

THE ANNALS *of* STATISTICS

AN OFFICIAL JOURNAL OF THE
INSTITUTE OF MATHEMATICAL STATISTICS

Articles appearing in *The Annals of Statistics* (volumes 1–17) are indexed in the *Cumulative Index to IMS Scientific Journals*, available from the Institute of Mathematical Statistics.

VOLUME 25

1997

CONTENTS OF VOLUME 25

Articles

ADLER, ROBERT J. Discussion of "Heavy tail modeling and tele-traffic data" by Sidney I. Resnick	1849–1852
ANDERSON, PAUL L. AND MEERSCHAERT, MARK M. Periodic moving averages of random variables with regularly varying tails	771–785
ANDERSSON, STEEN A., MADIGAN, DAVID AND PERLMAN, MICHAEL D. A characterization of Markov equivalence classes for acyclic digraphs	505–541
AVÉROUS, JEAN AND MESTE, MICHEL. Skewness for multivariate distributions: Two approaches	1984–1997
BADDELEY, ADRIAN AND GILL, RICHARD D. Kaplan–Meier estimators of distance distributions for spatial point processes	263–292
BAI, ZHIDONG, CHAO, CHERN-CHING, LIANG, WEN-QI AND ZHAO, LINCHENG. Error bound in a central limit theorem of double-indexed permutation statistics	2210–2227
BEDFORD, TIM AND MEILIJSON, ISAAC. A characterization of marginal distributions of (possibly dependent) lifetime variables which right censor each other	1622–1645
BENTKUS, V., GÖTZE, F. AND VAN ZWET, W. R. An edgeworth expansion for symmetric statistics	851–896
BERAN, JAN. Discussion of "Heavy tail modeling and teletraffic data" by Sidney I. Resnick	1852–1855
BERRY, DONALD A., CHEN, ROBERT W., ZAME, ALAN, HEATH, DAVID C. AND SHEPP, LARRY A. Bandit problems with infinitely many arms	2103–2116
BHATTACHARYA, P. K. AND ZHAO, PENG-LIANG. Semiparametric inference in a partial linear model	244–262
BHATTACHARYYA, B. B., RICHARDSON, G. D. AND FRANKLIN, L. A. Asymptotic inference for near unit roots in spatial autoregression	1709–1724
BILIAS, YANNIS, GU, MINGGAO AND YING, ZHILIANG. Towards a general asymptotic theory for Cox model with staggered entry	662–682
BIRGÉ, LUCIEN. Estimation of unimodal densities without smoothness assumptions	970–981
BOSQ, DENIS. Parametric rates of nonparametric estimators and predictors for continuous time processes	982–1000
BROWN, LAWRENCE D. AND TSENG, YU-LING. Good exact confidence sets for a multivariate normal mean	2228–2258
BROWN, LAWRENCE D., HWANG, J. T. GENE AND MUNK, AXEL. An unbiased test for the bioequivalence problem	2345–2367
BROWN, LAWRENCE D., LOW, MARK G. AND ZHAO, LINDA H. Superefficiency in nonparametric function estimation	2607–2625

BUTLER, STEVEN M. AND LOUIS, THOMAS A. Consistency of maximum likelihood estimators in general random effects models for binary data	351–377
CABAÑA, A. AND CABAÑA, E. M. Transformed empirical processes and modified Kolmogorov–Smirnov tests for multivariate distributions	2388–2409
CABAÑA, E. M. AND CABAÑA, A. Transformed empirical processes and modified Kolmogorov–Smirnov tests for multivariate distributions	2388–2409
CHAO, CHERN-CHING, LIANG, WEN-QI, ZHAO, LINCHENG AND BAI, ZHIDONG. Error bound in a central limit theorem of double-indexed permutation statistics	2210–2227
CHAUDHURI, PROBAL, DOKSUM, KJELL AND SAMAROV, ALEXANDER. On average derivative quantile regression	715–744
CHEN, HEGANG, WU, C. F. J. AND SUEN, CHUNG-YI. Some identities on q^{n-m} designs with application to minimum aberration designs	1176–1188
CHEN, KANI AND LO, SHAW-HWA. On the rate of uniform convergence of the product–limit estimator: Strong and weak laws	1050–1087
CHEN, MING-HUI AND SHAO, QI-MAN. On Monte Carlo methods for estimating ratios of normalizing constants	1563–1594
CHEN, ROBERT W., ZAME, ALAN, HEATH, DAVID C., SHEPP, LARRY A. AND BERRY, DONALD A. Bandit problems with infinitely many arms	2103–2116
CHENG, MING-YEN. A bandwidth selector for local linear density estimators	1001–1013
CHENG, MING-YEN, FAN, JIANQING AND MARRON, J. S. On automatic boundary corrections	1691–1708
CUESTA-ALBERTOS, J. A., GORDALIZA, A. AND MATRÁN, C. Trimmed k -means: An attempt to robustify quantizers	553–576
CUEVAS, ANTONIO AND FRAIMAN, RICARDO. A plug-in approach to support estimation	2300–2312
DABROWSKA, DOROTA M. Smoothed Cox regression	1510–1540
DAHLHAUS, R. Fitting time series models to nonstationary processes	1–37
DASGUPTA, ANIRBAN AND STRAWDERMAN, WILLIAM E. All estimates with a given risk, Riccati differential equations and a new proof of a theorem of Brown	1208–1221
DETTE, HOLGER AND RÖDER, INGO. Optimal discrimination designs for multifactor experiments	1161–1175
DEVROYE, LUC AND LUGOSI, GÁBOR. Nonasymptotic universal smoothing factors, kernel complexity and Yatracos classes	2626–2637

