

Probability Theory and Related Fields

Continuation of
Zeitschrift für Wahrscheinlichkeitstheorie

Volume 75 Number 3 1987

- 317 **K.R. Parthasarathy, K.B. Sinha:** Stop Times in Fock Space Stochastic Calculus
- 351 **K.S. Alexander:** Central Limit Theorems for Stochastic Processes under Random Entropy Conditions
- 379 **K.S. Alexander:** Rates of Growth and Sample Moduli for Weighted Empirical Processes Indexed by Sets
- 425 **R. Thrum:** A Remark on Almost Sure Convergence of Weighted Sums
- 431 **A. Greven:** Couplings of Markov Chains by Randomized Stopping Times. Part II: Short Couplings for 0-Recurrent Chains and Harmonic Functions

Volume 75 Number 4 1987 (Last issue of this volume)

- 459 **R.J. Williams:** Reflected Brownian Motion with Skew Symmetric Data in a Polyhedral Domain
- 487 **H. Nagai:** Non Zero-Sum Stopping Games of Symmetric Markov Processes
- 499 **T.R. McConnell, M.S. Taqqu:** Decoupling of Banach-Valued Multilinear Forms in Independent Symmetric Banach-Valued Random Variables
- 509 **R. Wittmann:** Sufficient Moment and Truncated Moment Conditions for the Law of the Iterated Logarithm
- 531 **J.M.C. Clark:** Convergent Martingales of Asymptotically Minimal Fluctuation
- 545 **E.D. Andjel, C.P. Kipnis:** Pointwise Ergodic Theorems for the Symmetric Exclusion Process

Volume 76 Number 1 1987

- 1 **C.S. Withers:** Central Limit Theorems for Dependent Variables, II
- 15 **E. Pardoux, P. Protter:** A Two-Sided Stochastic Integral and its Calculus
- 51 **P. Doukhan, J.R. Leon, F. Portal:** Principes d'invariance faible pour la mesure empirique d'une suite de variables aléatoires mélangée
- 71 **H.G. Kellerer:** Markov Property of Point Processes
- 81 **U. Einmahl:** A Useful Estimate in the Multidimensional Invariance Principle
- 103 **E. Mammen:** Optical Local Gaussian Approximation of an Exponential Family
- 121 **J.M. Azaïs, D. Florens-Zmlrou:** Approximation du temps local des processus gaussiens stationnaires par régularisation des trajectoires

Covered by *Zentralblatt für Mathematik*
and *Current Mathematical Publications*

Series Editor, Shanti S. Gupta

***Inequalities in Statistics and Probability** edited by Y.L. Tong,
with the cooperation of I. Olkin, M.D. Perlman, F. Proschan and C.R. Rao*

This volume comprises the proceedings of the Symposium on Inequalities in Statistics and Probability held in Lincoln, Nebraska during October 1982. (The Symposium was sponsored by the National Science Foundation, the Office of Naval Research, and the University of Nebraska. Typesetting of the volume was supported by the University of Nebraska.)

Introduction by Y.L. Tong

Inequalities via Partial Orderings

Stochastic Rearrangement Inequalities by C. D’Abadie and F. Proschan

On Group Induced Orderings by M.L. Eaton

Invariant Ordering by D.R. Jensen

Convex and Matrix-related Inequalities

Inequalities for Random Evolutions by J.E. Cohen

On TP_2 and Log-Concavity by S. Das Gupta and S.K. Sarkar

Generalized Holder’s Inequality by M. Freimer and G.S. Mudholkar

Sampling and Majorization Inequalities by S. Karlin and Y. Rinott

Entropy and Diversity by C.R. Rao

Probabilistic and Distribution-free Inequalities

Sharp Martingale Inequalities by D.C. Cox

Least Absolute Value and Median Polish by J.H.B. Kemperman

Markov’s Inequality by A.W. Marshall

Isoperimetric Inequality by R.A. Vitale

Efron-Stein Inequality by R.A. Vitale

Dependence-related Inequalities

Chebyshev’s Other Inequality by A.M. Fink and M. Jodeit, Jr.

FKG Inequality by K. Joag-Dev, L.A. Shepp, and R.A. Vitale

Independence and Limit Theorems by C.M. Newman

Stochastic Ordering of Spacings by M. Shaked and Y.L. Tong

Inequalities in Regression and Multivariate Analysis

Ordering of Scheffé Polyhedra by R. Bohrer and H.P. Wynn

Slepian’s Theorem by S.W. Dharmadhikari and K. Joag-Dev

Moment Inequalities by T.L. Lai and C.Z. Wei

Log-Eigenvalues of a Wishart Matrix by M.D. Perlman

Inequalities in Stochastic Optimization and Reliability

Stochastic Program Approximations by J.R. Birge and R. J.-B. Wets

Comparing Coherent Systems by H.W. Block and W. de Souza Borges

Multivariate Life Classes and Inequalities by T.H. Savits

Inequalities in Selecting and Ordering Populations

Monotonicity in Selection by R.L. Berger and F. Proschan

Multinomial Selection by P. Chen and M. Sobel

Selection and Ranking Inequalities by S.S. Gupta, D.-Y. Huang, and S. Panchapakesan

