FORTHCOMING PAPERS

The following papers have been accepted for publication in forthcoming issues. Further details are available **from the corresponding author** where an e-mail address or fax number is given.

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ANDJEL, E. and SCHINAZI, R. A complete convergence theorem for an epidemic model

ASMUSSEN, SØREN and KELLA, OFFER Rate modulation in dams and ruin problems
  ● *asmus@maths.lth.se*

ASMUSSEN, SØREN and TEUGELS, JOZEF L. Convergence rates for $M/G/1$ queues and ruin problems with heavy tails ● *asmus@maths.lth.se*

BANJEVIC, D. Recurrent relations for distribution of waiting time in Markov chain

BARBOUR, A. D. and BROWN, TIMOTHY C. Approximate versions of Melamed's theorem
  ● *tim@stats.mu.oz.au*

BARRY, DANIEL and HARTIGAN, JOHN A. The minimax bookie

BLASZCZYSZYN, BARTLOMIEJ and ROLSKI, TOMASZ Expansions for Markov-modulated systems and approximations of ruin probability ● *rolski@math.uni.wroc.pl*

BOROVKOV, ALEXANDER A. Asymptotic expansions for functionals of dilation of point processes

BOROVKOV, K. and PFEIFER, D. On improvements of the order of approximation in the Poisson limit theorem

BOROVKOV, K. and VATUTIN, V. A. On distribution tails and expectations of maxima in critical branching processes

BÖHM, W. and PANNY, W. Simple random walk statistics Part II: Continuous time results

CAMBANIS, STAMATIS and FAKHRE-ZAKERI, ISSA Forward and reversed time prediction of autoregressive sequences ● *issa@stat.unc.edu*

CAVAZOS-CADENA, ROLANDO and FERNÀNDEZ-GAUCHERAND, EMMANUEL Value iteration in a class of average controlled Markov chains with unbounded costs: necessary and sufficient conditions for pointwise convergence ● *emmanuel@sie.arizona.edu*

CHAUDHRY, M. L. and GUPTA, U. C. Performance analysis of the discrete time $GI/\text{Geom}/1/N$ queue ● *math@rmc.ca*

CHEN, HONG Rate of convergence of the fluid approximation for generalized Jackson networks

CHEN, TUHAO and SENETA, E. Multivariate Bonferroni-type bounds

COMMAULT, C. and CHEMLA, J. P. An invariant property of phase-type representations and some applications ● *chemla@univ-tours.fr*

COURCOUBETIS, COSTAS and WEBER, RICHARD Buffer overflow asymptotics for a switch handling many traffic sources ● *rrw1@statslab.cam.ac.uk*

COWAN, RICHARD, YU, PHILIP L. H. and FERGUSON, THOMAS S. Restrictions on the saddle-point solution in the game of teamball

DASSIOS, ANGELOS Sample quantiles of additive renewal reward processes ● *a.dassios@lse.ac.uk*

DEHAY, DOMINIQUE and LESKOW, JACEK Functional limit theory for the spectral covariance estimator ● *leskow@pstat.ucsb.edu*

DEKKING, F.M. An inequality for pairs of martingales and its application to fractal image coding

DE NITTO PERSONÈ, VITTORIA and GRASSI, VINCENZO Solution of finite QBD processes

DETTE, HOLGER On the generating functions of a random walk on the non-negative integers

Forthcoming papers

DOBROW, ROBERT P. On the distribution of distances in recursive trees

DOMINÉ, MARCO First passage time distribution of a Wiener process with drift concerning two elastic barriers ● *Marco.Domine@Mathematik.Uni-Magdeburg.de*

DUFFIELD, N. G. Economies of scale in queues with sources having power-law large deviation scalings ● *duffieldn@dcu.ie*

ELSHAMY, MAGED Stochastic models of damped vibrations

FALIN, G. A heterogeneous blocking system in a random environment ● *falin@nw.math.msu.su*

FERRARI, P. A. and FONTES, L. R. G. Poissonian approximation for the tagged particle in asymmetric simple exclusion ● *pablo@ime.usp.br*

GAWELL, BOLESLAW and KIMMEL, MAREK Iterated Galton–Watson process ● *kimmel@rice.edu*

GNEDIN, ALEXANDER V. On the full information best-choice problem

GOLDSTEIN, L. and RINOTT, Y. Multivariate normal approximations by Stein's method and size bias couplings ● *lgoldste@hto.usc.edu*

GONZALEZ, M. and MOLINA, M. On the limit behaviour of a superadditive bisexual Galton–Watson branching process ● *mvelasco@ba.unex.es*

GOSSELIN, FRÉDÉRIC Two classes of subcritical population-size-dependent Bienaymé-Galton–Watson branching processes ● *gosselin@cefe.cnrs-mop.fr*

GRIPENBERG, GUSTAF and NORROS, ILKKA On the prediction of fractional Brownian motion ● *Gustaf.Gripenberg@helsinki.fi*