INDEX

v

DÍAZ-GARCÍA, JOSÉ A. AND GUTIÉRREZ JÁIMEZ, RAMÓN. Proof of the conjectures of H. Uhlig on the singular multivariate beta and the Jacobian of a certain matrix transformation	2018–2023
DOKSUM, KJELL, SAMAROV, ALEXANDER AND CHAUDHURI, PROBAL. On average derivative quantile regression	715–744
DONOHO, DAVID L. CART and best-ortho-basis: A connection	1870–1911
DORADO, CRISANTO, HOLLANDER, MYLES AND SETHURAMAN, JAYARAM. Nonparametric estimation for a general repair model	1140–1160
DOSS, HANI, HUFFER, FRED W. AND LAWSON, KEVIN, L. Bayesian nonparametric estimation via Gibbs sampling for coherent systems with redundancy	1109–1139
DROST, FEIKE C., KLAASSEN, CHRIS A. J. AND WERKER, BAS J. M. Adaptive estimation in time-series models	786–817
DUAN, NAIHUA AND YE, JIANMING. Nonparametric $n^{-1/2}$ -consistent estimation for the general transformation models	2682–2717
ELLIS, JULES L. AND JUNKER, BRIAN W. A characterization of monotone unidimensional latent variable models	1327–1343
FAN, JIANQING. Discussion of “Polynomial splines and their tensor products in extended linear modeling” by Charles J. Stone, Mark H. Hansen, Charles Kooperberg and Young K. Truong	1425–1432
FAN, JIANQING, GIJBELS, IRÈNE AND KING, MARTIN. Local likelihood and local partial likelihood in hazard regression	1661–1690
FAN, JIANQING, MARRON, J. S. AND CHENG, MING-YEN. On automatic boundary corrections	1691–1708
FARIA, JR., ALVARO E. AND SMITH, JIM Q. Conditionally externally Bayesian pooling operators in chain graphs	1740–1761
FRAIMAN, RICARDO AND CUEVAS, ANTONIO. A plug-in approach to support estimation	2300–2312
FRANKLIN, L. A., BHATTACHARYYA, B. B. AND RICHARDSON, G. D. Asymptotic inference for near unit roots in spatial autoregression	1709–1724
GAMBOA, F. AND GASSIAT, E. Bayesian methods and maximum entropy for ill-posed inverse problems	328–350
GASSER, THEO AND WANG, KONGMING. Alignment of curves by dynamic time warping	1251–1276
GASSIAT, E. AND GAMBOA, F. Bayesian methods and maximum entropy for ill-posed inverse problems	328–350
GATHER, URSULA AND HILKER, TORSTEN. A note on Tyler’s modification of the MAD for the Stahel–Donoho estimator	2024–2026

