

THE ANNALS *of* APPLIED STATISTICS

AN OFFICIAL JOURNAL OF THE
INSTITUTE OF MATHEMATICAL STATISTICS

Articles

Topic-adjusted visibility metric for scientific articles LINDA S. L. TAN, AIK HUI CHAN AND TIAN ZHENG	1
Sequential advantage selection for optimal treatment regime AILIN FAN, WENBIN LU AND RUI SONG	32
Integer percentages as electoral falsification fingerprints DMITRY KOBAK, SERGEY SHPILKIN AND MAXIM S. PSHENICHNIKOV	54
A Markov-switching model for heat waves BENJAMIN A. SHABY, BRIAN J. REICH, DANIEL COOLEY AND CARI G. KAUFMAN	74
Prevalence and trend estimation from observational data with highly variable post-stratification weights YANNICK VANDENDIJK, CHRISTEL FAES AND NIEL HENS	94
Bayesian latent pattern mixture models for handling attrition in panel studies with refreshment samples YAJUAN SI, JEROME P. REITER AND D. SUNSHINE HILLYGUS	118
Fast parameter estimation in loss tomography for networks of general topology KE DENG, YANG LI, WEIPING ZHU AND JUN S. LIU	144
Estimating a common period for a set of irregularly sampled functions with applications to periodic variable star data JAMES P. LONG, ERIC C. CHI AND RICHARD G. BARANIUK	165
Persistent homology analysis of brain artery trees PAUL BENDICH, J. S. MARRON, EZRA MILLER, ALEX PIELOCH AND SEAN SKWERER	198
Accounting for time dependence in large-scale multiple testing of event-related potential data CHING-FAN SHEU, ÉMELINE PERTHAME, YUH-SHIOW LEE AND DAVID CAUSEUR	219
Extending the latent multinomial model with complex error processes and dynamic Markov bases SIMON J. BONNER, MATTHEW R. SCHOFIELD, PATRIK NOREN AND STEVEN J. PRICE	246
Capture–recapture abundance estimation using a semi-complete data likelihood approach RUTH KING, BRETT T. MCCLINTOCK, DARREN KIDNEY AND DAVID BORCHERS	264
Evaluating risk-prediction models using data from electronic health records LE WANG, PAMELA A. SHAW, HANSIE M. MATHÉLIER, STEPHEN E. KIMMEL AND BENJAMIN FRENCH	286
Power-weighted densities for time series data DANIEL MCCARTHY AND SHANE T. JENSEN	305
Full matching approach to instrumental variables estimation with application to the effect of malaria on stunting HYUNSEUNG KANG, BENNO KREUELS, JÜRGEN MAY AND DYLAN S. SMALL	335
Precinct or prejudice? Understanding racial disparities in New York City’s stop-and-frisk policy SHARAD GOEL, JUSTIN M. RAO AND RAVI SHROFF	365

Continued on back cover

THE ANNALS *of* APPLIED STATISTICS

AN OFFICIAL JOURNAL OF THE
INSTITUTE OF MATHEMATICAL STATISTICS

Articles—Continued from front cover

- Reconstructing transmission trees for communicable diseases using densely sampled genetic data COLIN J. WORBY, PHILIP D. O'NEILL, THEODORE KYPRAIOS, JULIE V. ROBOTHAM, DANIELA DE ANGELIS, EDWARD J. P. CARTWRIGHT, SHARON J. PEACOCK AND BEN S. COOPER 395
- Variable selection and prediction with incomplete high-dimensional data
YING LIU, YUANJIA WANG, YANG FENG AND MELANIE M. WALL 418
- Extended Structure Preserving Estimation (ESPREE) for updating small area estimates of poverty MARISSA ISIDRO, STEPHEN HASLETT AND GEOFF JONES 451
- Temperatures in transient climates: Improved methods for simulations with evolving temporal covariances ANDREW POPPICK, DAVID J. MCINERNEY, ELISABETH J. MOYER AND MICHAEL L. STEIN 477
- Change point analysis of histone modifications reveals epigenetic blocks linking to physical domains MENGJIE CHEN, HAIFAN LIN AND HONGYU ZHAO 506
- Applying a spatiotemporal model for longitudinal cardiac imaging data
BRANDON GEORGE, THOMAS DENNEY, JR., HIMANSHU GUPTA, LOUIS DELL'ITALIA AND INMACULADA ABAN 527