# THE ANNALS of APPLIED STATISTICS

## AN OFFICIAL JOURNAL OF THE INSTITUTE OF MATHEMATICAL STATISTICS

### Special Section on Network Modeling

SP	
Introduction to papers on the modeling and analysis of network data—II STEPHEN E. FIENBERG	533
A state-space mixed membership blockmodel for dynamic network tomography ERIC P. XING, WENJIE FU AND LE SONG	535
Maximum likelihood estimation for social network dynamics TOM A. B. SNIJDERS, JOHAN KOSKINEN AND MICHAEL SCHWEINBERGER	567
Empirical stationary correlations for semi-supervised learning on graphs YA XU, JUSTIN S. DYER AND ART B. OWEN	589
Ranking relations using analogies in biological and information networks RICARDO SILVA, KATHERINE HELLER, ZOUBIN GHAHRAMANI AND EDOARDO M. AIROLDI	615
Bayesian anomaly detection methods for social networksNICHOLAS A. HEARD, DAVID J. WESTON, KIRIAKI PLATANIOTI AND DAVID J. HAND	645
Sparse regulatory networks GARETH M. JAMES, CHIARA SABATTI, NENGFENG ZHOU AND JI ZHU	663
Strategies for online inference of model-based clustering in large and growing networks HUGO ZANGHI, FRANCK PICARD, VINCENT MIELE AND CHRISTOPHE AMBROISE	687
Uncovering latent structure in valued graphs: A variational approach MAHENDRA MARIADASSOU, STÉPHANE ROBIN AND CORINNE VACHER	715
Articles	
High-throughput data analysis in behavior genetics ANAT SAKOV, ILAN GOLANI, DINA LIPKIND AND YOAV BENJAMINI	743
Transposable regularized covariance models with an application to missing data imputation GENEVERA I. ALLEN AND ROBERT TIBSHIRANI	764
Building a model for scoring 20 or more runs in a baseball game MICHAEL R. HUBER AND RODNEY X. STURDIVANT	791
Changing approaches of prosecutors towards juvenile repeated sex-offenders: A Bayesian evaluation DIPANKAR BANDYOPADHYAY, DEBAJYOTI SINHA, STUART LIPSITZ AND ELIZABETH LETOURNEAU	805
	803
Likelihood inference for particle location in fluorescence microscopy  JOHN HUGHES, JOHN FRICKS AND WILLIAM HANCOCK	830
Likelihood inference for particle location in fluorescence microscopy	
Likelihood inference for particle location in fluorescence microscopy  JOHN HUGHES, JOHN FRICKS AND WILLIAM HANCOCK The sensitivity of linear regression coefficients' confidence limits to the omission of	830
Likelihood inference for particle location in fluorescence microscopy  JOHN HUGHES, JOHN FRICKS AND WILLIAM HANCOCK  The sensitivity of linear regression coefficients' confidence limits to the omission of a confounderCARRIE A. HOSMAN, BEN B. HANSEN AND PAUL W. HOLLAND  Statistical inference of transmission fidelity of DNA methylation patterns over somatic cell divisions in mammals	830 849

Continued on back cover

# THE ANNALS of APPLIED STATISTICS

## AN OFFICIAL JOURNAL OF THE INSTITUTE OF MATHEMATICAL STATISTICS

### **Articles**—Continued from front cover

A Dirichlet process mixture of hidden Markov models for protein structure prediction	
KRISTIN P. LENNOX, DAVID B. DAHL, MARINA VANNUCCI, RYAN DAY	016
AND JERRY W. TSAI	916
A flexible regression model for count data	
Kimberly F. Sellers and Galit Shmueli	943
A nested mixture model for protein identification using mass spectrometry QUNHUA LI, MICHAEL J. MACCOSS AND MATTHEW STEPHENS	962
Bayesian meta-analysis for identifying periodically expressed genes in fission yeast cell cycle XIAODAN FAN, SAUMYADIPTA PYNE AND JUN S. LIU	988
A geometric interpretation of the permutation $p$ -value and its application in eQTL studies Wei Sun and Fred A. Wright	1014
DISCO analysis: A nonparametric extension of analysis of variance MARIA L. RIZZO AND GÁBOR J. SZÉKELY	1034
Feature selection guided by structural information  MARTIN SLAWSKI, WOLFGANG ZU CASTELL AND GERHARD TUTZ	1056
Exact asymptotic distribution of change-point mle for change in the mean of Gaussian sequencesSTERGIOS B. FOTOPOULOS, VENKATA K. JANDHYALA	1001
AND ELENA KHAPALOVA	1081
Intervention analysis with state-space models to estimate discontinuities due to a survey redesignJAN VAN DEN BRAKEL AND JOERI ROELS	1105