GEIGER, DAN AND HECKERMAN, DAVID. A characterization of the Dirichlet distribution through global and local parameter independence	1344–1369
GIJBELS, IRÈNE, KING, MARTIN AND FAN, JIANQING. Local likelihood and local partial likelihood in hazard regression	1661–1690
GILL, RICHARD D. AND BADDELEY, ADRIAN. Kaplan–Meier estimators of distance distributions for spatial point processes	263–292
GORDALIZA, A., MATRÁN, C. AND CUESTA-ALBERTOS, J. A. Trimmed k -means: An attempt to robustify quantizers	553–576
GORDON, LOUIS AND POLLAK, MOSHE. Average run length to false alarm for surveillance schemes designed with partially specified pre-change distribution	1284–1310
GÖTZE, F., VAN ZWET, W. R. AND BENTKUS, V. An edgeworth expansion for symmetric statistics	851–896
GU, CHONG. Discussion of “Polynomial splines and their tensor products in extended linear modeling” by Charles J. Stone, Mark H. Hansen, Charles Kooperberg and Young K. Truong	1432–1443
GU, MINGGAO AND REN, JIAN-JIAN. Regression M -estimators with doubly censored data	2638–2664
GU, MINGGAO, YING, ZHILIANG AND BILIAS, YANNIS. Towards a general asymptotic theory for Cox model with staggered entry	662–682
GUTIÉRREZ JÁIMEZ, RAMÓN AND DÍAZ-GARCÍA, JOSÉ A. Proof of the conjectures of H. Uhlig on the singular multivariate beta and the Jacobian of a certain matrix transformation	2018–2023
HALL, PETER AND TURLACH, BERWIN A. Interpolation methods for nonlinear wavelet regression with irregularly spaced design	1912–1925
HALL, PETER AND WEISSMAN, ISHAY. On the estimation of extreme tail probabilities	1311–1326
HALL, PETER, KOUL, HIRA L. AND TURLACH, BERWIN A. Note on convergence rates of semiparametric estimators of dependence index	1725–1739
HALL, PETER, MARRON, J. S., NEUMANN, M. H. AND TITTERINGTON, D. M. Curve estimation when the design density is low	756–770
HANSEN, MARK H., KOOPERBERG, CHARLES, TRUONG, YOUNG K. AND STONE, CHARLES J. Polynomial splines and their tensor products in extended linear modeling	1371–1425
HANSEN, MARK H., KOOPERBERG, CHARLES, TRUONG, YOUNG K., HUANG, JIANHUA Z. AND STONE, CHARLES J. Rejoinder	1454–1470
HÄRDLE, W., MARRON, J. S. AND YANG, L. Discussion of “Polynomial splines and their tensor products in extended linear modeling” by Charles J. Stone, Mark H. Hansen, Charles Kooperberg and Young K. Truong	1443–1450

INDEX

vii

HÄRDLE, W., SPOKOINY, V. AND SPERLICH, S. Semiparametric single index versus fixed link function modelling	212–243
HASTIE, TREVOR AND TIBSHIRANI, ROBERT. Discussion of “Polynomial splines and their tensor products in extended linear modeling” by Charles J. Stone, Mark H. Hansen, Charles Kooperberg and Young K. Truong	1451–1454
HAUSSLER, DAVID AND OPPER, MANFRED. Mutual information, metric entropy and cumulative relative entropy risk	2451–2492
HE, XUMING AND WANG, GANG. Convergence of depth contours for multivariate datasets	495–504
HEATH, DAVID C., SHEPP, LARRY A., BERRY, DONALD A., CHEN, ROBERT W. AND ZAME, ALAN. Bandit problems with infinitely many arms	2103–2116
HECKERMAN, DAVID AND GEIGER, DAN. A characterization of the Dirichlet distribution through global and local parameter independence	1344–1369
HEDAYAT, S., STUFKEN, JOHN AND SU, GUOQIN. On the construction and existence of orthogonal arrays with three levels and indexes 1 and 2	2044–2053
HENGARTNER, NICOLAS W. Adaptive demixing in Poisson mixture models	917–928
HIDALGO, F. J. AND ROBINSON, P. M. Time series regression with long-range dependence	77–104
HILKER, TORSTEN AND GATHER, URSULA. A note on Tyler’s modification of the MAD for the Stahel–Donoho estimator	2024–2026
HOLLANDER, MYLES, SETHURAMAN, JAYARAM AND DORADO, CRISANTO. Nonparametric estimation for a general repair model	1140–1160
HOSOYA, YUZO. A limit theory with long-range dependence and statistical inference on related models	105–137
HSIEH, FUSHING. Estimations in homoscedastic linear regression models with censored data: An empirical process approach	2665–2681
HUANG, JIAN. Asymptotic properties of the NPMLE of a distribution function based on ranked set samples	1036–1049
HUANG, JIANHUA Z., STONE, CHARLES J., HANSEN, MARK H., KOOPERBERG, CHARLES AND TRUONG, YOUNG K. Rejoinder	1454–1470
HUFFER, FRED W., LAWSON, KEVIN L. AND DOSS, HANI. Bayesian nonparametric estimation via Gibbs sampling for coherent systems with redundancy	1109–1139
HWANG, J. T. GENE, MUNK, AXEL AND BROWN, LAWRENCE D. An unbiased test for the bioequivalence problem	2345–2367
IMBENS, GUIDO W. AND RUBIN, DONALD B. Bayesian inference for causal effects in randomized experiments with noncompliance	305–327

