If you’re going to San Francisco…

JSM2003: August 3–7, 2003, San Francisco

The 2003 IMS Annual Meeting is part of the JSM (Joint Statistical Meetings), held jointly with the American Statistical Association, the International Biometric Society (ENAR and WNAR), and the Statistical Society of Canada. Activities of the JSM include oral presentations, panel sessions, poster presentations, continuing education courses, exhibit hall, placement service, committee meetings, social activities, and networking opportunities.

San Francisco is the host city for JSM2003 and offers a wide range of possibilities for sharing time with friends and colleagues. JSM2003 will be held at the Hilton San Francisco, the Nikko and the Renaissance Parc 55 Hotel. Hope to see you there!

Important Dates:
- **May 15:** Registration materials available on JSM web site (see below).
- **July 4:** Last day for early bird registration forms to arrive at ASA Office.
- **July 4–18:** Advanced Registration (increased fees apply)
- **July 11:** Hotel reservations deadline.
- **July 19–August 7:** On-site registration fees.

Local Information:
The JSM website (www.amstat.org/meetings/jsm/2003/) provides some information about San Francisco. To learn more about the city, its activities, places to go and things to do, visit www.bestofsanfrancisco.net/ For nearby areas, visit www.bayarea.citysearch.com/

Highlights of the IMS Program at JSM 2003

This year’s Wald Lecturer will be Grace Wahba (U of Wisconsin-Madison).

The three Wald Lectures will include two discussants per session (see Page 5). The focus is on spline ANOVA models and support vector machines. On this theme, several Invited Paper Sessions on machine learning and related topics are sponsored or co-sponsored by the IMS.

An Invited Overview Lecture on support vector machines, directed towards a general audience, will be given by Nello Cristianini (U of California, Davis).

Another highlight of the program this year is the Le Cam Lecture. Established last year, the first Le Cam Lecture will be delivered by David Donoho (Stanford U) on “Asymptotic Equivalence of Experiments: An Appreciation”, with discussant David Pollard (Yale U).

JSM 2003 will feature four IMS Medallion Lectures, which will be presented by Sara van de Geer* (Leiden U, Netherlands); Arkadi Nemirovski (Technion, Israel); James Robins (Harvard U); and Maria Eulalia Vares* (Centro Brasileiro de Pesquisas Fisicas, Brasil) [*see page 6 for a preview of these lectures].

Information about the IMS Invited Paper Sessions and Topic Contributed Sessions can be found on page 7.

Jane-Ling Wang, IMS Program Chair
News from IMS members

Bradley Efron, Max H. Stein Professor in the Dept of Statistics at Stanford U is the first recipient of the C. R. and Bhargavi Rao Prize for Outstanding Research in Statistics awarded by the Department of Statistics, Penn State University. The prize was established to honor and recognize outstanding and influential innovations in the theory and practice of mathematical statistics, international leadership in directing statistical research, and pioneering contributions by a recognized leader in the field of statistics.


IMS Fellow, Professor Kanti Mardia (U of Leeds, UK) is the recipient of the Guy Medal in Silver for 2003, which is awarded by the Royal Statistical Society. The official citation referred to his “many pathbreaking contributions to statistical science, including two fundamental papers read to the Society on ‘Statistics of Directional Data’ (1968) and ‘A Penalised Likelihood Approach to Image Warping’ (with C.A. Glasbey, 2001), his highly acclaimed monographs and his lasting leadership role in interdisciplinary research.”

IMS grants ‘divine’ grace…?

A subscription agency, divine, used by about 250 of the libraries subscribing to IMS journals, has been considering bankruptcy: see the press release dated 25 February 2003 on divine’s website, http://www.divine.com/

It has now decided to file a voluntary petition to reorganize under Chapter 11 of the U.S. Bankruptcy Code. The press release says “One of divine’s top priorities is ensuring that customers are protected and that they continue to receive products, services and support.”

The company has been collecting subscription fees and has not then forwarded them to the IMS; this has happened to all publishers and the libraries are aware of it. At this time, the IMS has agreed to grace our subscribers through divine for the next year, until the issue is resolved.

Notes and Corrections:
Please note that the email address for Steve Lalley, Editor of the Annals of Probability, is actually annals@galton.uchicago.edu

…and the IMS Dues and Subscriptions Office phone and fax numbers are now:
tel 301-634-7029, fax 301-634-7099
Counting IMS elections: new procedure

Last summer the IMS Council agreed a change in the way that elections to Council will be conducted. In future the elections will be carried out by preference voting using the Single Transferable Vote system. Why the change?
Under the previous system, little-known candidates, or candidates from under-represented groups, had not much chance of being elected. Under STV, the representation of any group of candidates is roughly in proportion to the support that group has. This should lead to a more diverse Council. Furthermore it will give individuals nominated candidates, other than those chosen by the nominating committee, a real chance of being elected.
Do you feel strongly that young candidates, for instance, should be elected? Only a small proportion of voters need to put younger candidates at the top of their list of preferences, to be sure that at least one will get in. Also, it doesn’t matter how many “young” candidates there are; votes for unsuccessful candidates are transferred, so votes for “hopeless” candidates are not wasted.

How do I vote under STV?
Simply number your preferences 1, 2, 3… until you have no preference between remaining candidates. Easy, isn’t it? There is no disadvantage to your originally preferred candidates in expressing a full list of preferences; later preferences are only used when the fate of candidates given higher preferences has been decided one way or the other. A vote is reckoned as spoiled if the candidate with the least number of votes is eliminated and their votes transferred to next preferences. So if everyone is feeling frequentist and Bayes only gets a few votes, those votes are not wasted; Bayes is dropped out and the votes transferred.

Where is STV used?
STV is used in elections for the governments of various countries like Ireland and Australia. It is used by many non-governmental organisations, like the Royal Statistical Society. It’s particularly appropriate for situations where it is not important that a single party or group has a clear majority, but where the important aim is a diverse representation of the voters’ views.

What is the point of all this?
A more representative Council is one that will be more active in making IMS the sort of society you want it to be. Changing the voting system is only a small step in doing this, but Council hoped it will get more under-represented people involved.

Any questions?
Please write in (bulletin@imstat.org). I will try to answer them in the next issue.

Bernard Silverman is Editor of IMS Bulletin and writes voting software in his spare time.

Our own software is on the IMS website (www.imstat.org/elections/stv.html) so you can check what is going on. To be elected a candidate must achieve the quota of \( N/(m+1) \), where \( N \) is the total number of votes cast and \( m \) the number of vacancies to be filled. Excess votes over the quota are appropriately downweighted and allocated to the next preference of voters. Suppose 599 people vote and there were 5 places to be filled. If 100 people vote for Revd Thomas Bayes for council, then he will be elected. If everyone votes for Bayes, then only \( \frac{1}{6} \) of each vote goes to elect Bayes; the remaining \( \frac{5}{6} \) is distributed to second preferences. On the other hand if no candidate reaches the quota, the candidate with the least number of votes is eliminated and their votes transferred to next preferences.

www.imstat.org or www.electoral-reform.org.uk. Our
The Institute of Mathematical Statistics presents

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University of California
Davis, California

July 29 to August 1, 2003

Conference Objective:
To promote interaction among new researchers by introducing them to each other’s research in an informal setting.

Participants:
Anyone who has received their PhD since 1998 or expects to receive a PhD by 2004 is eligible to attend. All participants expected to present a short, expository talk or poster on their research.

Abstract Deadline: February 1, 2003
For more information: check out http://rohan.sdsu.edu/~ralevine/NRC

Whom do I contact?
ralevine@sciences.sdsu.edu

Welcome to Davis
Pop. 52,204
The 2003 Wald Lectures: a Preview

This year’s IMS Wald Lectures will be given by Grace Wahba at JSM in San Francisco

The Wald Lectures this year will be given by Grace Wahba, who is famous for her research in many theoretical and practical areas of nonparametric statistics. Grace’s appointments at the University of Wisconsin-Madison span Statistics, Biostatistics, Medical Informatics and Computer Sciences, and she has been the recipient of many honors, most notably election to the National Academy of Sciences.

The Wald Lectures traditionally consist of three linked lectures, and this year each lecture will be followed by two invited discussants. In each case, the first discussant will be one of Grace’s co-workers, who will therefore be able to give an additional slant on the work described in the main lecture.

