

THE ANNALS *of* APPLIED STATISTICS

AN OFFICIAL JOURNAL OF THE
INSTITUTE OF MATHEMATICAL STATISTICS

Articles

Applied statistics: A review	D. R. COX	1
A correlated topic model of <i>Science</i>	DAVID M. BLEI AND JOHN D. LAFFERTY	17
Coupling hidden Markov models for the discovery of <i>Cis</i> -regulatory modules in multiple species	QING ZHOU AND WING HUNG WONG	36
A statistical approach to simultaneous mapping and localization for mobile robots	ANITA ARANEDA, STEPHEN E. FIENBERG AND ALVARO SOTO	66
Random-set methods identify distinct aspects of the enrichment signal in gene-set analysis	MICHAEL A. NEWTON, FERNANDO A. QUINTANA, JOHAN A. DEN BOON, SRIKUMAR SENGUPTA AND PAUL AHLQUIST	85
On testing the significance of sets of genes	BRADLEY EFRON AND ROBERT TIBSHIRANI	107
Elevated soil lead: Statistical modeling and apportionment of contributions from lead-based paint and leaded gasoline	R. DENNIS COOK AND LIQIANG NI	130
Of mice and men: Sparse statistical modeling in cardiovascular genomics	DAVID M. SEO, PASCAL J. GOLDSCHMIDT-CLERMONT AND MIKE WEST	152
Control of the mean number of false discoveries, Bonferroni and stability of multiple testing	ALEXANDER GORDON, GALINA GLAZKO, XING QIU AND ANDREI YAKOVLEV	179
Spatial variation of total column ozone on a global scale	MICHAEL L. STEIN	191
A resampling-based test to detect person-to-person transmission of infectious disease	YANG YANG, IRA M. LONGINI, JR. AND M. ELIZABETH HALLORAN	211
Probabilistic projections of HIV prevalence using Bayesian melding	LEONTINE ALKEMA, ADRIAN E. RAFTERY AND SAMUEL J. CLARK	229
A multivariate semiparametric Bayesian spatial modeling framework for hurricane surface wind fields	BRIAN J. REICH AND MONTSERRAT FUENTES	249
Extending the rank likelihood for semiparametric copula estimation	PETER D. HOFF	265