INGLOT, TADEUSZ, KALLENBERG, WILBERT C. M. AND LEDWINA, TERESA. Data driven smooth tests for composite hypotheses	1222–1250
JAMES, LANCELOT F. A study of a class of weighted bootstraps for censored data	1595–1621
JIANG, JIMING. Wald consistency and the method of sieves in REML estimation	1781–1803
JUNKER, BRIAN W. AND ELLIS, JULES L. A characterization of monotone unidimensional latent variable models	1327–1343
KALLENBERG, WILBERT C. M., LEDWINA, TERESA AND INGLOT, TADEUSZ. Data driven smooth tests for composite hypotheses	1222–1250
KING, MARTIN, FAN, JIANQING AND GLJBELS, IRÈNE. Local likelihood and local partial likelihood in hazard regression	1661–1690
KITAMURA, YUICHI. Empirical likelihood methods with weakly dependent processes	2084–2102
KLAASSEN, CHRIS A. J., WERKER, BAS J. M. AND DROST, FEIKE C. Adaptive estimation in time-series models	786–817
KOLTCHINSKII, V. I. M -estimation, convexity and quantiles	435–477
KONEV, V. AND PERGAMENSHCHIKOV, S. On guaranteed estimation of the mean of an autoregressive process	2127–2163
KONG, AUGUSTINE, LIU, JUN S. AND WONG, WING HUNG. The properties of the cross-match estimate and split sampling	2410–2432
KOOPERBERG, CHARLES, TRUONG, YOUNG K., HUANG, JIANHUA Z., STONE, CHARLES J. AND HANSEN, MARK H. Rejoinder	1454–1470
KOOPERBERG, CHARLES, TRUONG, YOUNG K., STONE, CHARLES J. AND HANSEN, MARK H. Polynomial splines and their tensor products in extended linear modeling	1371–1425
KOSHEVOY, GLEB AND MOSLER, KARL. Zonoid trimming for multivariate distributions	1998–2017
KOUL, HIRA L. AND SURGAILIS, DONATAS. Asymptotic expansion of M -estimators with long-memory errors	818–850
KOUL, HIRA L., TURLACH, BERWIN A. AND HALL, PETER. Note on convergence rates of semiparametric estimators of dependence index	1725–1739
KURIKI, SATOSHI AND TAKEMURA, AKIMICHI. Weights of $\bar{\chi}^2$ distribution for smooth or piecewise smooth cone alternatives	2368–2387
KUSHNER, H. B. Optimal repeated measurements designs: The linear optimality equations	2328–2344
LANGE, KENNETH AND LAZZERONI, LAURA C. Markov chains for Monte Carlo tests of genetic equilibrium in multidimensional contingency tables	138–168
LAWSON, KEVIN L., DOSS, HANI AND HUFFER, FRED W. Bayesian nonparametric estimation via Gibbs sampling for coherent systems with redundancy	1109–1139

