciences
- **Social Sciences** Anthropology and Conservation; Business; Economics; Journalism; Law; Politics and International Relations; Psychology; Social Policy, Sociology and Social Research; Sports Studies

SMSAS

Academic Staff

- 15 Actuaries
- 17 Mathematicians
- 17 Statisticians
- 5 Postdocs

- 150 taught and research postgraduates

- Significant growth in staff & student numbers



My Research

Mathematical physics

- Quantum Integrable systems
- Statistical Mechanics
- Integrable quantum field theory
- Spectral theory

SMSAS Postgraduate Study

Taught

- MSc Applied Actuarial Science
- MSc Finance, Investment and Risk
- MSc Mathematics and its Applications
- MSc Statistics

Research

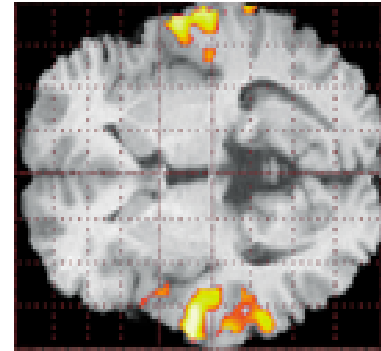
- MSc, MPhil and PhD in all subjects

Research in Mathematics

- nonlinear partial differential and difference equations
- geometric integration and discrete variational methods
- mathematical physics inc. nuclear physics
- classical and quantum integrable models
- spectral theory
- computational algebra
- applied and functional analysis
- Non-commutative algebra and geometry
- quantum groups
- representation and invariant theory
- discrete mathematics

Research in Statistics

- Bayesian statistics
- Bioinformatics
- Epidemic modelling
- Medical statistics
- Nonparametric statistics
- Risk and queuing theory



Hosts National Centre for Statistical Ecology (joint with Cambridge, St Andrews)

Research in Actuarial Science

- Economic capital and risk management
- Genetics and insurance economics
- Pensions
- Corporate reporting
- Finance



Research Excellence: RAE 2008

LTCC university	Number of staff submitted	RAE 2008
Applied Mathematics		
Imperial College	37.2	2.85
King's College	18	2.7
Kent	6	2.55
Statistics		
Imperial College	13.9	3.00
Kent	12	2.8

Research Excellence

Grants

- Approx. **2.1 million GBP** in last 6 years

From

- EPSRC, NERC, BBSRC, European Union, IoP, LMS, IoA, British Council, Pfizer, RS, STFC, Leverhulme, Wildfowl and Wetland trust, Nuffield, Department of Health...

Why Kent?

- World-leading research
 - Research-led teaching
 - Strong academic community
 - Personal supervision and friendly environment
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- Graduate School
 - Wolf Postgraduate college
 - Beautiful campus close to coast, countryside, London and Europe



Your PhD

Kent is moving to a 4 year PhD (Bologna)

- Year 1 Acquire broad and deep subject knowledge, attack small research problems, formulate and start research project

Research and skills training

- LTCC / APTS (MAGIC/SMSTC), MSc modules, School seminars, discussion groups, external schools (LMS/EPSRC/Europe), Graduate School

Your PhD

- Years 2/3 Carry out bulk of research, attend conferences and present your work
- Year 3.5 Finish research, write thesis, publish and present

Experienced, highly skilled and employable

- Communication, Career Management, Personal development, Teaching, Teamwork, Networking

Employment after a PhD

400-450 UK doctorates awarded annually

HESA data 2004-2008 (January post graduation)

- Education 42%
- Finance, Business and IT 34%
- Other 18%
- Unemployed 6%

Overall 30% of graduates doing research (20% in HE)

Are you up for it?

A PhD requires

- MSc, MMath, MPhys or BSc 1st
- Exceptional commitment
- Understanding of wide range of mathematics
- Independence, initiative and creativity
- Original work

Kent Scholarships

- Stipend of £13,590 p.a. for 3.5 years
- UK/European students: fees paid in full
- Overseas students: £3,800 p.a. towards fees

- University: 30 competitive scholarships
- SMSAS: approx 6 scholarships

Deadline for application is **25 April 2011**

Thank you