The first lecture will be an overview of Spline ANOVA Models including models with complex input and output structure, applications in medicine and meteorology, and various computational aspects. The lead discussant will be Yi Lin. In the second lecture, Grace will concentrate on aspects of model selection in Spline ANOVA Models by considering problems in nonparametric model selection, in particular when there are many potential, possibly correlated predictor variables. We will learn about likelihood basis pursuit and the nonparametric LASSO, and the lead discussant will be Hao Helen Zhang. In the final lecture, the focus will move to The (Nonstandard) Multicategory Support Vector Machine, with lead discussant Yoonkyung Lee. These vector machines include adjustments for non-representative samples and unequal misclassification costs, and the lecture and discussion will cover various aspects, examples and comparisons.

This format of the Wald Lectures will give you the chance both to hear a series of lectures by someone who has been a world leader in research for many years, and also to hear shorter presentations by three promising new researchers. After each lecture there will be a second invited discussion, followed by further discussion and questions from the audience. Don’t miss what will be an exciting and memorable series!

JSTOR News

On January 15, 2003, JSTOR released the Mathematics & Statistics collection, a new package of journals for consideration by libraries not now participating in JSTOR (www.jstor.org). All of the journals in this collection are currently included in other JSTOR collections, indeed, most of the statistics offerings (including all IMS and RSS journals, Biometrika, and JASA) are already in the Arts & Sciences I collection. This new repackaging is designed specifically for libraries who focus primarily on technical disciplines and who have a limited need for the broad spectrum of disciplines available thru JSTOR’s larger collections. This could include departmental libraries, or libraries without JSTOR, where acquisition decisions are made at the departmental level, as is true in a number of European universities. Before considering this collection, please check to make sure that your institution does not already participate in JSTOR, or does not wish to participate in the broader JSTOR offerings. If you wish more details, please contact JSTOR at jstor-participation@umich.edu.

JSTOR has recently made a number of improvements in its interface, including enhancing its capabilities (which now include citation listing) and increased accessibility for visual-impaired and learning disabled users.

See the web page for details: www.jstor.org.
Medallion Lecture Previews

Some of this year’s IMS Medallion Lecturers give us a preview of their lectures below.

Sara van de Geer:
**An oracle inequality for the classification problem**

The classification problem concerns the question how to label objects according to the value of some input variable. Examples are the classification of gene expression levels as belonging to normal or tumor tissue, in order to predict clinical disease outcome, or, in machine learning, recognition of speech, handwriting, images, etc.

The optimal rule, called Bayes rule, is to assign to the input variable the label which is most likely. This rule depends on the joint distribution of label and input variable, which is in whole or in part unknown. Therefore, we take a sample of inputs and labels (the training set), and try to estimate Bayes rule. One way to do this is to minimize the classification error in the sample, over all possible classification rules. Note that if we choose the set of possible classification rules too large, this procedure will have little predictive power. On the other hand, if we choose it too small we might rule out a good approximation of Bayes rule. Our striving is now to filch the ideal procedure from an oracle.


Dominique Picard:
**Maxisets : A way to compare the procedures**

In the last decade a lot of new methods in nonparametric statistics have been developed mostly oriented towards adaptation, inhomogenous smoothness, sparse representation pursuit. The performances of these methods have been in general compared either in a practical way on test signals, or theoretically using minimax type results.

We will here focus on a new way of evaluating the performances of a procedure. This point of view, rather standard in approximation theory, is more unusual is Statistics. It consists in investigating the maximal set where a procedure has a given rate of convergence. The setting is not extremely different from the minimax context but it has the main advantage of providing a functional set which is authentically connected to the procedure and the model.

We are still looking for the ‘bad functions’ to estimate, but in a more ‘pragmatic’ way, since they are the difficult functions of a given procedure, not the difficult functions of a space for all the procedures. Moreover, this gives as a by-product a very efficient way of producing the rates over specified spaces and provides an opportunity to enhance the minimax paradigm, since procedures which already have minimax properties, automatically are minimax on their maxisets.

We investigate and compare in this context the performances of different types of procedures, including linear methods, thresholding, Bayesian methods, adaptive choice of the bandwidth parameter, in different specific situations such as deconvolution, regression with random design, multivariate regression...

Dominique Picard will give her lecture at the IMS Western Regional/WNAR Meeting in Golden, Colorado, June 22–25, 2003.

Maria Eulália Vares:
**Oriented Percolation in a Dependent Environment**

In this lecture I will discuss results of a joint project by Harry Kesten, Vladas Sidoravicius and myself, where we consider a two-dimensional oriented percolation problem in a random environment. It may be thought as a discrete time growth model; time instants are first declared to be bad (or good), independently of each other. Given the configuration of good/bad times, at the good times, the sites have a small probability to be open. We ask if the frequency of bad time instants may be taken small enough so that there is a positive probability of percolation to infinity from the origin. We prove the answer to be positive.

Several interesting problems such as percolation of binary sequences (introduced by I. Benjamini and H. Kesten in 1995), percolation on randomly stretched lattices (J. Jonasson, E. Mossel and Y. Peres, 2000), and compatibility of binary sequences (P. Winkler, 1991) can be formulated as percolation in such kind of environment.

In the lecture I shall discuss the main ideas behind our proof and the relation to the above mentioned problems.

Maria Eulália Vares will give her lecture at JSM in San Francisco, August 3–7, 2003.
JSM2003: IMS Invited Papers and Topic Contributed Sessions

Special Invited Paper Sessions:

Title: Wald Lecture 1
Organizer & Chair: Bernard W. Silverman, University of Bristol
Grace Wahba, University of Wisconsin-Madison; Spline ANOVA Models I: Introduction, Applications, Computation
Discussants: Yi Lin, University of Wisconsin-Madison; Jim Ramsay, McGill University

Title: Wald Lecture 2
Organizer: Bernard W. Silverman, University of Bristol
Chair: Iain M. Johnstone, Stanford University Grace Wahba, University of Wisconsin-Madison; Spline ANOVA Models II: Aspects of Model Selection
Discussants: Hao Helen Zhang, North Carolina State University; Doug Nychka, National Center for Atmospheric Research

Title: Wald Lecture 3
Organizer & Chair: Bernard W. Silverman, University of Bristol
Chair: Iain M. Johnstone, Stanford University Grace Wahba, University of Wisconsin-Madison; The (Nonstandard) Multicategory Support Vector Machine
Discussants: Yoonkyung Lee, The Ohio State University; Wing Hung Wong, Harvard University

Title: Le Cam Lecture
Organizer & Chair: Grace L. Yang, University of Maryland-College Park
David Donoho, Stanford University; Asymptotic Equivalence of Experiments: An Appreciation
Discussants: David Pollard, Yale University

Title: Medallion Lectures 1
Organizer & Chair: Wolfgang Polonik, University of California, Davis
1. Sara van de Geer, Leiden University, Netherlands; An Oracle Inequality for the Classification Problem
2. James Robins, Harvard University; Recent Developments in Modelling and Estimation of Non-Stationary Time Series

Title: Medallion Lectures 2
Organizer & Chair: Prabir Burman, University of California, Davis
1. Maria Eulalia Vares, Centro Brasileiro de Pesquisas Fisicas, Brasil; Oriented Percolation in a Dependent Environment
2. Arkadi Nemirovsky, Technion, Israel; De-Noising Signals of Unknown Local Structure

Title: Statistical Issues in Image Understanding
Organizer and Chair: David E. Tyler, Rutgers University
1. John T. Kent, University of Leeds, England; Shape and Shape Variability in Image Analysis
2. Yingnian Wu, University of California, Los Angeles; Statistical Models for Natural Scenes
3. Javier Cabrera, Rutgers University; Machine Vision Methods for DNA Microarray Spotting

Title: Recent Developments in Modelling and Estimation of Non-Stationary Time Series
Organizer: Rainer Von Sachs, Université Catholique de Louvain-La-Neuve, Belgium
Chair: Wolfgang Polonik, University of California, Davis
1. Vladimir Spokoiny, Humboldt University; Adaptive Methods for Analysis of Nonstationary Time Series
2. Sébastien Van Bellegem, Université Catholique de Louvain-La-Neuve, Belgium; Wavelet Processes & Adaptive Estimation of Sparse Evolutionary Wavelet Spectra
3. Hernando Ombao, University of Illinois; The SLEX Analysis of Multivariate Non-Stationary Time Series
Discussant: Rainer Von Sachs, Université Catholique de Louvain-La-Neuve, Belgium

Title: New Methods of Model Selection and Testing
Organizer & Chair: Axel Munk, University of Goettingen, Germany
1. Adrian Raftery, University of Washington; Bayesian Model Averaging for Deterministic Simulation Models
2. Andrew W. Nobel, University of North Carolina; Distinguishing Families of Dependent Processes
3. Wanli Min, University of Chicago; Identification of Kronecker Index of Multivariate Time Series with Dependent Innovations
Discussant: Randy Eubank, Texas A&M University