LAZZERONI, LAURA C. AND LANGE, KENNETH. Markov chains for Monte Carlo tests of genetic equilibrium in multidimensional contingency tables	138–168
LEDWINA, TERESA, INGLOT, TADEUSZ AND KALLENBERG, WILBERT C. M. Data driven smooth tests for composite hypotheses	1222–1250
LEPSKI, O. V. AND SPOKOINY, V. G. Optimal pointwise adaptive methods in nonparametric estimation	2512–2546
LEPSKI, O. V., MAMMEN, E. AND SPOKOINY, V. G. Optimal spatial adaptation to inhomogeneous smoothness: An approach based on kernel estimates with variable bandwidth selectors	929–947
LI, BING AND LINDSAY, BRUCE G. On second-order optimality of the observed Fisher information	2172–2199
LI, KER-CHAU. Nonlinear confounding in high-dimensional regression	577–612
LIANG, WEN-QI, ZHAO, LINCHENG, BAI, ZHIDONG AND CHAO, CHERN-CHING. Error bound in a central limit theorem of double-indexed permutation statistics	2210–2227
LINDSAY, BRUCE G. AND LI, BING. On second-order optimality of the observed Fisher information	2172–2199
LINDSAY, BRUCE AND ROEDER, KATHRYN. Moment-based oscillation properties of mixture models	378–386
LIU, JUN S., WONG, WING HUNG AND KONG, AUGUSTINE. The properties of the cross-match estimate and split sampling	2410–2432
LIU, WEI. Improving the fully sequential sampling scheme of Anscombe–Chow–Robbins	2164–2171
LO, SHAW-HWA AND CHEN, KANI. On the rate of uniform convergence of the product–limit estimator: Strong and weak laws	1050–1087
LOUIS, THOMAS A. AND BUTLER, STEVEN M. Consistency of maximum likelihood estimators in general random effects models for binary data	351–377
LOW, MARK G. On nonparametric confidence intervals	2547–2554
LOW, MARK G., ZHAO, LINDA H. AND BROWN, LAWRENCE D. Superefficiency in nonparametric function estimation	2607–2625
LUGOSI, GÁBOR AND DEVROYE, LUC. Nonasymptotic universal smoothing factors, kernel complexity and Yatracos classes	2626–2637
MADIGAN, DAVID, PERLMAN, MICHAEL D. AND ANDERSSON, STEEN A. A characterization of Markov equivalence classes for acyclic digraphs	505–541
MAMMEN, E., SPOKOINY, V. G. AND LEPSKI, O. V. Optimal spatial adaptation to inhomogeneous smoothness: An approach based on kernel estimates with variable bandwidth selectors	929–947

MAMMEN, ENNO AND VAN DE GEER, SARA. Locally adaptive regression splines	387–413
MAMMEN, ENNO AND VAN DE GEER, SARA. Penalized quasi-likelihood estimation in partial linear models	1014–1035
MARRON, J. S., CHENG, MING-YEN AND FAN, JIANQING. On automatic boundary corrections	1691–1708
MARRON, J. S., NEUMANN, M. H., TITTERINGTON, D. M. AND HALL, PETER. Curve estimation when the design density is low	756–770
MARRON, J. S., YANG, L. AND HÄRDLE, W. Discussion of “Polynomial splines and their tensor products in extended linear modeling” by Charles J. Stone, Mark H. Hansen, Charles Kooperberg and Young K. Truong	1443–1450
MARZEC, LESZEK AND MARZEC, PAWEŁ. Generalized martingale-residual processes for goodness-of-fit inference in Cox’s type regression models	683–714
MARZEC, PAWEŁ AND MARZEC, LESZEK. Generalized martingale-residual processes for goodness-of-fit inference in Cox’s type regression models	683–714
MATRÁN, C., CUESTA-ALBERTOS, J. A. AND GORDALIZA, A. Trimmed k -means: An attempt to robustify quantizers	553–576
MEERSCHAERT, MARK M. AND ANDERSON, PAUL L. Periodic moving averages of random variables with regularly varying tails . . .	771–785
MEILLJON, ISAAC AND BEDFORD, TIM. A characterization of marginal distributions of (possibly dependent) lifetime variables which right censor each other	1622–1645
MESTE, MICHEL AND AVÉROUS, JEAN. Skewness for multivariate distributions: Two approaches	1984–1997
MINNOTTE, MICHAEL C. Nonparametric testing of the existence of modes	1646–1660
MORGAN, JOHN P. AND UDDIN, NIZAM. Universally optimal designs with blocksize $p \times 2$ and correlated observations	1189–1207
MOSLER, KARL AND KOSHEVOY, GLEB. Zonoid trimming for multivariate distributions	1998–2017
MÖTTÖNEN, JYRKI, OJA, HANNU AND TIENARI, JUHA. On the efficiency of multivariate spatial sign and rank tests	542–552
MULIERE, PIETRO AND WALKER, STEPHEN. Beta-Stacy processes and a generalization of the Polya-urn scheme	1762–1780
MUNK, AXEL, BROWN, LAWRENCE D. AND HWANG, J. T. GENE. An unbiased test for the bioequivalence problem	2345–2367
MURPHY, S. A. AND VAN DER VAART, A. W. Semiparametric likelihood ratio inference	1471–1509
NAIMAN, DANIEL Q. AND WYNN, HENRY P. Abstract tubes, improved inclusion–exclusion identities and inequalities and importance sampling	1954–1983