Trends and Order Restrictions

Dual Convex Cones by R.L. Dykstra

Trends in Poisson Intensities by R. Magel and F.T. Wright

Conformity to a Trend by T. Robertson and F.T. Wright

Order prepaid from:

List price \$25.00

IMS member price \$15.00

**The Institute of Mathematical Statistics
3401 Investment Boulevard, Suite 7
Hayward, California 94545 (USA)**

The Annals of Statistics

Vol. 15

December 1987

No. 4

Memorial Article

Harald Cramér 1893–1985 GUNNAR BLOM

Articles

- The nonexistence of $100(1 - \alpha)\%$ confidence sets of finite expected diameter
in errors-in-variables and related models . . . LEON JAY GLESER AND JIUNN T. HWANG
- Conditionally acceptable recentered set estimators GEORGE CASELLA
- Conditional properties of interval estimators of the normal variance
JON M. MAATTA AND GEORGE CASELLA
- Estimating the mean of a normal distribution with loss equal to squared error
plus complexity cost PETER J. KEMPTHORNE
- On local and nonlocal measures of efficiency
WILBERT C. M. KALLENBERG AND TERESA LEDWINA
- Some classes of global Cramér–Rao bounds
B. Z. BOBROVSKY, E. MAYER-WOLF AND M. ZAKAI
- Belief function representations of statistical evidence PETER WALLLEY
- Distributions on partitions . . ROBERT KEENER, EDWARD ROTHMAN AND NORMAN STARR
- Comparisons of optimal stopping values and prophet inequalities for negatively
dependent random variables YOSEF RINOTT AND ESTER SAMUEL-CAHN
- On Kullback–Leibler loss and density estimation PETER HALL
- Asymptotically optimal bandwidth selection for kernel density estimators from
randomly right-censored samples J. S. MARRON AND W. J. PADGETT
- Strong consistency of a nonparametric estimator of the survival function with
doubly censored data MYRON N. CHANG AND GRACE L. YANG
- Consistent estimation of the influence function of locally asymptotically linear
estimators CHRIS A. J. KLAASSEN
- Heteroscedasticity-robustness of jackknife variance estimators in linear models
JUN SHAO AND C. F. J. WU
- On preliminary test and shrinkage M -estimation in linear models
PRANAB KUMAR SEN AND A. K. MD. EHSANES SALEH
- An application of the Kiefer–Wolfowitz equivalence theorem to a problem
in Hadamard transform optics CHING-SHUI CHENG
- On the optimality of finite Williams II(a) designs J. KUNERT AND R. J. MARTIN
- A-optimal block designs for comparing test treatments with a control . . . JOHN STUFKEN
- Best equivariant estimators of a Cholesky decomposition
MORRIS L. EATON AND INGRAM OLKIN
- Estimation of parameter matrices and eigenvalues in MANOVA and canonical
correlation analysis PUI LAM LEUNG AND ROBB J. MUIRHEAD
- Adaptive prediction by least squares predictors in stochastic regression models
with applications to time series C. Z. WEI
- Testing that a stationary time series is Gaussian T. W. EPPS
- Strong convergence of distributions of estimators P. JEGANATHAN

Short Communications

- A note on the variance of a stopping time ROBERT KEENER
- On a partial correction by the bootstrap REGINA Y. LIU AND KESAR SINGH

Series Editor, Shanti S. Gupta

Approximate Computation of Expectations *by Charles Stein*

One aim of the theory of probability is the effective computation, perhaps only approximate, of probabilities that are given in principle. This volume is concerned with an abstract approach to the approximate computation of probabilities and, more generally, expectations, keeping in mind the interaction of theoretical ideas and concrete problems.

CONTENTS

- Introduction
- I. The basic approach
- II. Continuation of the basic idea
- III. A normal approximation theorem
- IV. The number of ones in a binary expansion of a random integer
- V. Heuristic treatment of large deviations
- VI. Sums of independent random variables with densities
- VII. Counting Latin rectangles
- VIII. Poisson approximations
- IX. Sums of independent identically distributed random variables
- X. Another abstract normal approximation theorem
- XI. Improved results on the number of Latin rectangles
- XII. Random allocations
- XIII. An application to the theory of random graphs
- XIV. A third abstract normal approximation theorem
- XV. Summary
- Bibliography

List price \$20.00
IMS member price \$12.00

Order prepaid from:
Institute of Mathematical Statistics
3401 Investment Boulevard, Suite 7
Hayward, California 94545 (USA)