Title: Recent Developments on Times Series Analysis - Theory and Applications
Organizer: Hwai-Chung Ho, Academia Sinica, Taiwan
Chair: Jun Zhu, University of Wisconsin, Madison
1. Clifford Hurvich, New York University; The Local Whittle Estimator of Long Memory Stochastic Volatility
2. Jin Cao, Bell Labs; PackMime-HTTP: Statistical Models for Generating HTTP Application Traffic
3. Ching-Kang Ing, National Taipei University, Taiwan; Asymptotic Equivalence Between Information- and Prediction-Based Model Selection Criteria: A New Look at AIC
4. Hwai-Chung Ho, Academia Sinica, Taiwan; Recent Developments on Time Series Analysis and Applications

Title: Survival Statistical Methods in Genetic Studies
Organizer & Chair: Chao A. Hsiung, National Health Research Institute, Taiwan
1. Hongne Li, University of California, Davis; Survival Models for Genetic Linkage and Association Analysis
2. I-Shou Chang, National Health Research Institutes, Taiwan; An Asymptotic Theory for the Nonparametric Maximum Likelihood Estimator in the Cox-gene Model
3. Terry M Therneau, Mayo Clinic; Experience with Using a Random Effects Cox Model for Genetic Data
4. Peter Kraft, UCLA School of Public Health; Case-sibling Gene-Association Studies for Diseases with Variable Age at Onset
Discussant: Mitchell H. Gail, National Cancer Institute

Title: Recent Developments in Modelling and Estimation of Non-Stationary Time Series
Organizer: Rainer Von Sachs, Université Catholique de Louvain-La-Neuve, Belgium
Chair: Wolfgang Polonik, University of California, Davis
1. Vladimir Spokoiny, Humboldt University; Adaptive Methods for Analysis of Nonstationary Time Series
2. Sébastien Van Bellegem, Université Catholique de Louvain-La-Neuve, Belgium; Wavelet Processes & Adaptive Estimation of Sparse Evolutionary Wavelet Spectra
3. Hernando Ombao, University of Illinois; The SLEX Analysis of Multivariate Non-Stationary Time Series
Discussant: Rainer Von Sachs, Université Catholique de Louvain-La-Neuve, Belgium

Title: New Methods of Model Selection and Testing
Organizer & Chair: Axel Munk, University of Goettingen, Germany
1. Adrian Raftery, University of Washington; Bayesian Model Averaging for Deterministic Simulation Models
2. Andrew W. Nobel, University of North Carolina; Distinguishing Families of Dependent Processes
3. Wanli Min, University of Chicago; Identification of Kronecker Index of Multivariate Time Series with Dependent Innovations
Discussant: Randy Eubank, Texas A&M University

Title: Recent Developments on Times Series Analysis - Theory and Applications
Organizer: Hwai-Chung Ho, Academia Sinica, Taiwan
Chair: Jun Zhu, University of Wisconsin, Madison
1. Clifford Hurvich, New York University; The Local Whittle Estimator of Long Memory Stochastic Volatility
2. Jin Cao, Bell Labs; PackMime-HTTP: Statistical Models for Generating HTTP Application Traffic
3. Ching-Kang Ing, National Taipei University, Taiwan; Asymptotic Equivalence Between Information- and Prediction-Based Model Selection Criteria: A New Look at AIC
4. Hwai-Chung Ho, Academia Sinica, Taiwan; Recent Developments on Time Series Analysis and Applications

Title: Survival Statistical Methods in Genetic Studies
Organizer & Chair: Chao A. Hsiung, National Health Research Institute, Taiwan
1. Hongne Li, University of California, Davis; Survival Models for Genetic Linkage and Association Analysis
2. I-Shou Chang, National Health Research Institutes, Taiwan; An Asymptotic Theory for the Nonparametric Maximum Likelihood Estimator in the Cox-gene Model
3. Terry M Therneau, Mayo Clinic; Experience with Using a Random Effects Cox Model for Genetic Data
4. Peter Kraft, UCLA School of Public Health; Case-sibling Gene-Association Studies for Diseases with Variable Age at Onset
Discussant: Mitchell H. Gail, National Cancer Institute

Title: Joint Models on Survival and Other Longitudinal Clinical Outcomes
Organizer & Chair: Wei Wang, Harvard School of Public Health / Dana-Farber Cancer Institute
1. Elizabeth Brown, Univ of Washington; Bayesian Approaches to Joint Cure Rate and Longitudinal Models
2. Yijian Huang, Fred Hutchinson Cancer Research Center; Analysis of Lifetime Hospitalization Cost with Incomplete Follow-up
3. Hongwei Zhao, University of Rochester; Testing Equality of Survival Functions of Quality Adjusted Lifetime

Title: Boosting
Organizer: Bin Yu, University of California, Berkeley
Chair: Peter J. Bickel, University of California, Berkeley
1. Trevor Hastie, Stanford University; Boosting and Support Vector Machines
2. Tong Zhang, IBM T.J. Watson Research Center; Convergence and Consistency of Greedy Boosting Procedures
3. Yaakov Ritov, The Hebrew University of Jerusalem; Boosting in General: Consistency and Minimaxity
Discussant: Bin Yu, University of California, Berkeley

Title: Statistics and Genomics
Organizer & Chair: Sandrine Dudoit, Mathematical Sciences Research Institute
1. Robert Gentleman, Harvard School of Public Health; Graphs and EDA in Computational Biology
2. Mark Vanderlaan, University of California, Berkeley; Asymptotic Optimality of Cross-validation methods in Prediction and Likelihood Inference
3. Mike West - Duke University Medical Center; Bayesian Analysis for Clinico-Genomic methods in Prediction and Likelihood Inference
Discussant: Michael B. Eisen, Lawrence Berkeley National Laboratory

Title: Topics in Spline Smoothing
Organizer & Chair: Randall L Eubank, Texas A&M University
1. Gerda Claeskens, Texas A&M University; Smoothing based lack of fit tests
2. Robert Kohn, University of New South Wales, Australia; Estimation and Variable Selection in Nonparametric Heteroscedastic Models
3. Paul L. Speckman, University of Missouri-Columbia; Asymptotic Properties of Smoothing Parameter Selection in Spline Smoothing
Discussants: Douglas W Nychka, National Center of Atmospheric Res.
JSM2003 Special Invited Paper Sessions, continued:

**Title:** Statistically Motivated Developments in Machine Learning  
**Organizer:** Yi-Lin, University of Wisconsin-Madison  
& Xiaotong Shen, Ohio State University  
**Chair:** Yi-Lin, University of Wisconsin-Madison  
1. Yoonkyung Lee, Ohio State University;  
   Multicategory Support Vector Machines  
2. Hao Helen Zhang, North Carolina State University;  
   Basis Pursuit Support Vector Machines  
3. J. Stephen Marron, Univ of North Carolina-Chapel Hill;  
   Distance Weighted Discrimination

**Title:** Causal Inference for Longitudinal Data  
**Organizer & Chair:** Xihong Lin, University of Michigan  
1. Roderick Little, University of Michigan; Causal Inference in Choice-Based Intervention Studies  
2. Susan A Murphy, University of Michigan; Issues in Designing Dynamic Treatment Regimes  
3. Joe Hogan, Brown University; Assessing Sensitivity to Exclusion Restrictions in Semiparametric Instrumental Variables Estimators of Treatment Effects

**Title:** Errors in Variable and Multivariate Calibration  
**Organizer & Chair:** Lutz Duembgen, University of Berne, Germany  
1. Bernd Wolfgang Igl, University of Luebeck

**Title:** Estimation and Calibration for Multivariate Linear Models with Errors in Variables  
2. Silvelyn Zwanzig, Uppsala University, Sweden; On Consistency in Errors-in-Variables Models  
3. Yasuo Amemiya, IBM Watson Research Center; Nonlinear Latent Variable Analysis for Multivariate Non-Normal Data

**Title:** Stochastic Models of Interacting Sytems  
**Organize & Chair:** Steven Lally, University of Chicago  
1. Thomas Liggett, University of California, Los Angeles; Negative Correlations and Particle Systems  
2. Jim Pitman, University of California, Berkeley; A System of Interacting Rayleigh Processes Related to the Brownian Tree  
3. Yuval Peres, University of California, Berkeley; Stable Marriage of a Poisson Process to Lebesgue Measure

