

Sergey Utev

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Publications

List (journal articles) [in pdf](#)
List/reviews in [MathSciNet](#)

Teaching

Autumn semester: 'Stochastic models' ([G13STM](#) and [G13ST2](#)) for the third year students.
Spring semester: 'Markov chains ([G12MAC](#)) for the second year students.

Admin-GL11

Monday 21 Septemeber 2009, 11:30. C4 M&P. [Week 1, 1st year meeting:](#)

Local Probability Theory Seminars:

(see also below):

Postgraduate Probability day 8 June 2010

Tue 8th June 2010 11:00-11:50, B21 M&P	Gracie-Xiaojuan Ma Modelling the share prices as a hidden random walk on the lamplighter group
Tue 8th June 2010 12-12:50, B21 M&P	Pin-Cheng Chu Malliavin Calculus in Financial Maths
Tue 8th June 2010 13-13:50, B21 M&P	Vytaute Zabarskaite Introduction to quntumn games
Tue 8th June 2010 14-14:50, B21 M&P	Hanan Baaqeel Introduction to stochastic storage processes
Tue 8th June 2010 15-15:50, B21 (or B23) M&P	Rabab Syeda Jafri On characterization and stochastic ordering of shift operator

For further details, please contact Sergey Utev (sergey.utev@nottingham.ac.uk).



Past Probability Seminars

Postgraduate Probability day 20 May 2009

Wed 20th May 2009 12:00-12:50, B27 M&P	Gracie-Xiaojuan Ma Computational and statistical aspects of pricing models
Wed 20th May 2009 13-13:50, B27 M&P	George Deligiannidis Wiener Tauberain Lemma
Wed 20th May 2009 14-14:50, B27 M&P	Mengdi Li (Claude) Ruin probability for dependent claims

Nottingham Postgraduate Probability Seminars 07-08

These seminars are intended to provide an interactive introduction to a particular area of research or technique within Probability and Statistics, with an emphasis on concepts, methods and examples. The material should be suitable for an audience of postgraduate Probability and Statistics students and questions will be welcome throughout the seminar.

Seminars are currently held on Wednesdays 2pm-4pm in C13 of the Coates Building. All are welcome. If you wish to be notified of forthcoming seminars in this series, please contact Fraser Daly (pmxfad@maths.nott.ac.uk).

Wednesday 23rd April 2008 2pm, C13 Coates	Efstathios Sakkas Regime switching model for discrete dividends
Wednesday 12th March 2008 2pm, C13 Coates	George Deligiannidis Optimal stopping and Wiener-Hopf factorization. Part 2
Wednesday 5th March 2008 2pm, C13 Coates	George Deligiannidis Optimal stopping and Wiener-Hopf factorization
Wednesday 27th February 2008 2pm, C13 Coates	Sergey Utev Coupling, ordering and limit theorems. Skorohod embedding theorem
Wednesday 20th February 2008 2pm, C13 Coates	Sergey Utev Coupling, ordering and limit theorems

Wednesday 13th February 2008 2pm, C13 Coates	Fraser Daly Coupling, ordering and Stein's method
Wednesday 28th November 2007 2pm, A1 M&P	Efstathios Sakkas and Rabab Syeda Jafri Backward equations and construction of diffusion processes
Wednesday 21st November 2007 2:30pm, A1 M&P	Efstathios Sakkas Backward equations for diffusion processes.
Wednesday 14th November 2007 2pm, A1 M&P	George Deligiannidis Generators for diffusion processes.
Wednesday 7th November 2007 Wednesday 31st October 2007 2pm, A1 M&P	Sergey Utev Topology and Probability: A user's guide with examples and selected proofs
Wednesday 24th October 2007 Wednesday 17th October 2007 2pm, C14 Coates	Fraser Daly and Sergey Utev A selection of proofs of the central limit theorem

For further details, please contact Fraser Daly (pmxfad@maths.nott.ac.uk) or Sergey Utev (pmzsu@maths.nott.ac.uk).

Other Events

A joint Oxford-Nottingham young probabilists' workshop on Stein's method and applications will be held in Nottingham on Thursday 6th December 2007. Details are available [here](#) and below.

Oxford-Nottingham Stein's Method Workshop

The first joint Oxford-Nottingham young probabilists' workshop on Stein's Method and applications is to be held at the University of Nottingham on Thursday 6th December 2007.

The workshop will consist of a series of talks on Stein's Method and applications given by researchers from Oxford and Nottingham. These will take place in A1 of the Mathematics and Physics building from 1pm. Details are given below.

Following these talks, Gesine Reinert from the University of Oxford will give a presentation as part of the University of Nottingham's probability and statistics seminar programme. This will be held at 4pm in C12 of the Mathematics and Physics building. Further details are available [here](#).