GUILLEMIN, FABRICE, MAZUMDAR, RAVI R. and SIMONIAN, ALAIN On heavy traffic approximations for transient characteristics of $M/M/\infty$ queues ● *guillemin@lannion.cnet.fr*

HAIGH, JOHN More on n-point, win-by-k games ● *J.Haigh@sussex.ac.uk*

HANIN, L. G., KLEBANOV, L. B. and YAKOVLEV, A. YU. Randomized multihit models and their identification ● *guest0@mathlab.mtu.edu*

HAUKAS, HARALD and AVEN, TERJE A general formula for the downtime distribution of a parallel system

HO, HWAI-CHUNG and HSING, TAILEN On the asymptotic joint distribution of the sum and maximum of stationary normal random variables ● *thsing@stat.tamu.edu*

HSU, IVY and WALRAND, JEAN Dynamic bandwidth allocation for ATM switches

HU, TAIZHONG Stochastic comparisons of order statistics under multivariate imperfect repair

HUANG, DAWEI and SPENCER, N.M. On a random vibration model

HÜSLER, J. and SCHMIDT, M. A note on the point processes of rare events

JAIN, GAUTAM and SIGMAN, KARL A Pollaczek–Khintchine formula for $M/G/1$ queues with disasters ● *sigman@ieor.columbia.edu*

JOE, HARRY Time series models with univariate margins in the convolution-closed infinitely divisible class

KARPELEVITCH, F. I. and KREININ, A. Asymptotic analysis of queueing systems with identical service ● *kreinin@csri.toronto.edu*

KASPI, H. and KELLA, O. Stability of feed-forward fluid networks with Lévy inputs

KATZENBEISSER, W. and PANNY, W. Simple random walk statistics Part I: Discrete time results

KELLA, OFFER and WHITT, WARD Stability and structural properties of stochastic storage networks

KOUTRAS, M. V. On a Markov chain approach for the study of reliability structures

LEFÉVRE, CLAUDE and UTEV, SERGEY Comparing partial and iterated sums of exchangeable Bernoulli random variables ● *clefevre@ulb.ac.be*

LI, JINGWEN From FIFO to LIFO: a functional ordering of service delay via arrival discipline

LIN, XIAODONG Tail of compound distributions and excess time ● *sheldon@utstat.toronto.edu*

Forthcoming papers

LINDVALL, TORGNY and ROGERS, L. C. G. On coupling of random walks and renewal processes
● *lindvall@math.chalmers.se*

LIU, LIMING and SHI, DING-HUA Busy period in $GI^X/G/\infty$

LOCATELLI, MARCO Convergence properties of simulated annealing for continuous global optimization ● *locatelli@hermes.mc.dsi.unimi.it*

LUND, ROBERT B. The stability of storage models with shot noise input

MCBETH, DOUGLAS W. and WEERASINGHE, ANANDA P. Finite time optimal control of a process leaving an interval ● *dwmcbeth@iastate.edu*

MENG, FAN C. More on optimal allocation of components in coherent systems

MILLIGAN P.J.M. and DOWNHAM, D.Y. Models of superinfection and acquired immunity to multiple parasite strains ● *p.milligan@liverpool.ac.uk*

MØLLER, CHRISTIAN MAX Kolmogorov equations for the compound distribution function
● *chrmax@math.ku.dk*

MØRI, TAMÁS F. Bonferroni inequalities and deviations of discrete distributions

NANDA, ASOK K., JAIN, KANCHAN and SINGH, HARSHINDER On closure of some partial orderings under mixtures and convolutions

NANDA, ASOK K., JAIN, KANCHAN and SINGH, HARSHINDER Properties of moments for s-order equilibrium distributions

OLOFSSON, PETER General branching processes with immigration ● *petero@math.chalmers.se*

O'NEILL, PHILIP Strong approximations for some open population epidemic model
● *P.ONeill@bradford.ac.uk*

PAPANGELOU, F. Large deviations and the Bayesian estimation of higher order Markov transition functions

PEKÖZ, EROL A. Geometric approximation with the Stein–Chen method: application to sequence pattern waiting times

PENG, NAN FU Spectral representations of the transition probability matrices for continuous time finite Markov chains ● *nfpeng@twnctu01.bitnet*

PENROSE, MATHEW Spatial epidemics with large finite range ● *mathew.penrose@durham.ac.uk*

PETERSON, WILLIAM P. and WEIN, LAWRENCE M. Heavy traffic analysis of a transportation network model ● *billp@middlebury.edu*

PHELAN, MICHAEL J. A Markov process and a martingale problem ● *phelan@wharton.upenn.edu*

PHELAN, MICHAEL J. A Girsanov transformation for birth and death on a Brownian flow
● *phelan@wharton.upenn.edu*

PLATEN, E. and REBOLLEDO, R. Principles for modelling financial markets

QUINE, M. P. and LAW, J. S. Exact results for a secretary problem ● *quine_m@maths.su.oz.au*

RIDDER, AD Fast simulation of Markov fluid models

RIGHTER, RHONDA Optimal control of the finite source single server queue
● *rrighter@scuacc.scu.edu*