**Title:** Optimal Multistage Decisions and Causal Inference  
**Organizer & Chair:** Susan A Murphy, University of Michigan  
1. Philip Lavori, Stanford University; TBA  
2. Benjamin Van Roy, Stanford University; Value Function Approximation in Dynamic Programming: History and Recent Developments  
3. Anthony E. Brockwell, Carnegie Mellon University; A Gridding Method for Bayesian Sequential Decision Problems  
**Discussants:** Ross Shachter of Stanford University

**Title:** Statistics of fMRI  
**Organizer & Chair:** Jonathan Taylor, Stanford University  
1. Keith J Worsley, McGill University; Recent Advances in Finding Signals in fMRI Data  
2. Christopher Genovese, Carnegie Mellon University; TBA  
3. Gary Glover, Stanford University School of Medicine; Physiological Noise in fMRI

**Title:** Statistical Challenges in Functional Neuroimaging  
**Organizer & Chair:** Christopher Genovese, Carnegie Mellon University  
1. Tom Nichols, University of Michigan; Optimization of fMRI Experimental Designs with the Genetic Algorithm  
2. Nicole Lazar, Carnegie Mellon University; New Methods for the Analysis of Functional Neuroimaging  
3. Jonathan E. Taylor, Stanford University; Incorporating Spatial Information into False Discovery Rate Procedures Data

**Title:** Nonparametric Techniques in Financial Econometrics  
**Organizer & Chair:** Jianqing Fan, Chinese University of Hong Kong  
1. Andrew W. Lo, Massachusetts Inst of Technology; Temporal Averaging and Nonstationarities  
2. Ruey-Shiong Tsay, University of Chicago; Nonparametric Estimation of Conditional Variance and Quantiles  
3. Ronald Gallant, Duke University; Model Calibration by Matching to the Empirical Distribution

**Title:** Nonparametric Analysis of Functional Data  
**Organizer & Chair:** Hans-Georg Müller, University of California, Davis  
1. Jianqing Fan, University of North Carolina, Chapel Hill; Semiparametric Modeling for Longitudinal Data  
2. Theo Gasser, University of Zurich; Assigning Variability in Functional Data Analysis  
3. Fang Yao, University of California, Davis; Functional Regression and Principal Components Analysis For Sparse Longitudinal Data

**Title:** Multiscale Methods in Statistics  
**Organizer:** Xiaoming Huo, Georgia Institute of Technology  
**Chair:** Lutz Duembgen, University of Berne  
1. Uk Jung, Georgia Institute of Technology; Wavelet-based Data Reduction Procedures for Multiple Functional Data Curves  
2. Ofer Levi, Stanford University; Multiscale Geometric Analysis of 3D Galaxy Catalogues  
3. Jia Li, Pennsylvania State University; Studying Digital Imagery of Ancient Paintings by Mixtures of Stochastic Models  
4. Marina Vannucci, Texas A&M University; Wavelet Decoloration, Wavelet Packets and the Brunelleschi Domes  
5. Xiaoming Huo, Georgia Institute of Technology; Beamlets and hierarchical models for directional features

**Title:** Functional Regression and Principal Components Analysis For Sparse Longitudinal Data  
**Organizer:** Jonathan Taylor, Stanford University  
1. Keith J Worsley, McGill University; Recent Advances in Finding Signals in fMRI Data  
2. Christopher Genovese, Carnegie Mellon University; TBA  
3. Gary Glover, Stanford University School of Medicine; Physiological Noise in fMRI

**Title:** Statistics of Extremes, With Applications in Environment, Insurance, and Finance  
**Organizer:** Zhengjun Zhang, Washington University  
**Chair:** Richard L. Smith, University of North Carolina  
1. Amy Grady, National Institute of Statistical Sciences; Extreme Value Theory for Global Climate Change  
2. Yongcheng Qi, University of Minnesota, Duluth; Limit Distributions of the Sum and Maximum from Multivariate Gaussian Sequences  
3. Francisco Chamu, University of North Carolina, Chapel Hill; Estimation of M4 Processes with Particle Filters  
4. Zhengjun Zhang, Washington University, Saint Louis; Extreme Co-Movements of Financial Assets: Characterization and Gamma Test  
5. Robert Lund, University of Georgia, Athens; Trends in United States High and Low Temperatures
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Volume 7
Generalized Linear Mixed Models
by Charles E. McCulloch
University of California, San Francisco

Generalized Linear Mixed Models explores the basic idea of statistical models that incorporate random factors into generalized linear models. This allows the accommodation of correlation via random effects as well as nonlinear models and models for non-normally distributed responses. The monograph illustrates the richness of inferential goals accommodated by these models, and computational details in fitting these models and performing statistical inference. The ideas and computations are illustrated for a variety of data sets.

The monograph begins with an extended example that introduces all the main topics. Chapters 2 and 3 briefly review linear mixed models and generalized linear models. Chapters 4 and 5 introduce generalized linear mixed models (GLMMs) and illustrate the breadth of inferences possible. Finally, Chapters 6 through 9 cover the difficult aspects of fitting these models to data; which is where much of the current research interest lies.

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A. Krishnamoorthy, the Convenor of the IMS-funded Mini-meeting “Instructional workshop on Matrix Analytic Methods” which took place in Cochin, India, in December, writes:

At the outset I acknowledge with thanks the financial support from the Institute of Mathematical Statistics in organising the Instructional Workshop on Matrix Analytic Methods.

The IMS Mini-meeting was organised at the Department of Mathematics, Cochin University of Science & Technology, Cochin 682022, India on 22 and 23 December 2002, two full days of lectures and discussions. It was preceded by an International Conference on Stochastic Modelling, and IV International workshop on Retrial Queues, on 11-14 December.

Despite the tight schedule, several delegates of the conference also participated in the Instructional workshop.

There were 88 participants in the workshop. The speakers were Professor V. Ramaswami, Professor A. Krishnamoorthy, Professor Nishimura, Professor Uchiyama, Professor N. Narayanan Namboodiri, Professor Alexander N. Dudin and Professor Hermann Thorisson.

Professor Ramaswami spoke about the development of the Matrix Analytic Method (MAM) starting with the exponential distribution viewed as Markov chain on statespace with just two elements, then moving to mixtures of exponentials, then Erlang and generalized Erlang. Next in the development was the Coxian distribution followed by the Phas型 distribution. This has further generalizations, namely the generalized and bilateral phas型. Further generalizations are the Markovian arrival process and the Batch Markovian arrival process. These are further generalized to the SMAP, the spatial Markovian arrival process. The last one takes care of the seasonal changes (that is consider the more general setup of nonhomogeneity). He proved several results in this direction. Then he discussed the Matrix Analytic Methods as one of the most powerful tool to find solutions to problems for which analytical solutions are not available.

This is a very powerful computational procedure. Instead of the rate matrix, as in Matrix geometric method, here we compute what is called a G-matrix. This matrix, unlike the matrix (which has entries representing the expected number of visits to a state, starting from a given state, until it moves back to the initial state), is stochastic and hence the iterates converge. Several system performance measures could be computed.

The programme started with a talk by Krishnamoorthy. Ramaswami gave 5 lectures and was the key speaker to the workshop. Alexander Dudin gave two talks on BMAP, Toeplitz and Quasi-Toeplitz matrices. These matrices arise in several queueing context as in a BMAP/PH/1 queue. To get further information from the generator of this process one needs techniques from MAM. Nishimura spoke on spectral methods in MAM, considering the more general setup of BMAP. Uchiyama talked on: (i) Order and commutativity of self-adjoint operators and (ii)Inverse functions of polynomials and as operator monotone functions. These were more theoretical in nature, though the results are of great interest to probabilists.

Narayanan Namboodiri spoke on Toeplitz matrices which was again of a high level and quality, but more theoretical in nature. Herman Thorisson lectured on coupling methods.

There was very active discussion during and at the end of each talk. Outside the lecture room, too, there were a lot of discussions and interactions between the speakers and the participants. A discussion on the various truncation procedures also followed. This is especially useful as very often one has to work with infinite matrices with matrix entries.

All participants were unanimous in their views that the workshop was a great success and that each one of them gained a lot by attending the same. Those who were already familiar with the method got better insight into the subject.

More workshops of this nature are envisaged. Once again I thank the Institute of Mathematical Statistics for the generous financial support in organizing the workshop.

Are you thinking about organizing a Mini-meeting?
IMS Mini-meetings were introduced as an initiative to encourage shorter conferences and events. The IMS provides funds (up to US$3000), publicity and sometimes expertise, to help promote events which are easier to organize and focus on current events.

