## Official Journal of the Bernoulli Society for Mathematical Statistics and Probability

## Volume Twenty Five Number One February 2019 ISSN: 1350-7265

CONTENTSCHATTERJEE, S. and LAFFERTY, J.1Adaptive risk bounds in unimodal regression
EVANS, S.N., RIVEST, R.L. and STARK, P.B.26Leading the field: Fortune favors the bold in Thurstonian choice models
BICKEL, D.R. and PATRIOTA, A.G. ..... 47Self-consistent confidence sets and tests of composite hypotheses applicable to restrictedparameters
QIU, Y. ..... 75Rigid stationary determinantal processes in non-Archimedean fieldsMCKEAGUE, I.W., PEKÖZ, E.A. and SWAN, Y.89Stein's method and approximating the quantum harmonic oscillator
CHOTARD, A. and AUGER, A. ..... 112
Verifiable conditions for the irreducibility and aperiodicity of Markov chains by analyzing underlying deterministic models
LAMBERT, A. and SCHERTZER, E. ..... 148
Recovering the Brownian coalescent point process from the Kingman coalescent by conditional sampling
HU, S. and WANG, X. ..... 174Subexponential decay in kinetic Fokker-Planck equation: Weak hypocoercivityPEKÖZ, E., RÖLLIN, A. and ROSS, N.189Pólya urns with immigration at random times
RÁTH, B.221Feller property of the multiplicative coalescent with linear deletionLEUNG, D. and SHAO, Q.241Asymptotic power of Rao's score test for independence in high dimensions
DAOUIA, A., GIRARD, S. and STUPFLER, G. ..... 264Extreme M-quantiles as risk measures: From $L^{1}$ to $L^{p}$ optimizationPAULIN, D., JASRA, A. and THIERY, A.310Error bounds for sequential Monte Carlo samplers for multimodal distributionsADAMCZAK, R. and STRZELECKI, M.341On the convex Poincaré inequality and weak transportation inequalities
(continued on the inside cover)

The papers published in Bernoulli are indexed or abstracted in Current Index to Statistics, Mathematical Reviews, Statistical Theory and Method Abstracts-Zentralblatt (STMA-Z), and Zentralblatt für Mathematik (also avalaible on the MATH via STN database and Compact MATH CD-ROM). A list of forthcoming papers can be found online at http://www. bernoulli-society.org/index.php/publications/bernoulli-journal/bernoulli-journal-papers

## BERNOULLI

## Official Journal of the Bernoulli Society for Mathematical Statistics and Probability

Volume Twenty Five Number One February 2019 ISSN: 1350-7265
CONTENTS
(Continued)
ASMUSSEN, S., IVANOVS, J. and SEGERS, J. ..... 375
On the longest gap between power-rate arrivalsCHOWDHURY, J. and CHAUDHURI, P.395Nonparametric depth and quantile regression for functional data
DREES, H., NEUMEYER, N. and SELK, L.
Estimation and hypotheses testing in boundary regression models424
LEHÉRICY, L.464
Consistent order estimation for nonparametric hidden Markov models
PELIGRAD, M. and ZHANG, N. ..... 499
Central limit theorem for Fourier transform and periodogram of random fields
KABLUCHKO, Z., VYSOTSKY, V. and ZAPOROZHETS, D.521A multidimensional analogue of the arcsine law for the number of positive terms in arandom walk
ANEVSKI, D. and FOUGÈRES, A.-L. ..... 549
Limit properties of the monotone rearrangement for density and regression function estimation
HUGGINS, J.H. and ROY, D.M. ..... 584Sequential Monte Carlo as approximate sampling: bounds, adaptive resampling via$\infty$-ESS, and an application to particle Gibbs
FLAMMARION, N., MAO, C. and RIGOLLET, P. ..... 623
Optimal rates of statistical seriation
DAS, D. and LAHIRI, S.N. ..... 654
Second order correctness of perturbation bootstrap M-estimator of multiple linear regression parameter
COMETS, F., MORENO, G. and RAMÍREZ, A.F. ..... 683Random polymers on the complete graph
GAMBOA, F., NAGEL, J. and ROUAULT, A. ..... 712Sum rules and large deviations for spectral matrix measuresBUCHMANN, B., LU, K.W. and MADAN, D.B.742Weak subordination of multivariate Lévy processes and variance generalised gammaconvolutions
DUARTE, A., GALVES, A., LÖCHERBACH, E. and OST, G. ..... 771
Estimating the interaction graph of stochastic neural dynamics