NAKAYAMA, MARVIN K. Multiple-comparison procedures for steady-state simulations	2433–2450
NEUMAN, MICHAEL H. AND VON SACHS, RAINER. Wavelet thresholding in anisotropic function classes and application to adaptive estimation of evolutionary spectra	38–76
NEUMANN, M. H., TITTERINGTON, D. M., HALL, PETER AND MARRON, J. S. Curve estimation when the design density is low	756–770
NICOLERIS, THEODOROS AND YATRACOS, YANNIS G. Rates of convergence of estimates, Kolmogorov's entropy and the dimensionality reduction principle in regression	2493–2511
OJA, HANNU, TIENARI, JUHA AND MÖTTÖNEN, JYRKI. On the efficiency of multivariate spatial sign and rank tests	542–552
OPPER, MANFRED AND HAUSSLER, DAVID. Mutual information, metric entropy and cumulative relative entropy risk	2451–2492
OPSOMER, JEAN D. AND RUPPERT, DAVID. Fitting a bivariate additive model by local polynomial regression	186–211
OWEN, ART B. Scrambled net variance for integrals of smooth functions	1541–1562
PAXSON, VERN AND WILLINGER, WALTER. Discussion of "Heavy tail modeling and teletraffic data" by Sidney I. Resnick	1856–1866
PERGAMENSHCHIKOV, S. AND KONEV, V. On guaranteed estimation of the mean of an autoregressive process	2127–2163
PERLMAN, MICHAEL D., ANDERSSON, STEEN A. AND MADIGAN, DAVID. A characterization of Markov equivalence classes for acyclic digraphs	505–541
POLLAK, MOSHE AND GORDON, LOUIS. Average run length to false alarm for surveillance schemes designed with partially specified pre-change distribution	1284–1310
PORTNOY, STEPHEN. Local asymptotics for quantile smoothing splines	414–434
REN, JIAN-JIAN AND GU, MINGGAO. Regression M -estimators with doubly censored data	2638–2664
RESNICK, SIDNEY I. Heavy tail modeling and teletraffic data . . .	1805–1849
RESNICK, SIDNEY I. Rejoinder	1866–1869
RICCOMAGNO, EVA, SCHWABE, RAINER AND WYNN, HENRY P. Lattice-based D -optimum design for Fourier regression	2313–2327
RICHARDSON, G. D., FRANKLIN, L. A. AND BHATTACHARYYA, B. B. Asymptotic inference for near unit roots in spatial autoregression	1709–1724
RIEDEL, KURT S. Piecewise convex function estimation: Pilot estimators	2592–2606
ROBINSON, P. M. Large-sample inference for nonparametric regression with dependent errors	2054–2083
ROBINSON, P. M. AND HIDALGO, F. J. Time series regression with long-range dependence	77–104

RÖDER, INGO AND DETTE, HOLGER. Optimal discrimination designs for multifactor experiments	1161–1175
ROEDER, KATHRYN AND LINDSAY, BRUCE. Moment-based oscillation properties of mixture models	378–386
ROUTLEDGE, RICK AND TSAO, MIN. On the relationship between two asymptotic expansions for the distribution of sample mean and its applications	2200–2209
RUBIN, DONALD B. AND IMBENS, GUIDO W. Bayesian inference for causal effects in randomized experiments with noncompliance	305–327
RUPPERT, DAVID AND OPSOMER, JEAN D. Fitting a bivariate additive model by local polynomial regression	186–211
SAMAROV, ALEXANDER, CHAUDHURI, PROBAL AND DOKSUM, KJELL. On average derivative quantile regression	715–744
SCHMID, WOLFGANG AND SCHÖNE, ALEXANDER. Some properties of the EWMA control chart in the presence of autocorrelation	1277–1283
SCHÖNE, ALEXANDER AND SCHMID, WOLFGANG. Some properties of the EWMA control chart in the presence of autocorrelation	1277–1283
SCHWABE, RAINER, WYNN, HENRY P. AND RICCOMAGNO, EVA. Lattice-based D -optimum design for Fourier regression	2313–2327
SELF, STEVEN G. AND WICK, DAVID. Estimating disease attack rates in heterogeneous interacting populations, with applications to HIV vaccine trials	642–661
SETHURAMAN, JAYARAM, DORADO, CRISANTO AND HOLLANDER, MYLES. Nonparametric estimation for a general repair model	1140–1160
SHAO, QI-MAN AND CHEN, MING-HUI. On Monte Carlo methods for estimating ratios of normalizing constants	1563–1594
SHEN, XIAOTONG. On methods of sieves and penalization	2555–2591
SHEPP, LARRY A., BERRY, DONALD A., CHEN, ROBERT W., ZAME, ALAN AND HEATH, DAVID C. Bandit problems with infinitely many arms	2103–2116
SMALL, CHRISTOPHER G. Multidimensional medians arising from geodesics on graphs	478–494
SMITH, JIM Q. AND FARIA, JR., ALVARO E. Conditionally externally Bayesian pooling operators in chain graphs	1740–1761
SPEED, T. P. AND YU, BIN. Information and the clone mapping of chromosomes	169–185
SPERLICH, S., HÄRDLE, W. AND SPOKOINY, V. Semiparametric single index versus fixed link function modelling	212–243
SPOKOINY, V. G. AND LEPSKI, O. V. Optimal pointwise adaptive methods in nonparametric estimation	2512–2546
SPOKOINY, V. G., LEPSKI, O. V. AND MAMMEN, E. Optimal spatial adaptation to inhomogeneous smoothness: An approach	