Iain Johnstone, IMS past president, wrote about Mini-meetings in the March/April issue of the IMS Bulletin last year (http://www.imstat.org/bulletin/31_2.htm)

For more information on Mini-meetings, please see the IMS website: http://www.imstat.org/program/minimeeting.htm
IMS sponsored mini-conference on Comparative Genomics

Hemant K Tiwari and David B. Allison, of the Section on Statistical Genetics, Department of Biostatistics at the University of Alabama, Birmingham, write:

The IMS-sponsored mini-conference on “Statistical Integration of Genetic Information across Data Domains: Biomedical, Agricultural and Comparative Genomics” was held on 2 December, 2002 at University of Alabama at Birmingham. The conference was a great success, according to participants’ feedback and evaluations. The participants were from such diverse backgrounds as genetics, pathology, clinical research, biostatistics, agriculture and animal research. We had several participants from Auburn University and from the Centers for Disease Control and Prevention (CDC) in Atlanta. The event was videotaped and will be available on our website as soon as processing is complete (www.soph.uab.edu/Statgenetics/Events/IMS/IMSConf.htm). The event was covered by the local broadcast and print media (e.g., see: www.soph.uab.edu/Statgenetics/Events/IMS/haley-post.htm).

Presentation topics included QTL across studies and designs (Dr Chris Haley); Comparative genomics of Diabetes (Dr Philip Wood); Incorporation of gene information for conducting meta-analysis (Dr Carol J. Etzel); Integrating QTL mapping data across species (Dr David Allison); Mapping epistatic genes for complex traits (Dr Nengjun Yi); and Combined microarray and linkage studies (Dr Grier Page).

Morning session started with the opening remarks given by Dr Philip Wood, Professor of Genetics, University of Alabama, Birmingham. He discussed the genetics of type 2 diabetes mellitus which is on the rise world-wide. He described effective genomic approaches to understand the genetic components and pathogenesis of type 2 diabetes using murine models.

The keynote speaker, Dr Chris Haley, Head of the Department of Genetics and Biometry at Roslin Institute, Edinburgh, is a leading expert on statistical methods for the detection, mapping and utilization of quantitative trait loci and applications of genomics studies in the area of fatness, meat quality and reproduction in pigs. He addressed the identification of loci controlling variation in complex traits, particularly quantitative trait loci. He pointed out complexities such as parent of origin effects and epistatic interactions, in localizing QTLs in pigs and elaborated on how the lessons learned from livestock research can help in understanding the complex traits in human populations.

Dr Carol J. Etzel, Department of Epidemiology, UT M.D Anderson Cancer Center, Houston, gave a talk on meta-analysis for human linkage analysis. She discussed the challenges in meta-analysis of genetic studies due to publication bias, time-lag bias, different phenotypic measures and among-study heterogeneity.

The afternoon session started with Dr David Allison, Head of the Section on Statistical Genetics, Department of Biostatistics, University of Alabama at Birmingham, giving a presentation on the importance of comparative genomics. He emphasized how empirical Bayes methods can help to localize disease susceptibility loci or traits by using available information about homology between genomes of different species such as human, mouse, pig, rat, drosophilae, etc.

Dr Nengjun Yi, Section on Statistical Genetics, Department of Biostatistics, University of Alabama at Birmingham, talked about statistical modeling of interaction effects in QTLs using the Bayesian approach. He showed utility and performance of his new method using reversible jump Markov Chain Monte Carlo algorithm to determine the number of QTLs and their significant effects by simulation studies.

The last speaker of the event was Dr Grier Page, Section on Statistical Genetics, Department of Biostatistics, University of Alabama at Birmingham. He discussed how microarray analysis and linkage analysis of genomic regions could be incorporated to identify disease susceptibility genes.

For more conference information, including a list of speakers, the slides of the talks and synchronized video feed, see www.soph.uab.edu/Statgenetics/Events/IMS/IMSConf.htm.

Additional support for the conference was received from the University of Alabama at Birmingham: Howell and Elizabeth Heflin Center for Human Genetics, Section on Statistical Genetics, Department of Biostatistics and Dean’s Office, School of Public Health.
A number of interesting and important ideas have resulted from the relationship between matrix computations and statistics. Well known examples include the solution of least squares problems, computation of the singular value decomposition and its generalizations, estimation of principal components, computation of canonical correlations, several cluster analysis algorithms, and the solution of total least squares problems.

A previous special issue on this area featured papers on multidimensional scaling, an application to web search engines, an algorithm for seemingly unrelated regression models, an error measurement model for motion analysis, and a survey on alternating least squares problems. These papers left the impression that the overlap between matrix computations and statistics is a fertile area of research.

Thus we propose a second special issue on matrix computations and statistics. The editors would like to receive papers on any of the topics listed above and also topics such as latent semantic indexing, structured total least squares, cluster analysis, complete orthogonal decompositions, data compression, linear discriminant analysis, dimension reduction/feature extraction, and applications of statistical matrix computing to other scientific disciplines.

The deadline for submission to this special issue is June 1, 2003. Manuscripts submitted to this special issue will be refereed according to standard procedures for Computational Statistics and Data Analysis.

The editors for this special issue will be: Jesse L. Barlow: Department of Computer Science and Engineering, The Pennsylvania State University, University Park, PA 16802-6106, e-mail: barlow@cse.psu.edu; Patrick J.F. Groenen: Econometric Institute, Erasmus University Rotterdam, Room H11.23, P.O. Box 1738, 3000 DR Rotterdam, The Netherlands, e-mail: groenen@few.eur.nl; Haesun Park: 4-192 EE/CS, Department of Computer Science and Engineering, University of Minnesota, Minneapolis, MN 55455, e-mail: hpark@cs.umn.edu; Hongyuan Zha: Department of Computer Science and Engineering, The Pennsylvania State University, University Park, PA 16802-6106, e-mail: zha@cse.psu.edu
IMS Meetings around the world

IMS Sponsored Meeting
IMS Annual Meeting/ 6th Bernoulli World Congress
July 26-30, 2004, Barcelona, Spain
Joint Program Chair: Wilfrid S. Kendall
(wsk@stats.warwick.ac.uk) University of Warwick, UK. Local Chair: David Nualart, (nualart@mat.ub.es) Universitat de Barcelona, Spain

IMS Sponsored Mini-Meeting
CURRENT TRENDS IN SAMPLE SURVEYS AND OFFICIAL STATISTICS
January 2 and 3, 2004, Calcutta, India
Organizers: Tathagata Banerjee, Partha Lahiri

IMS Co-sponsored Meeting:
First IMS-ISBA Joint Meeting:
24-27 July 2003, Puerto Rico, USA
REGISTRATION FORMS NOW AVAILABLE
The first joint statistical meeting of IMS and ISBA (the International Society for Bayesian Analysis) will be held in Isla Verde (San Juan, Puerto Rico, USA) on July 24-27, 2003. The meeting will evolve around three main topics of interest to both IMS and ISBA members: Causal-Graphical Modeling; Spatial Statistics and Analysis of Extremes. The format of the meeting includes overview lectures in the topics, invited talks, and poster sessions.
Registration information:
The registration fee is $160 (US dollars) to be paid before April 23, 2003, through a check (USA bank) or money order payable to IMS, or by credit card (Master or Visa card only). Send to: IMS/ISBA meeting registration, P.O. Box 22718, Beachwood OH 44122
FAX: 1-(216) 921-6703 (Credit card registration)
Tel: 1-(216) 295-2340
E-mail: erg@imstat.org
For Puerto Rican participants registration is $80.
The program Committee is: M.J. Bayarri (Chair, Universidad de Valencia), Jim Berger (Duke U), Alicia Carriquiry (Iowa State U), Susan Murphy (U of Michigan), Luis Pericchi (Universidad de Puerto Rico), Larry Wasserman (Carnegie Mellon U).
The Overview Plenary Speakers are: Stephen Lauritzen (Causal-Graphical Modeling), Peter Green (Spatial Statistics) and Richard Smith (Analysis of Extremes).
For more details, and registration form, please visit the website www.cnnet.clu.edu/math/ims-isba-pr2003

IMS Invited Paper Session at the International Statistical Institute, 54th Biennial Session:
The Analysis of Gene Expression Data
August 13-20, 2003, Berlin, Germany
IMS Organizer: Mike West, Duke U, mw@stat.duke.edu (speakers are Rainer Spang, Sandrine Dudoit and Mike West).
ISI website: www.isi-2003.de

IMS Co-sponsored Meeting:
2003 Joint Summer Research Conferences
June 8-July 24, 2003, Snowbird, Utah
http://www.ams.org/meetings/src03.html

IMS, together with the American Mathematical Society (AMS) and the Society for Industrial and Applied Mathematics (SIAM), have jointly sponsored Summer Research Conferences for twenty years. This year’s SRC is in the breathtaking mountain setting of Snowbird Resort in Utah, 30 minutes from the University of Utah, and easily accessible from Salt Lake City International Airport. For more information about Snowbird Resort, see www.snowbird.com.

