The Annals of Statistics
Vol. 23 April 1995 No. 2

Articles
Probability inequalities for likelihood ratios and convergence rates of sieve MLEs
WING HUNG WONG and XIAOTONG SHEN
Uniform coverage bounds for confidence intervals and Berry-Esseen theorems for edgeworth expansion.
F. PETER HALL and BING-YI JING
Estimating the real parameter in a two-sample proportional odds model
COLIN O. WU
Dual likelihood ........................................... Per ASLAK MYKLAND
The central limit theorem under random censorship ........................................... WINFRIED STUTE
On strong uniform consistency of the Lynden-Bell estimator for truncated data
KANI CHEN, MIN-TE CHAO and SHAW-HWA LO
An omnibus test for independence of a survival time from a covariate
IAN W. McKEAGUE, A. M. NIKABADZE and YANGQING SUN
Efficient estimation of monotone boundaries
A. P. KOROSTELEY, L. SIMAR and A. B. TSYBAKOV
Dimension of the singular sets of plane-fitters ......................................... STEVEN P. ELLIS
Asymptotical minimax recovery of sets with smooth boundaries
E. MAMMEN and A. B. TSYBAKOV
Finite-sample confidence envelopes for shape-restricted densities
NICOLAS W. HENGSTERN and PHILIP B. STARK
Model estimation in nonlinear regression under shape invariance
ALOIS KNEIP and JOACHIM ENGEL
Estimation of a loss function for spherically symmetric distributions in the general linear model ........................................... DOMINIQUE FOURDRINIER and MARTIN T. WELLS
A note on admissibility when precision is unbounded
CHARLES ANDERSON and NABENDU PAL
Admissibility and minimaxity of the UMVU estimator of $P(\chi < Y)$
QIQING YU and Z. GOVINDARAJULU
Testing for a signal with unknown location and scale in a stationary Gaussian random field ........................................... DAVID O. SIGMUND and KEITH J. WORSLEY
Estimating the number of peaks in a random field using the Hadwiger characteristic of excursion sets, with applications to medical images
K. J. WORSLEY
Autoregression quantiles and related risk-scores processes
HIRA L. KOUL and A. K. MD. E. SALEH
Blind deconvolution of linear systems with multilevel nonstationary inputs
TA-HSIN LI

Correction Note
The relationship between sufficiency and invariance with applications in sequential analysis ........................................... W. J. HALL, R. A. WILSMA and J. K. GHOSH
The Annals of Probability

Vol. 23  April 1995  No. 2

Articles
Existence of quasi-stationary distributions. A renewal dynamical approach
P. A. Ferrari, H. Kesten, S. Martinez and P. Picco

Differential subordination and strong differential subordination for continuous-time martingales and related sharp inequalities
Gang Wang

The asymptotic behaviour of locally square integrable martingales
Jia-Gang Wang

A Skorohod-type lemma and a decomposition of reflected Brownian motion
Krzysztof Burdzy and Ellen Toby

Föllmer-Schweizer decomposition and mean-variance hedging for general claims
Pascale Monat and Christophe Stricker

Stochastic integration of processes with finite generalized variations. I
Nasser Towghi

Intermediate phase for the contact process on a tree
Rick Durrett and Rinaldo Schinazi

Reconstruction of band limited processes from irregular samples
Christian Houdré

Improved upper bounds for the contact process critical value
Thomas M. Liggett

Large deviations from a hydrodynamic scaling limit for a nongradient system
Jérémy Quastel

Super fractional Brownian motion, fractional super Brownian motion and related
self-similar (super) processes
Robert J. Adler and Gennady Samorodnitsky

Hausdorff measure of trajectories of multiparameter fractional Brownian motion
Michel Talagrand

A borderline random fourier series
Michel Talagrand

On the distribution of bubbles of Brownian sheet
Davar Khoshnevisan

Decoupling inequalities for the tail probabilities of multivariate U-statistics
Victor H. de la Peña and S. J. Montgomery-Smith

On the cluster set problem for the generalized law of the iterated logarithm in
Euclidean space
Uwe Einmahl

Limiting curves for i.i.d. records
Jean-Dominique Deuschel and Ofer Zeitouni

Point process and partial sum convergence for weakly dependent random variables
with infinite variance
Richard A. Davis and Tailing Hsing

A maximal inequality and dependent Marcinkiewicz-Zygmund strong laws
Emmanuel Rio

A note on the asymptotic independence of the sum and maximum or strongly
mixing stationary random variables
Taillen Hsing

Maximal inequalities for partial sums of ρ-mixing sequences
Qi-Man Shao

On the rotational dimension of stochastic matrices
S. Kalpazidou
Looking out for the family should be second nature. And your first priority.