based on kernel estimates with variable bandwidth selectors	929–947
SPOKOINY, V., SPERLICH, S. AND HÄRDLE, W. Semiparametric single index versus fixed link function modelling	212–243
STEIF, JEFFREY E. Consistent estimation of joint distributions for sufficiently mixing random fields	293–304
STONE, CHARLES J., HANSEN, MARK H., KOOPERBERG, CHARLES AND TRUONG, YOUNG K. Polynomial splines and their tensor products in extended linear modeling	1371–1425
STONE, CHARLES J., HANSEN, MARK H., KOOPERBERG, CHARLES, TRUONG, YOUNG K. AND HUANG, JIANHUA Z. Rejoinder . . .	1454–1470
STRAWDERMAN, WILLIAM E. AND DASGUPTA, ANIRBAN. All estimates with a given risk, Riccati differential equations and a new proof of a theorem of Brown	1208–1221
STUFKEN, JOHN, SU, GUOQIN AND HEDAYAT, S. On the construction and existence of orthogonal arrays with three levels and indexes 1 and 2	2044–2053
STUTE, WINFRIED. Nonparametric model checks for regression	613–641
SU, GUOQIN, HEDAYAT, S. AND STUFKEN, JOHN. On the construction and existence of orthogonal arrays with three levels and indexes 1 and 2	2044–2053
SUEN, CHUNG-YI, CHEN, HEGANG AND WU, C. F. J. Some identities on q^{n-m} designs with application to minimum aberration designs	1176–1188
SURGAILIS, DONATAS AND KOUL, HIRA L. Asymptotic expansion of M -estimators with long-memory errors	818–850
TAKEMURA, AKIMICHI AND KURIKI, SATOSHI. Weights of $\bar{\chi}^2$ distribution for smooth or piecewise smooth cone alternatives	2368–2387
TIBSHIRANI, ROBERT AND HASTIE, TREVOR. Discussion of “Polynomial splines and their tensor products in extended linear modeling” by Charles J. Stone, Mark H. Hansen, Charles Kooperberg and Young K. Truong	1451–1454
TIENARI, JUHA, MÖTTÖNEN, JYRKI AND OJA, HANNU. On the efficiency of multivariate spatial sign and rank tests	542–552
TITTERINGTON, D. M., HALL, PETER, MARRON, J. S. AND NEUMANN, M. H. Curve estimation when the design density is low . . .	756–770
TRUONG, YOUNG K., HUANG, JIANHUA Z., STONE, CHARLES J., HANSEN, MARK H. AND KOOPERBERG, CHARLES. Rejoinder . . .	1454–1470
TRUONG, YOUNG K., STONE, CHARLES J., HANSEN, MARK H. and Kooperberg, Charles. Polynomial splines and their tensor products in extended linear modeling	1371–1425
TSAO, MIN AND ROUTLEDGE, RICK. On the relationship between two asymptotic expansions for the distribution of sample mean and its applications	2200–2209