The atmosphere at SRC is comparable to the collegial gatherings at Oberwolfach and other conferences that combine peaceful natural ambience with stimulating meetings.

Summer Research Conferences participants have access to a range of activities such as a tram ride to the top of the mountain, guided hikes, swimming, mountain bike tours, rock climbing, plus heated outdoor pools. More than a dozen walking and hiking trails head deep in the surrounding mountains. Participants also enjoy the simpler pleasures of convening on the patios at the resort to read, work, and socialize. In the evenings colleagues enjoy informal gatherings to network and continue discussion of the day’s sessions over refreshments.

Summer in Snowbird, Utah
IMS Co-sponsored Meeting:
*2003 Spring Research Conference on Statistics in Industry and Technology*

June 4-6, 2003, Dayton, Ohio

http://www.stat.uiowa.edu/SRC2003/

The SRC is the premier research conference for statistics in industry and technology. The program for the 2003 conference will feature a keynote address by Friedrich W. Scholz, Technical Fellow at Boeing Company; and plenary talks, invited sessions, and contributed sessions on key and emerging areas. Suggestions on topics and speakers are welcome.

Contributed-paper submissions from new researchers and graduate students are especially encouraged. There will be several student scholarships available, so please apply! (Details on the website above)

**Sponsors:** The SRC is a joint venture of the Institute of Mathematical Statistics and the Section on Physical and Engineering Sciences of the American Statistical Association.

**Contacts:** src2003@stat.uiowa.edu

**Invited Program:** Russell V. Lenth, The University of Iowa, 319/335-0814, russell-lenth@uiowa.edu

**Contributed Program:** William A. Brenneman, Procter and Gamble, 513/622-3195, brenneman.wa@pg.com

**Local Arrangements:** Peter W. Hovey, The University of Dayton, 937/229/2964, peter.hovey@notes.udayton.edu

IMS Sponsored Mini-Meeting:
*Statistics for Mathematical and Computational Finance*

May 3, 2003, U of Connecticut, Storrs, CT

The Department of Statistics at the University of Connecticut will host an IMS Mini-Meeting on Statistics and Finance on May 3, 2003 in Storrs, Connecticut.

This meeting is designed to bring about interaction between statistics, probability, econometrics and finance. In financial modeling and asset pricing, complex stochastic models are widely employed, and cutting-edge statistical methods are being used for inferences and computations. Its major purpose is to stimulate discussions and exchange of ideas among participants in these different disciplines, and to identify the latest developments.

In addition to invited presentations, the meeting will include a contributed poster session. For more information visit: http://www.stat.uconn.edu/~yzwang/IMSfinance

Other Meetings Around the World: Announcements and Calls for Papers

**Justus F. Seely Memorial Conference on Linear Models**

July 31 - August 1, 2003, Corvallis, OR

*NB The conference dates were misprinted in earlier issues*

A two-day conference on linear models will be held at Oregon State University in memory of Justus F. Seely, a long-time faculty member of the Department of Statistics and an internationally recognized researcher in linear model theory. Conference plans include a keynote address by Charles McCulloch (UCSF), five invited speaker sessions, contributed posters, and a mid-conference banquet. Invited speakers and session organizers are: Alan Agresti (U of Florida), David Birkes (Oregon State), Richard Burdick (Arizona State), Jim Calvin (Texas A&M), Joe Cavanaugh (U of Missouri), Ron Christensen (U of New Mexico), Yadolah Dodge (U of Neuchatel), Yahia ElBassiouni (United Arab Emirates U), Mike Fugate (Los Alamos National Lab), Hari Iyer (Colorado State), Mike Jacroux (Washington State), André I Khuri (U of Florida), Ramon Littell (U of Florida), Youngjo Lee (Seoul National U), Dibyen Majumdar (U of Illinois at Chicago), Thomas Mathew (UMBC), John Morgan (Virginia Tech), William Notz (Ohio State), John Stufken (Iowa State), Mark Vangel (Massachusetts General Hospital), Tim White (U of Florida).

The conference occurs immediately prior to the Joint Statistical Meetings in San Francisco to allow convenient attendance at both events. Limited financial support will be available to help defray the expenses of student and junior faculty attendees. Updates to the conference link at http://oregonstate.edu/dept/statistics/ will be made periodically as conference plans are finalized. Questions concerning the conference may be addressed to the conference co-chairs: Cliff Pereira (pereira@stat.orst.edu; tel. 541 737-1984) and Dave Birkes (birkes@stat.orst.edu; tel. 541 737-1986).
WORKSHOP: PATHWAYS TO THE FUTURE
August 2-3, 2003. SAN FRANCISCO:
A short workshop called “Pathways to the Future” will be run on the Saturday evening and Sunday August 2-3, 2003 preceding the Joint Statistical Meetings in San Francisco. This is primarily designed for young women researchers who are within about five years of having completed their doctoral degree. Funding support for US-based scientists is provided by the National Science Foundation.
For further details contact Lynne Billard, Department of Statistics, University of Georgia, Athens GA 30602-1952, phone:1-706-542-3281, fax:1-706-542-3391, email: lynne@stat.uga.edu

International Workshop on Wavelets and Statistics: Watering the Seed
4-7 September 2003
Villard de Lans, Grenoble, France

32nd Annual Meeting of the Statistical Society of Canada
May 30-June 2 2004, Montréal, Québec

Nominations Solicited for 2003 Jerome Sacks Award
Annual Award Honors Outstanding Cross-Disciplinary Research

The NISS Board of Trustees established the Jerome Sacks Award for Cross-Disciplinary Research in 2000 to honor Sacks’ service as the founding director of NISS. The annual prize of $1,000, presented at the NISS JSM Reception, recognizes sustained, high-quality cross-disciplinary research involving the statistical sciences.

The inaugural award was presented to Professor Elizabeth Thompson of the University of Washington for her “sustained, high-quality cross-disciplinary research bridging the statistical sciences and genetics.” Max Morris of Iowa State University received the 2002 Award, recognizing “outstanding cross-disciplinary contributions to the statistical sciences, engineering, health physics, geology and toxicology.”

The 2003 award selection committee solicits nominations of researchers whose work is cross-disciplinary, sustained and encompasses innovation in the statistical sciences. Preference will be given to work that, in the spirit of NISS, creates new research relationships bridging the statistical sciences and other disciplines. “Nonstandard” achievements, such as patents and software creation, will be considered.

Complete nominations include a current CV or biographical sketch for the nominee, a nomination letter and several supporting letters, and should be submitted by April 30, 2003. If possible, please submit nominations electronically to sacksaward03@niss.org. Otherwise, hard copy may be sent to: Sacks Award Committee, National Institute of Statistical Sciences, 19 T. W. Alexander Drive, PO Box 14006, Research Triangle Park, NC 27709-4006
For more information on NISS and the award, visit the NISS web site at www.niss.org
LECTURE NOTES – MONOGRAPH SERIES

Volume 39:
R.R. Bahadur’s Lectures on the Theory of Estimation
Stephen M. Stigler, Wing Hung Wong and Daming Xu, Editors

In Winter Quarter 1985, Raj Bahadur (1924-1997) gave a series of lectures on estimation at the University of Chicago. He presented the core results of estimation theory with a singular elegance of style that was his hallmark.

Two members of the audience took careful notes, long circulated in xerox and now re-edited, with a brief biographical notice and list of publications. The ten weeks’ lectures began with a review of the geometry of L2 function spaces and covered Bayes estimates, unbiased estimation, Fisher information, Cramér-Rao bounds, and the theory of maximum likelihood estimation.

In these lectures, Bahadur strived towards, and in most cases succeeded in deriving the most general results using the simplest arguments. His treatment of Fisher’s bound for the asymptotic variance of estimators was elegant and powerful, using the Neyman-Pearson lemma and the asymptotic normal distribution under local alternatives to provide a remarkable proof of the celebrated result (which he attributed to LeCam) that the set of parameter points at which the Fisher bound fails must be of measure zero.

These lecture notes may help the reader to appreciate the beauty and utility of estimation theory, as viewed by a brilliant scholar and master teacher.

