ADVANCES IN APPLIED PROBABILITY

INCLUDING A SECTION ON

STOCHASTIC GEOMETRY AND
STATISTICAL APPLICATIONS

Advances in Applied Probability

This is a companion publication to the *Journal of Applied Probability* published by the Applied Probability Trust. It contains reviews and expository papers in applied probability, as well as mathematical and scientific papers of interest to probabilists, letters to the editor and a section devoted to stochastic geometry and statistical applications (SGSA). An annual volume of approximately 1200 pages is published in four issues appearing in March, June, September and December.

All correspondence relating to the submission of papers should be sent to: The Executive Editor, Applied Probability, School of Mathematics and Statistics, University of Sheffield, Sheffield S3 7RH, UK. Subscription rates and notes for contributors are to be found on the inside back cover.

CECIL KING TRAVEL SCHOLARSHIP 2003

The Cecil King Memorial Foundation in 2001 established a Cecil King Travel Scholarship in Mathematics to the value of £5000, to be awarded annually to a young mathematician of outstanding promise, to support a period of study or research abroad for a typical period of three months, to enhance his or her studies and further his or her career development. The Scholarship will normally be awarded to a UK or Irish National under the age of 25 years, either registered for or having recently completed a doctoral degree at a UK University.

The award will be competitive and based on a written proposal describing the intended programme of study or research abroad and the benefits to be gained from such a visit, a short presentation and an interview.

The award will be made by the Council of the London Mathematical Society on the nomination of the Cecil King Prize Committee, whose members will be nominated by the Society's Education Committee.

The initial application should include:

1. A completed application form.

2. A short proposal (4 pages maximum) indicating the proposed programme of study abroad, the benefit of such an opportunity in advancing the candidate's studies, and an indication of the Institute that the candidate wishes to visit.

3. A letter of support from the Head of their Department, or from their Research Supervisor.

The initial applications will then be considered by the Cecil King Prize Committee, which will select up to six candidates for interview. Selected candidates will be asked to approach the intended research institution or research leader to be visited, to confirm that a visit would indeed be welcomed if an award were made. They will then be invited to make a brief presentation to the Cecil King Prize Committee on their proposed research and the benefits to be gained from the visit abroad.

Final ratification of the award will require formal confirmation from the institution/person to be visited, indicating their willingness to welcome the visit and to provide whatever supervision and research facilities might be needed. Any supervision or other fees will be paid from the Prize.

At the end of the visit, the student will be expected to write a short report to the Cecil King Memorial Foundation, indicating the activities and benefits gained from the visit.

Application forms may be obtained from the Executive Secretary, The London Mathematical Society, De Morgan House, 57–58 Russell Square, London WC1B 4HS (email: lms@lms.ac.uk) or from the Society's website (http://www.lms.ac.uk/activities/prizes_com/). The closing date for applications is Friday 7 February 2003. It is hoped that the Scholarship will be awarded before the end of March 2003.

Volume 34   Number 1

Stochastic Geometry and Statistical Applications

General Applied Probability

Volume 34   **Number 2**

Stochastic Geometry and Statistical Applications

General Applied Probability

Volume 34   Number 3

Stochastic Geometry and Statistical Applications

General Applied Probability

Volume 34　　　　**Number 4**

Stochastic Geometry and Statistical Applications

General Applied Probability

FORTHCOMING PAPERS
JOURNAL OF APPLIED PROBABILITY

A. A. BOROVKOV, O. J. BOXMA AND Z. PALMOWSKI. On the integral of the workload process of the single server queue

F. THOMAS BRUSS AND GUY LOUCHARD. Optimal stopping on patterns in strings generated by independent random variables

JI HWAN CHA. A further extension of generalized burn-in model

ANYUE CHEN AND KAI LIU. Birth–death processes with an instantaneous reflective barrier

G. FORT, E. MOULINES, G. O. ROBERTS AND J. S. ROSENTHAL. On the geometric ergodicity of hybrid samplers

FABRICE GUILLEMIN, RAVI MAZUMDAR, ALAIN DUPUIS AND JACQUELINE BOYER. Analysis of the fluid weighted fair queueing system

VYTAUTAS KAZAKEVIČIUS AND REMIGIJUS LEIPUS. A new theorem on existence of invariant distributions with applications to ARCH processes

BERNHARD KLAR AND ALFRED MÜLLER. Characterizations of classes of lifetime distributions generalizing the NBUE class

SOPHIE MERCIER AND MICHEL ROUSSIGNOL. Asymptotic failure rate of a Markov deteriorating system with preventive maintenance

EROL A. PEKÖZ, RHONDA RIGHTER AND CATHY H. XIA. Characterising losses during busy periods in finite buffer systems

BERO ROOS AND DIETMAR PFEIFER. On the distance between the distributions of random sums

SUNDER SETHURAMAN. A clustering law for some discrete order statistics

EILON SOLAN AND NICOLAS VIEILLE. Perturbed Markov chains

FORTHCOMING PAPERS
ADVANCES IN APPLIED PROBABILITY

Stochastic Geometry and Statistical Applications

RICHARD COWAN, MALCOLM QUINE AND SERGEI ZUYEV. Decomposition of gamma-distributed domains constructed from Poisson point processes

UTE HAHN, EVA B. VEDEL JENSEN, MARIE-COLETTE VAN LIESHOUT AND LINDA STOUGAARD NIELSEN. Inhomogeneous spatial point processes by location-dependent scaling

JULIEN MICHEL AND KATY PAROUX. Local convergence of the Boolean shell model towards the thick Poisson hyperplane process in the Euclidian space

WERNER NAGEL AND VIOLA WEISS. Limits of sequences of stationary planar tessellations

ROLF SCHNEIDER. Nonstationary Poisson hyperplanes and their induced tessellations

General Applied Probability

F. THOMAS BRUSS, GUY LOUCHARD AND JOHN W. TURNER. On the N-tower problem and related problems

V. ČEKANAVIČIUS AND Y. H. WANG. Compound Poisson approximations for sums of discrete nonlattice variables

B. M. HAMBLY AND O. D. JONES. Thick and thin points for random recursive fractals

DAMING LIN AND VILIAM MAKIS. Recursive filters for a partially observable system subject to random failure

HIROYUKI MATSUMOTO AND MARC YOR. On Dufresne's relation between the probability laws of exponential functionals of Brownian motions with different drifts

MICHAEL SCHRÖDER. On the integral of geometric Brownian motion