1pm-1.35pm	Liz Ford, University of Oxford
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A1, M&P	Statistical Properties of an Evolving Bernoulli Random Graph: Some Applications of Stein's Method
1.40pm- 2.15pm A1, M&P	Kaisheng Lin, University of Oxford Clustering and Joint Vertex Degrees in Random Network Models via the Chen- Stein Method
2.20pm- 2.55pm A1, M&P	Fraser Daly, University of Nottingham Stein factors from generating functions, with applications to compound geometric approximation
3pm-3.35pm A1, M&P	Adrian Röllin, University of Oxford Martingale CLTs using Stein's method

Other Events

Click [here](#) for details of the University of Nottingham's postgraduate probability theory seminar series.

RSC2008, the 31st annual Research Students' Conference in Probability and Statistics, is being held in Nottingham from 31st March to 3rd April 2008. See the [conference website](#) for more details.

Previous Seminars

Details of the Postgraduate Probability Theory Seminars 2006-2007 can be found [here](#) or below.

Nottingham Postgraduate Probability Seminars 06-07

Click [here](#) for details of current Postgraduate Probability Theory Seminars.

These seminars are intended to provide an interactive introduction to a particular area of research or technique within Probability and Statistics, with an emphasis on concepts, methods and examples. The material should be suitable for an audience of postgraduate Probability and Statistics students and questions will be welcome throughout the seminar.

Seminars are currently held on Wednesdays 2pm-4pm in A1 of the Mathematics and Physics building. All are welcome. If you wish to be notified of forthcoming seminars in this series, please contact Fraser Daly (pmxfad@maths.nott.ac.uk).

Friday 8th June 2007 3pm, C29 M&P	Andy Wood The law of the iterated logarithm
Friday 8th June 2007 2pm, C29 M&P	Sergey Utev Convergence in probability measures
Postgraduate Probability Day	Simon White: An introduction to branching processes George Deligiannidis: Computational and theoretical

Wednesday 30th May 2007 11.15pm, C29 M&P	aspects of financial mathematics Stathis Sakkas: Application of hidden Markov chains in financial modelling Fraser Daly: Stein factors for normal and compound Poisson approximation Rabab Syeda Jafri: Comparison of mixtures with non-mixtures Claude Li: Ruin probability and Brownian motion
Monday 19th March 2007 12pm, A6 M&P	Frank Ball Coupling and epidemics
Monday 12th March 2007 12pm, A6 M&P	George Deligiannidis The construction of stochastic integrals
Monday 26th February 2007 Monday 5th March 2007 12pm, A6 M&P	Simon Spencer The final size distribution of the generalised stochastic epidemic model
Monday 11th December 2006 1pm, A6 M&P	Igor Borisov Stochastic integrals of nonrandom functions without orthogonality of the integrating noise
Monday 11th December 2006 12pm, A6 M&P	Madalin Guta A quantum Cramer-Rao bound
Monday 27th November 2006 Monday 4th December 2006 12pm, A6 M&P	Stathis Sakkas Financial mathematics
Monday 20th November 2006 12pm, A6 M&P	Madlin Guta An introduction to quantum statistics
Monday 30th October 2006 Monday 6th November 2006 Monday 13th November 2006 12pm, A6 M&P	Sergey Utev and Fraser Daly Poisson approximation

In 2005-06 a series of seminars was given by Mathematics PhD students from various disciplines introducing their research. Details can be found [here](#) or below.

Nottingham Postgraduate Seminars 2005-06

Each of these seminars was given by a PhD student in the School of Mathematical Sciences. They were designed to provide an introduction to an area of research, suitable for an audience of Mathematics postgraduate students from a range of disciplines.

<p>Wednesday 16th November 2005 Wednesday 23rd November 2005 2pm, B21 M&P</p>	<p>Adam Skalski An introduction to compact quantum groups</p>
<p>Wednesday 30th November 2005 1pm, C12 M&P</p>	<p>Tom Marlow Cox's axioms of probability and quantum theory <i>We introduce Cox's axioms of probability and apply them to quantum theory. This gives a novel notion of probability that is, in part, less problematic than some given in the literature i.e. because it obeys natural probability axioms. Such probability assignments are complex---this gives a justification of why we end up invoking complex numbers in quantum theory, whereas in classical probability theory we only invoke real numbers. We also attempt a justification of why it is useful to invoke such Bayesian axioms in quantum theory in the first place.</i></p>
<p>Wednesday 7th December 2005 1pm, C12 M&P</p>	<p>Fraser Daly An introduction to Stein's method <i>We give an introduction to Stein's method for deriving explicit error bounds in the approximation of random variables. The key features of Stein's approach are highlighted, with particular emphasis on the two main examples developed in the literature: normal and Poisson approximation. We give several applications of these results, including the central limit theorem and the Berry-Esseen theorem.</i></p>
<p>Wednesday 8th February 2006 1pm, C12 M&P</p>	<p>Matthew Heath Compact derivations and compact cohomology for Banach algebras</p>
<p>Wednesday 15th February 2006 1pm, C12 M&P</p>	<p>Alejandro Satz Particle detectors in quantum field theory</p>
<p>Wednesday 1st March 2006 1pm, C12 M&P</p>	<p>Adam Philpotts Matchings, k-factors and extensions in graphs</p>