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Employment Opportunities around the world

Canada: Ontario

Position Title/Rank: Lecturer
Division: University of Toronto at Scarborough
Department: Statistics/UTSC
Deadline: March 15, 2003

Job Description: The Division of Mathematical Sciences, University of Toronto at Scarborough, invites applications for a full-time teaching position in Statistics at the rank of Lecturer. The appointment will take effect on July 1, 2003, or as soon as possible thereafter. A postgraduate degree in Statistics by date of appointment is required. Initial appointments at the rank of Lecturer are for a term of one year and may be renewed to a total of five years. In the fifth year of service, Lecturers are reviewed for promotion to the rank of Senior Lecturer, which is a continuing appointment.

Responsibilities include lecturing, tutorials, grading, and curriculum development in a variety of undergraduate courses. Interested candidates are invited to submit a curriculum vitae, statement of career goals and teaching philosophy, evidence of teaching excellence, and arrange to have three letters of reference sent directly from the referees.

Applications and letters of reference should be sent to: Professor John Scherk, Division of Mathematical Sciences, University of Toronto at Scarborough, 1265 Military Trail, Scarborough, Ontario, M1C 1A4 or email: scherk@utsc.utoronto.ca

The deadline date for applications is March 15, 2003, or until the position is filled.

Canadian citizens and permanent residents will be considered first for this position. The University of Toronto is strongly committed to diversity within its community. The University especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to further diversification of ideas.
Canada: Ontario
York University, Toronto

Applications are invited for a tenure-track appointment in Statistics at the Assistant Professor level in the Department of Mathematics and Statistics to commence July 1, 2003. The successful candidate must have a PhD and is expected to have a proven record of research excellence and superior teaching ability. Preference will be given to candidates who can strengthen existing areas of present and ongoing research activity. The selection process will begin on April 15, 2003. All positions at York are subject to budgetary approval. Applicants should send resumes and arrange for three letters of recommendation (one of which should address teaching) to be sent directly to: Statistics Search Committee, Department of Mathematics and Statistics, York University, 4700 Keele Street, Toronto, Ontario, Canada, M3J 1P3. Fax: (416) 736-5757. E-mail: stats.recruit@mathstat.yorku.ca. www.math.yorku.ca/Hiring/.

York University has an Affirmative Action Program with respect to its faculty and librarian appointments. The designated groups are: women, racial/visible minorities, persons with disabilities and aboriginal peoples. Persons in these groups must self-identify in order to participate in the Affirmative Action Program. The Department of Mathematics and Statistics welcomes applications from persons in these groups. The Affirmative Action Program can be found on York’s website at www.yorku.ca/acadjobs or a copy can be obtained by calling the affirmative action office at 416-736-5713. All qualified candidates are encouraged to apply; however, Canadian citizens and Permanent Residents will be given priority.

If you have a position to advertise, the deadline for next issue (May/June 2003) is April 23. See the panel ‘Information for Advertisers’, inside the back cover.

Current Index to Statistics Release 11 goes on-line

Release 11 of the Current Index to Statistics (CIS) was installed on the CIS web site http://www.statindex.org at the beginning of March. The Release 11 CDROM is scheduled for shipping to subscribers in April and is available for ordering.

With this release, CIS passes the quarter-million mark: over 250,000 bibliographic items. Coverage includes complete indexing of core journals (162 currently being indexed) in statistics and probability, and selected articles with statistical content from many other journals in allied fields. This release includes about two-thirds of the ultimate content for publications with 2002 dates, and some entries for 2003. Thus CIS has advanced by almost 2 years of coverage since Release 10.0 was posted in April, 2002. Additional material will be added to the Web query site as late-arriving publications are received and indexed. The improved timeliness of our coverage reflects the tireless efforts of Abstracting Editor George Styan and Database Editor Douglas Bates to streamline and speed up abstracting and database processing.

The Release 11 database was assembled by Editor Bates and Editorial Associate Deepayan Sarkar in Wisconsin. Other major contributors included Krisztina Filep in Toronto, who coordinated transfer of files from Editor Styan and his data entry crew in Montreal, and also Ronald Thisted in Chicago, Saikat Debroy in Wisconsin, Nicholas Horton in Boston, and Alan Zaslavsky in Boston.

Subscriptions for access to the Web site are available to institutional subscribers. At present, only the CD-ROM edition is available to individual subscribers (Personal licenses). For information about ordering CIS, please visit the informational web site at http://www.statindex.org.

The CIS Web site also has information about journals in related fields for which we are seeking Contributing Editors to select articles that should be included in CIS. Please joining our current 47 Contributing Editors in 17 countries if you would like to help us to improve coverage in your area of application of statistics or of publications from your country; write to editor@statindex.org for more information.

Alan M. Zaslavsky, Chairman, CIS Management Committee
SPRINGER FOR STATISTICS

AN INTRODUCTION TO THE THEORY OF POINT PROCESSES
Volume 1: Elementary Theory and Methods
SECOND EDITION
D.J. DALEY, Australian National University, Canberra, Australia; and
DAVID VERE-JONES, Victoria University, New Zealand

Point processes and random measures find wide applicability in telecommunications, earthquakes, image analysis, spatial point patterns, and stereology. This volume contains the introductory chapters from the first edition, together with an informal treatment of some of the later material intended to make it more accessible to readers primarily interested in models and applications. The main new material in this volume relates to marked point processes and to processes evolving in time, where the conditional intensity methodology provides a basis for model building, inference, and prediction.

CONTENTS: Early History • Basic Properties of the Poisson Process • Simple Results for Stationary Point Processes on the Line • Renewal Processes • Finite Point Processes • Models Constructed via Conditioning: Cox, Cluster, and Marked Point Processes • Conditional Intensities and Likelihoods • Second Order Properties of Stationary Point Processes

2002/464 PP. /HARDCOVER/ $89.95
ISBN 0-387-95541-0
PROBABILITY AND ITS APPLICATIONS

PROBABILITY MODELS FOR DNA SEQUENCE EVOLUTION
RICK DURRETT, Cornell University, Ithaca, NY

Given a collection of DNA sequences, what underlying forces are responsible for the observed patterns of variability? The author approaches this question by introducing and analyzing a number of probability models: the Wright-Fisher model, the coalescent, the infinite alleles model, and the infinite sites model. He discusses the complications that come from nonconstant population size, recombination, population subdivision, and three forms of natural selection: directional selection, balancing selection, and background selection. These theoretical results set the stage for the investigation of various statistical tests to detect departures from “neutral evolution.” The final chapter studies the evolution of whole genomes by chromosomal inversions, reciprocal translocations, and genome duplication.

PROBABILITY AND ITS APPLICATIONS

UNIFIED METHODS FOR CENSORED LONGITUDINAL DATA AND CAUSALITY
MARK J. VAN DER LAAN, University of California, Berkeley; JAMES M. ROBINS, Harvard School of Public Health, Cambridge, MA

This book provides the first comprehensive description of optimal estimation techniques based on time-dependent data structures subject to informative censoring and treatment assignment in so-called semiparametric models. Semiparametric models are particularly attractive since they allow the presence of large unmodeled nuisance parameters. These techniques include estimation of regression parameters in the familiar (multivariate) generalized linear regression and multiplicative intensity models. They go beyond standard statistical approaches by incorporating all the observed data to allow for informative censoring, to obtain maximal efficiency, and by developing estimators of causal effects.

SPRINGER SERIES IN STATISTICS

SAMPLE SURVEY THEORY
Some Pythagorean Perspectives
PAUL KNOTTENBERG, Statistics Netherlands, Voorburg

This book describes a novel approach to the theory of sampling from finite populations. The new unifying approach is based on the sampling autocorrelation coefficient. Step by step, the author derives a general set of sampling equations that describe the estimators and their variances, as well as the corresponding variance estimators. These equations are applicable for a whole family of different sampling designs, varying from simple surveys to complex surveys based on multistage sampling without replacement and unequal probabilities.

The book also considers constrained estimation problems that may occur in practice when linear or nonlinear economic restrictions are imposed on the population parameters to be estimated and the observations stem from different surveys. It offers a guide to little-known connections between design-based survey sampling and other areas of statistics. The common underlying principles in the distinct fields are explained by an extensive use of the geometry of the ancient Pythagorean theorem.