TSENG, YU-LING AND BROWN, LAWRENCE D. Good exact confidence sets for a multivariate normal mean	2228–2258
TSYBAKOV, A. B. On nonparametric estimation of density level sets	948–969
TURLACH, BERWIN A. AND HALL, PETER. Interpolation methods for nonlinear wavelet regression with irregularly spaced design	1912–1925
TURLACH, BERWIN A., HALL, PETER AND KOUL, HIRA L. Note on convergence rates of semiparametric estimators of dependence index	1725–1739
UDDIN, NIZAM AND MORGAN, JOHN P. Universally optimal designs with blocksize $p \times 2$ and correlated observations . .	1189–1207
VAN DE GEER, SARA AND MAMMEN, ENNO. Locally adaptive regression splines	387–413
VAN DE GEER, SARA AND MAMMEN, ENNO. Penalized quasi-likelihood estimation in partial linear models	1014–1035
VAN DER VAART, A. W. AND MURPHY, S. A. Semiparametric likelihood ratio inference	1471–1509
VAN ZWET, W. R., BENTKUS, V. AND GÖTZE, F. An edgeworth expansion for symmetric statistics	851–896
VON SACHS, RAINER AND NEUMAN, MICHAEL H. Wavelet thresholding in anisotropic function classes and application to adaptive estimation of evolutionary spectra	38–76
VU, H. T. V. AND ZHOU, S. Generalization of likelihood ratio tests under nonstandard conditions	897–916
WALKER, STEPHEN AND MULIERE, PIETRO. Beta-Stacy processes and a generalization of the Polya-urn scheme	1762–1780
WALTHER, GUENTHER. Granulometric smoothing	2273–2299
WALTHER, GUENTHER. Monte Carlo sampling in dual space for approximating the empirical halfspace distance	1926–1953
WANG, GANG AND HE, XUMING. Convergence of depth contours for multivariate datasets	495–504
WANG, KONGMING AND GASSER, THEO. Alignment of curves by dynamic time warping	1251–1276
WEISSMAN, ISHAY AND HALL, PETER. On the estimation of extreme tail probabilities	1311–1326
WERKER, BAS J. M., DROST, FEIKE C. AND KLAASSEN, CHRIS A. J. Adaptive estimation in time-series models	786–817
WICK, DAVID AND SELF, STEVEN G. Estimating disease attack rates in heterogeneous interacting populations, with applications to HIV vaccine trials	642–661
WILLINGER, WALTER AND PAXSON, VERN. Discussion of “Heavy tail modeling and teletraffic data” by Sidney I. Resnick . . .	1856–1866
WONG, WING HUNG, KONG, AUGUSTINE AND LIU, JUN S. The properties of the cross-match estimate and split sampling . .	2410–2432

WU, C. F. J., SUEN, CHUNG-YI AND CHEN, HEGANG. Some identities on q^{n-m} designs with application to minimum aberration designs	1176–1188
WU, HUAIQING. Optimal exact designs on a circle or a circular arc	2027–2043
WYNN, HENRY P. AND NAIMAN, DANIEL Q. Abstract tubes, improved inclusion–exclusion identities and inequalities and importance sampling	1954–1983
WYNN, HENRY P., RICCOMAGNO, EVA AND SCHWABE, RAINER. Lattice-based D -optimum design for Fourier regression	2313–2327
XU, JIAN-LUN. Simultaneous estimation of location parameters for sign-invariant distributions	2259–2272
YAKIR, BENJAMIN. A note on optimal detection of a change in distribution	2117–2126
YANG, L., HÄRDLE, W. AND MARRON, J. S. Discussion of “Polynomial splines and their tensor products in extended linear modeling” by Charles J. Stone, Mark H. Hansen, Charles Kooperberg and Young K. Truong	1443–1450
YANG, SONG. A generalization of the product-limit estimator with an application to censored regression	1088–1108
YATRACOS, YANNIS G. AND NICOLERIS, THEODOROS. Rates of convergence of estimates, Kolmogorov’s entropy and the dimensionality reduction principle in regression	2493–2511
YE, JIANMING AND DUAN, NAIHUA. Nonparametric $n^{-1/2}$ -consistent estimation for the general transformation models	2682–2717
YING, ZHILIANG, BILIAS, YANNIS AND GU, MINGGAO. Towards a general asymptotic theory for Cox model with staggered entry	662–682
YU, BIN AND SPEED, T. P. Information and the clone mapping of chromosomes	169–185
ZAME, ALAN, HEATH, DAVID C., SHEPP, LARRY A., BERRY, DONALD A. AND CHEN, ROBERT W. Bandit problems with infinitely many arms	2103–2116
ZHAO, LINCHENG, BAI, ZHIDONG, CHAO, CHERN-CHING AND LIANG, WEN-QI. Error bound in a central limit theorem of double-indexed permutation statistics	2210–2227
ZHAO, LINDA H. Minimax linear estimation in a white noise problem	745–755
ZHAO, LINDA H., BROWN, LAWRENCE D. AND LOW, MARK G. Superefficiency in nonparametric function estimation	2607–2625
ZHAO, PENG-LIANG AND BHATTACHARYA, P. K. Semiparametric inference in a partial linear model	244–262
ZHOU, S. AND VU, H. T. V. Generalization of likelihood ratio tests under nonstandard conditions	897–916