

THE ANNALS *of* STATISTICS

AN OFFICIAL JOURNAL OF THE
INSTITUTE OF MATHEMATICAL STATISTICS

Articles

- Empirical Bayes oracle uncertainty quantification for regression
EDUARD BELITSER AND SUBHASHIS GHOSAL 3113
- Asymptotic joint distribution of extreme eigenvalues and trace of large sample covariance
matrix in a generalized spiked population model
ZENG LI, FANG HAN AND JIANFENG YAO 3138
- Singularity, misspecification and the convergence rate of EM
RAAZ DWIVEDI, NHAT HO, KOULIK KHAMARU,
MARTIN J. WAINWRIGHT, MICHAEL I. JORDAN AND BIN YU 3161
- Towards optimal estimation of bivariate isotonic matrices with unknown permutations
CHENG MAO, ASHWIN PANANJADY AND MARTIN J. WAINWRIGHT 3183
- High-dimensional consistent independence testing with maxima of rank correlations
MATHIAS DRTON, FANG HAN AND HONGJIAN SHI 3206
- Optimal rates of entropy estimation over Lipschitz balls
YANJUN HAN, JIANTAO JIAO, TSACHY WEISSMAN AND YIHONG WU 3228
- Limit distribution theory for block estimators in multiple isotonic regression
QIYANG HAN AND CUN-HUI ZHANG 3251
- Assessment of the extent of corroboration of an elaborate theory of a causal hypothesis
using partial conjunctions of evidence factors
BIKRAM KARMAKAR AND DYLAN S. SMALL 3283
- Fréchet change-point detection PAROMITA DUBEY AND HANS-GEORG MÜLLER 3312
- Nonparametric drift estimation for i.i.d. paths of stochastic differential equations
FABIENNE COMTE AND VALENTINE GENON-CATALOT 3336
- Distance-based and RKHS-based dependence metrics in high dimension
CHANGBO ZHU, XIANYANG ZHANG, SHUN YAO AND XIAOFENG SHAO 3366
- The distance standard deviation
DOMINIC EDELMANN, DONALD RICHARDS AND DANIEL VOGEL 3395
- Robust multivariate nonparametric tests via projection averaging
ILMUN KIM, SIVARAMAN BALAKRISHNAN AND LARRY WASSERMAN 3417
- Inference for conditional value-at-risk of a predictive regression
YI HE, YANXI HOU, LIANG PENG AND HAIPENG SHEN 3442
- Simultaneous high-probability bounds on the false discovery proportion in structured,
regression and online settings EUGENE KATSEVICH AND AADITYA RAMDAS 3465
- Clustering in Block Markov Chains
JARON SANDERS, ALEXANDRE PROUTIERE AND SE-YOUNG YUN 3488
- Model selection and local geometry ROBIN J. EVANS 3513
- Irreducibility and geometric ergodicity of Hamiltonian Monte Carlo
ALAIN DURMUS, ÉRIC MOULINES AND EERO SAKSMAN 3545
- Test for high dimensional covariance matrices YUEFENG HAN AND WEI BIAO WU 3565
- Optimal estimation of variance in nonparametric regression with random design
YANDI SHEN, CHAO GAO, DANIELA WITTEN AND FANG HAN 3589
- Analysis of a two-layer neural network via displacement convexity
ADEL JAVANMARD, MARCO MONDELLI AND ANDREA MONTANARI 3619

Continued on back cover

THE ANNALS *of* STATISTICS

AN OFFICIAL JOURNAL OF THE
INSTITUTE OF MATHEMATICAL STATISTICS

Articles—Continued from front cover

Beyond Gaussian approximation: Bootstrap for maxima of sums of independent random vectors	HANG DENG AND CUN-HUI ZHANG	3643
Isotonic regression in multi-dimensional spaces and graphs	HANG DENG AND CUN-HUI ZHANG	3672
Robust Bayes-like estimation: Rho-Bayes estimation	YANNICK BARAUD AND LUCIEN BIRGÉ	3699