2003/416 PP. /HARDCOVER/ $69.95
ISBN 0-387-95407-4
SPRINGER SERIES IN STATISTICS

MATHEMATICAL AND STATISTICAL METHODS FOR GENETIC ANALYSIS
SECOND EDITION
KENNETH LANGE, UCLA School of Medicine, Los Angeles, CA

This second edition expands the original edition by over 100 pages and includes new material on DNA sequence analysis, diffusion processes, binding domain identification, Bayesian estimation of haplotype frequencies, case-control association studies, the gamete competition model, QTL mapping and factor analysis, the Lander-Green-Kruglyak algorithm of pedigree analysis, and codon and rate variation models in molecular phylogeny. Sprinkled throughout the chapters are many new problems.

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International Calendar of Statistical Events

IMS meetings are highlighted in maroon with the logo and new or updated entries have the symbol. f means telephone, fax, e email and w website. Please send additions and corrections to Tati Howell at bulletin@imstat.org

April 2003


May 2003


15-17: Hotel Sol Galúa, La Manga, Spain. Third Workshop on Bayesian Inference in Stochastic Processes (BISP03) w http://www.upct.es/bisp03/e Juan Antonio Cano Sánchez bisp03@upct.es or Fabrizio Ruggeri fabrizio@iami.mi.cnr.it


June 2003


2-6: Dimacs Center, Rutgers U, NJ. DIMACS Workshop on Complexity and Inference. Organizers: Mark Hansen (Bell Labs), Paul Vitanyi (CWI & U Amsterdam), and Bin Yu (UC Berkeley). w http://stat.bell-labs.com/complexity

4-6: University of Dayton, Ohio. Spring Research Conference on Statistics in Industry and Technology: Sponsored by IMS and SPES section of ASA. Program chair: Russell V. Lenth, U of Iowa, e russell-lenth@uiowa.edu, Local arrangements: Peter W. Hovey, U of Dayton, e peter.hovey@notes.udayton.edu w www.stat.uiowa.edu/ SRC2003/


8-11: Halifax, Nova Scotia, Canada. Annual Meeting of the Statistical Society of Canada. Local Arrangements Chair: Chris Field, e field@mathstat.dal; Progam Chair: Doug Wiens, e doug.wiens@ualberta.ca; w www.ssc.ca. Includes two IMS Invited Paper Sessions: ‘Machine Learning Methods from a Statistical Perspective’, contact Yi Lin e yilin@cs.wisc.edu and ‘Shape-Restricted Inference’, contact Mary Meyer e mmeyer@stat.uga.edu

8-17: Joint Summer Research Conferences. Jointly sponsored by IMS, AMS & SIAM. Conferences typically run for one week with forty-five to sixty participants. Conferences of longer duration are possible. Funding for the conferences is provided by a grant from the National Science Foundation. w http://www.ams.org/meetings/src03.html

9-12: KIMEP, Almaty, Kazakhstan. ASIM 2003, International Conference on Advances in Statistical Inferential Methods. (theory and applications) w www.kimep.kz/research/asim e voinv@kimep.kimep.kz

15-18: Merida, Mexico. 23rd International Symposium on Forecasting. Principal organizer: Victor M. Guerrero (ITAM), e guerrero@itam.mx. w http://www.isf2003.org

15-19: Lund, Sweden. SPRUCE VI Conference on Statistics for the Analysis of Risks and Benefits from the Environment. Contact: Ulla Holst ulla@maths.lth.se w: www.maths.lth.se/conferences/spruceVI/

19-24: West Lafayette, Indiana. 7th Purdue International Symposium on Statistics. Conference (Statistical Decision Theory and Related Topics) and 3 workshops (A: Bioinformatics and Microarrays; B: Multiple Comparisons and Mixture Models for Large Data Sets; C: Statistical Consultancy). Abstract submission, registration etc info w http://www.stat.purdue.edu/~obayes03

22-25: Colorado School of Mines, Golden, CO. WNAR/IMS Western Regional (Sponsored/Numbered meeting 281). Program Chair: Naisyn Wang, Texas A&M e nwang@stat.tamu.edu Local Arrangements Chairs: Jan Breidt e jbreid t@stat.colostate.edu and Jan Hannig e hannig@stat.colostate.edu

24-27: Technical U of Gdansk, Poland. 1st World Congress on Information...
International Calendar continued


July 2003


7-11: Diepenbeek, Belgium. 18th International Workshop on Statistical Modelling. w www.luc.ac.be/censtat/IWSM2003 e jeannine.rongy@med.kuleuven.ac.be


14-17: Leuven, Belgium. RSS2003: Theme Conference of the Royal Statistical Society: Statistical Genetics and Bioinformatics. w www.luc.ac.be/censtat/RSS2003 e martine.machiels@kuleuven.ac.be

14-17: U of Lugano, Switzerland. 3rd International Symposium on Imprecise Probabilities and Their Applications (ISIPTA ’03) w http://www.isipta.org/~isipta03/ e Marco Zaffalon zaffalon@idsia.ch

14-18: University of Antwerp, Belgium. International Conference on Robust Statistics 2003 (ICORS2003) e statis@uia.ua.ac.be w win-www.uia.ac.be/u/icors03.htm

16-18: Universidad de Santiago de Compostela, Spain. International Conference on Environmental Statistics and Health. Scientific Committee Chair: Montserrat Fuentes (N Carolina State U); Local Arrangements Committee Chair: Wenceslao Gonzalez Manteiga (ISI-Spain). Program, registration, committees, sponsors and student travel grants: w http://isieh.usc.es


24-26: U of Puerto Rico, Rio Pedras Campus. First Joint ISBA-IMS Meeting (Sponsored/Numbered 282). Joint Program Chair: M J Bayarri, U de Valencia e susie.bayarri@uv.es Local Arrangements Chair Luis Pericchi, U of Puerto Rico e perricchi@goliath.cnnet.clu.edu w www.cnnet.clu.edu/math/ims-isba-pr2003

28 - August 31: Inst for Mathematical Sciences, National U of Singapore. Program on Stein’s Method and Applications: A program in honor of Charles Stein. w www.ims.nus.edu.sg/Programs/stein/index.htm

29-August 1: U of California, Davis. IMS New Researchers Conference (Sponsored/Numbered meeting 283). Program Chair: Richard Levine, San Diego State U e ralevine@sciences.sdsu.edu IMS Local Chair: Juanjuan Fan, U of California, Davis e jjfan@ucdavis.edu w http://rohan.sdsu.edu/~ralevine/NRC (Note new web address)

August 2003

2-3: San Francisco, CA. Workshop: Pathways to the Future. For young women researchers within about 5 years of completing PhD. NSF Funding available. Lynne Billard lynne@stat.uga.edu

3-7: San Francisco, CA. Joint Statistical Meetings (ASA/IMS/ENAR/WNAR) including IMS Annual Meeting. Sponsored/Numbered 284. IMS Program Chair: Jane-Ling Wang, U of California, Davis e wang@wald.ucdavis.edu Contributed Papers Chair: Lutz Duembgen e lutz.duembgen@stat.unibe.ch


September 2003


January 2004


May 2004

30-June 2: Montréal, Québec. 32nd Annual Meeting of the Statistical Society of Canada. Local Arrangements Chair: Christian Léger (leger@dms.umontreal.ca), Program Committee Chair: Christian Genest (genest@mat.ulaval.ca)

June 2004

16-18: Santander, Spain. Distribution Theory, Order Statistics and Inference - A Conference in Honor of Barry C. Arnold. Organizers: Prof. N. Balakrishnan bala@mcmail.cis.mcmaster.ca, Prof. Enrique Castillo castie@unican.es, Prof. Jose-Maria Sarabia sarabiaj@unican.es

July 2004

4-11: Copenhagen, Denmark. 10th International Congress on Mathematical Education. w www.icme-10.dk


August 2004

8-12: Toronto, Canada. Joint Statistical Meetings (ASA/IMS/ENAR/WNAR). Sponsored/Numbered. IMS Program Chair: Michael Evans, U of Toronto e mevans@utstat.utoronto.ca

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<tr>
<th>Issue</th>
<th>Scheduled Mail Date</th>
<th>Deadline for Advertisement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan/Feb</td>
<td>February 1</td>
<td>December 23</td>
</tr>
<tr>
<td>Mar/Apr</td>
<td>April 1</td>
<td>February 23</td>
</tr>
<tr>
<td>May/Jun</td>
<td>June 1</td>
<td>April 23</td>
</tr>
<tr>
<td>Jul/Aug</td>
<td>August 1</td>
<td>June 23</td>
</tr>
<tr>
<td>Sep/Oct</td>
<td>October 1</td>
<td>August 23</td>
</tr>
<tr>
<td>Nov/Dec</td>
<td>December 1</td>
<td>October 23</td>
</tr>
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</table>

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