Nothing changes one's outlook on life like raising a family. There are so many new decisions to be made. One of the most important is figuring out how to protect them if something happens to you.

The best answers are right here with IMS. We know a lot about our members. So we can offer insurance that is tailored to the way you live, while keeping our group rates affordable. And as you move on to another job, you can take our coverage with you.

So if you're questioning the nature of your insurance plan, call 1 800 424-9883, or in Washington, DC (202) 457-6820, between 8:30 a.m. and 5:30 p.m. eastern time to speak with a customer service representative.

IMS Insurance
Term Life • Small Business

The term life plan is underwritten by the New York Life Insurance Company, 51 Madison Avenue, New York, NY 10010.
The Annals of Applied Probability
Vol. 5 May 1995 No. 2

Articles
There is no nontrivial hedging portfolio for option pricing with transaction costs
H. M. SONER, S. E. SHREVE AND J. CVITANIĆ
Black’s consol rate conjecture
DARRELL DUFFIE, JIN MA AND JIONGMIN YONG
Some formulae for a new type of path-dependent option
JIRÔ AKAHORI
The distribution of the quantiles of a brownian motion with drift and the pricing of
related path-dependent options
ANGELOS DASSIOS
Impulse control of piecewise deterministic Markov processes
M. A. H. DEMPSTER AND J. J. YE
Limits of first passage times to rare sets in regenerative processes
PAUL GLASSERMAN AND SHING-GANG KO
The hazard rate tangent approximation for boundary hitting times
G. O. ROBERTS AND C. F. SHORTLAND
Gibbs–Cox random fields and Burgers' turbulence
T. FUNAKI, D. SURGAILIS AND W. A. WOYCZYNSKI
Diffusion approximation of nuclear space-valued stochastic differential equations driven
by Poisson random measures
G. KALLIANPUR AND J. XIONG
Multivariate integration and approximation for random fields satisfying Sacks–
Ylvisaker conditions
KLAUS RITTER, GRZEGORZ W. WASILKOWSKI AND HENRYK WOŹNIACKOWSKI
Levy bandits: multi-armed bandits driven by Levy processes
HAYA KASPI AND AVI MANDELBLOUM
Large deviation rates for branching processes. II. The multitype case
K. B. ATHREYA AND A. N. VIDYASHANKAR
IMS Lecture Notes—Monograph Series

Volume 23

CHANGE-POINT PROBLEMS
edited by E. Carlstein, H. G. Mueller and D. Siegmund

Change-point analysis is a rapidly growing area with applications ranging from edge detection in image analysis to DNA sequence comparison to clinical trials and industrial quality control. Based on the AMS-IMS-SIAM Summer Research Conference on "Change-point Problems" at Mount Holyoke College, this volume contains 29 papers covering a wide range of change-point problems and theory.

385 pages; list price $45; IMS members $26

Volume 24

MULTIVARIATE ANALYSIS AND ITS APPLICATIONS

This volume, based on an International Symposium held at Hong Kong Baptist College in 1992, presents work by many major figures in the theory of Multivariate Analysis and highlights important recent trends in applications. The volume includes 35 research articles and four longer articles summarizing short courses by T. W. Anderson, W. S. Cleveland, I. Olkin and Y.L. Tong, readers will find useful discussions of recent theoretical results in optimality, characterization and majorization. Applied topics include correspondence analysis, nonparametric regression, projection pursuit, structural equations and quantization.

472 pages; list price $45; IMS members $26

Volume 25

ADAPTIVE DESIGNS
edited by Nancy Flournoy and William F. Rosenberger

Because of the logic of adapting treatment allocation rules to the results of past experience, scientists and engineers repeatedly create and implement such strategies. Motivated by the desire to improve the efficiency of information acquisition or to limit exposure when the consequences of such exposure become evident, adaptive designs have a long history of popularity in practice. Advances in computational capabilities and in statistical theory for dependent observations have contributed to a resurgence of theoretical development in this area. This volume contains 29 papers whose topics include two-arm clinical trials, adaptive dose-response designs for quantile estimation and maximizing survival in the presence of opposing hazard functions, linear models, multinomial models, quality control and group testing.

296 pages; list price $40; IMS members $24

Order prepaid from the:

Institute of Mathematical Statistics
3401 Investment Blvd., Suite 7
Hayward, California 94545-3819
Ph #510-783-8141 Fax #510-783-4131
E-mail IMS@STAT.BERKELEY.EDU