

THE ANNALS *of* STATISTICS

AN OFFICIAL JOURNAL OF THE
INSTITUTE OF MATHEMATICAL STATISTICS

Articles

On the optimality of sliced inverse regression in high dimensions QIAN LIN, XINRAN LI, DONGMING HUANG AND JUN S. LIU	1
Asymptotic optimality in stochastic optimization JOHN C. DUCHI AND FENG RUAN	21
Concordance and value information criteria for optimal treatment decision CHENGCHUN SHI, RUI SONG AND WENBIN LU	49
Statistically optimal and computationally efficient low rank tensor completion from noisy entries DONG XIA, MING YUAN AND CUN-HUI ZHANG	76
Transfer learning for nonparametric classification: Minimax rate and adaptive classifier T. TONY CAI AND HONGJI WEI	100
Adaptation in multivariate log-concave density estimation OLIVER Y. FENG, ADITYANAND GUNTUBOYINA, ARLENE K. H. KIM AND RICHARD J. SAMWORTH	129
Asymptotically independent U-statistics in high-dimensional testing YINQIU HE, GONGJUN XU, CHONG WU AND WEI PAN	154
Frequentist validity of Bayesian limits B. J. K. KLEIJN	182
Optimal change point detection and localization in sparse dynamic networks DAREN WANG, YI YU AND ALESSANDRO RINALDO	203
Convergence of covariance and spectral density estimates for high-dimensional locally stationary processes DANNA ZHANG AND WEI BIAO WU	233
Wordlength enumerator for fractional factorial designs .. YU TANG AND HONGQUAN XU	255
Estimating minimum effect with outlier selection ALEXANDRA CARPENTIER, SYLVAIN DELATTRE, ETIENNE ROQUAIN AND NICOLAS VERZELEN	272
Multiple block sizes and overlapping blocks for multivariate time series extremes NAN ZOU, STANISLAV VOLGUSHEV AND AXEL BÜCHER	295
Estimation of low-rank matrices via approximate message passing ANDREA MONTANARI AND RAMJI VENKATARAMANAN	321
Asymptotics for spherical functional autoregressions ALESSIA CAPONERA AND DOMENICO MARINUCCI	346
Singular vector and singular subspace distribution for the matrix denoising model ZHIGANG BAO, XIUCAI DING AND AND KE WANG	370
Robust multivariate mean estimation: The optimality of trimmed mean GÁBOR LUGOSI AND SHAHAR MENDELSON	393
Classification accuracy as a proxy for two-sample testing ILMUN KIM, ADITYA RAMDAS, AARTI SINGH AND LARRY WASSERMAN	411
Asymmetry helps: Eigenvalue and eigenvector analyses of asymmetrically perturbed low-rank matrices YUXIN CHEN, CHEN CHENG AND JIANQING FAN	435
Complex sampling designs: Uniform limit theorems and applications QIYANG HAN AND JON A. WELLNER	459
Predictive inference with the jackknife+ RINA FOYgel BARBER, EMMANUEL J. CANDÈS, ADITYA RAMDAS AND RYAN J. TIBSHIRANI	486
Robust estimation of superhedging prices..... JAN OBŁÓJ AND JOHANNES WIESEL	508
Concentration of kernel matrices with application to kernel spectral clustering ARASH A. AMINI AND ZAHRA S. RAZAEE	531

Continued on back cover