ROUGHAN, MATTHEW An analysis of a modified $M/G/1$ queue using a martingale technique
● *roughan@cssip.edu.au*

RYDÉN, TOBIAS On identifiability and order of continuous-time aggregated Markov chains, Markov-modulated Poisson processes and phase-type distributions ● *tobias@maths.lth.se*

SCHMIDLI, HANSPETER Lundberg inequalities for a Cox model with a piecewise constant intensity
● *schmidli@mi.aau.dk*

SESHADRI, SRIDHAR A sample path analysis of the delay in the $M/G/C$ system
● *sseshadr@stern.nyu.edu*

SGIBNEV, M. S. Markov renewal functions

SHEU, SHEY-HUEI A modified block replacement policy with two variables and general random minimal repair cost

Forthcoming papers

SIMONOT, F. and SONG, Y.Q. Characterization of convergence rates for the approximation of the stationary distribution of infinite monote stochastic matrices ● *simonofr@esstin.u-nancy.fr*

SOLTANI, A. REZA Reward processes with nonlinear reward functions

SONIN, I.M. Increasing the reliability of a machine reduces the period of its work
● *fma00is1@unccvm.uncc.edu*

TAIBI, DJAOUAD Une généralisation du modèle de diffusion de Bernoulli–Laplace
● *taibi@univ-rouen.fr*

TSAKLIDIS, G. The evolution of the attainable structures of a continuous time homogeneous Markov system with fixed size

VAN DEN BERG, J. A note on disjoint-occurrence inequalities for marked Poisson point processes

VELLAISAMY, P. and CHAUDHURI, B. Poisson and compound Poisson approximations for random sums of random variables ● *bikram@cc.iitb.ernet.in*

VOIT, M. Asymptotic distributions for the Ehrenfest urn and related random walks

WARREN, DI and SENETA, E. Peaks and Eulerian numbers in a random sequence
● *seneta_e@maths.su.oz.au*

WILLMOT, GORDON E. A non-exponential generalization of an inequality arising in queueing and insurance risk

YAO, YI-CHING On Kingman's characteristic functional approach to Rényi's characterization of Poisson processes ● *yao@statsun.stat.colostate.edu*

ZHANG, YU Continuity of percolation probability in $\infty + 1$ dimensions

ZHAO, Y. QUENNEL and LIU, DANIELLE The censored Markov chain and the best augmentation

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A similar list of papers accepted for publication in *Advances in Applied Probability* now appears at the end of each issue of that journal.

ADVANCES IN APPLIED PROBABILITY

The main function of AAP is to define areas of recent progress and potential development in applied probability. The Editorial Board would like to encourage the submission of review papers summarising and coordinating recent results. In addition to review papers, AAP is also a medium of publication for

- ○ longer research papers, which may include expository material
- ○ expository papers on branches of mathematics of interest to probabilists
- ○ papers outlining areas in which probability models can be usefully developed
- ○ papers presented at conferences which do not publish their proceedings
- ○ letters to the editor on any appropriate topic

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Stochastic Geometry and Statistical Applications
S. N. CHIU. Limit theorems for the time of completion of Johnson–Mehl tesselations
N. L. GARCIA. Birth and death processes as projections of higher-dimensional Poisson processes
I. S. MOLCHANOV, E. OMEY and E. KOZAROVITZKY. An elementary renewal theorem for random compact convex sets
K. J. WORSLEY. Boundary corrections for the expected Euler characteristic of excursion sets of random fields, with an application to astrophysics

General Applied Probability
P. O'NEILL. Epidemic models featuring behaviour change
L. MYTNIK and R. J. ADLER. Bisexual branching diffusions
P. W. GLYNN and P. L'ECUYER. Likelihood ratio gradient estimation for stochastic recursions
R. AGRAWAL. Sample mean based index policies with $O(\log n)$ regret for the multi-armed bandit problem
M. SHAKED and R. SZEKLI. Comparison of replacement policies via point processes
G. L. CHOUDHURY, K. K. LEUNG and W. WHITT. An algorithm to compute blocking probabilities in multi-rate multi-class multi-resource loss models
K. P. KONTOVASILIS and N. M. MITROU. Markov-modulated traffic with near-complete decomposability characteristics and associated fluid queueing models
R. PÉREZ-OCÓN and M. L. GÁMIZ-PÉREZ. On the HNBUE property in a class of correlated cumulative shock models

Subscription rates (per volume) for AAP are the same as for JAP (see the inside back cover). A discount of 10% is allowed to subscribers who order both journals at the same time directly from the Applied Probability Office. A detailed price list, including back issues, is available on request. Payment by credit card or by cheque (on a UK, US or Australian bank) is accepted.

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Papers published in the *Journal* are of two kinds:
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Review papers, longer research papers and *letters to the editor* are published in *Advances in Applied Probability*, a companion journal. (Note: Letters relating specifically to papers which have appeared in the *Journal of Applied Probability* will continue to appear in the *Journal*.)

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