

NEWS / ANUNCIOS

CONFERENCE AND PLACE/ CONFERENCIA Y LUGAR	DATA AND CONTACTS/ FECHA Y CONTACTOS
The International Symposium on Stochastic Models in Reliability, Safety, Security and Logistics Beer Sheva, Israel.	February 16-18, 2005 HTTP://www.nace.ac.il
VI International Workshop on Operations Research: Applications to Logistics	Sometime in March, 2005 sira@matcom.uh.cu
55th Session of the International Statistical Institute Sydney, Australia. - Includes the meetings of the Bernoulli Society - International Association for Statistical Computing - International Association of Survey Statisticians - International Association of Official Statistics and the International Association for Statistical Education)	5-12 April, 2005 A. Harris (annette.harris@abs.gov.au ; isi-2005@tourthosts.com.au)
Gini Lorenz Conference Siena, Italy	May 23 –26, 2005 ginilorenz05@unisi.it
INFORMS Marketing Science Conference Atlanta, GA. USA.	June 16- 19, 2005 http://www.informs.org/
VI Brazilian Workshop on Continuous Optimization Goiania-Goias, Brazil.	July 18-22, 2005 orizon@mat.ufg.br
22nd IFIP TC 7 Conference on System Modeling and Optimization Turin, Italy.	July 18-22, 2005 http://www.polito.it/ifip2005
17th Triennial Conference of the International Federation of Operational Research Societies 2005 Honolulu, Hawaii. USA.	July 11-15, 2005 http://www.informs.org
25th European Meeting of Statisticians Oslo, Norway	July 24-28, 2005 http://www.ems2005.no
Annual Meeting of the Statistical Society of Canada Saskatoon, Saskatchewan, Canada	Sometime in the Summer of 2005 www.ssc.ca
INFORMS Annual Meeting New Orleans 2005 New Orleans, Louisiana USA	November 13-16, 2005 http://www.informs.org
Winter Simulation Conference 2005 Orlando, FL. USA	December 4-7, 2005 http://www.informs.org

ICOTS-7, Séptimo Congreso Internacional sobre Educación Estadística Salvador (Bahia), Brazil.	July 2–7, 2006 http://www.maths.otago.ac.nz/icots7
International Congress of Mathematicians Palacio Municipal de Congresos de Madrid. Madrid, Spain	August 22-30, 2006 http://www.icm2006.org/ icm2006@unicongress.com Carlos Andradas & Manuel de León
IAOS Conference 2006 Amman, Jordan	Sometime in the Spring or Sumer 2006 http://www.singstat.gov.sg/IAOS/index.html
2006 Joint Statistical Meetings Seattle, Washington. To be held at the Seattle Convention Center.	August 6-10, 2006 meetings@amstat.org
2007 Joint Statistical Meetings Salt Lake City, Utah. To be held at the Salt Palace Convention Center	July 29 - August 2, 2007 meetings@amstat.org
2008 Joint Statistical Meetings Denver, Colorado. To be held at the Denver Convention Center.	August 3-7, 2008 meetings@amstat.org
2009 Joint Statistical Meetings Washington, DC. To be held at the Washington Convention Center.	August 2-6, 2009 meetings@amstat.org

RESEÑAS / BOOK REVIEW

FREE BOUNDARY PROBLEMS. THEORY AND APPLICATIONS

P. Colli, C. Verdi, A. Visintin, Editors, (2004)

Birkhäuser viii+346

ISBN 3-7643-2193

This is the volume 147 of the International Series of Numerical Mathematics. It contains the proceedings of the homonymous conference held in Trento, Italy in June 2002. The term free boundary is used when they are unknown and the set of differential equations that describes the phenomena should be numerically solved. This problem is present in many fields of Applied Mathematics. The report of conference fixes that it was attended by more than 150 specialists and the book contains 27 of the presented papers. They are devoted to:

- 1 The presentation of new implemented numerical methods and algorithms for structural optimization, solidification simulations, compression results controlling the maximum error of the decoded elevation map, crystal growth.
2. Simulation of morphological changes in nonlinear dynamics, normal grain growth, of reaction-diffusion systems, the recovering of missing parts in digital images.
3. Variational and graph formulations.
4. Modeling and formulation of: a quasi neutral plasma expansion in vacuum, the nucleation of the growth of liquid droplets in single crystals, growth of spherulite, singularities of solution curves of the flow, crystallization process of polymers, chemotaxis problems, error estimation, analysis of stability-bifurcation of steady states, travelling of waves, motion of a rigid body in a viscous incompressible fluid.

A.T. Chou
Ishinomaki School

STOCHASTIC ANALYSIS AND RELATED TOPICS VIII

Silivri Workshop in Gazimagusa (North Cyprus)

September 2000

U. Çapar and A. S. Üstümel (Editors), 2003

Birkhäuser ISBN 3-7643-6998-1 xi+205

We have a new addition to the series Progress in Probability of Birkhäuser... It contains 10 of the 16 contributions presented at the traditional workshop, of the same name, which took place, in this occasion in Cyprus. The contribution presented in the workshop can be classified in two major themes:

1. Stochastic analysis in Wiener Space.
2. Stochastic control and stochastic evolution equations.

In the first group are the contributions of A. Benssousan-J. Freshe (Stochastic Games with risk sensitive payoffs of N players), U. Çapar-H. Aktuğlu (An overall view of stochastic in Colombeau related algebras), A.B. Cruzeiro-Kai-Nan Xiang (On metrics for tangent processes on the path space), N. Privault (Quasi-invariance

for Levy Processes under anticipating shifts) and A. S. Üstümel (Gaussian measure of the intersection of two absolutely convex sets)

In second group are the contributions of A. E. Bashirov (Stochastic control and games under arbitrarily dependent noises), E. Hausenlas (Weak approximation for semi linear stochastic evolution equations), Y. Ishikawa (Exponential type decrease of the density for jump processes with singular Levy measures in small time) N. Mahmudov (Controllability and observability of Linear Stochastic Systems), and P. Malliavin-U. Taneri (Exact computation of spectral densities for a Langevin dynamic modelling for relaxation of the protein near its equilibrium).

It is a book for specialists.

A.S. Akiva
Nosharkart Women's College

MATHEMATICS AND WAR (2003)

Bernhelm Booß-Babvnbek and Jens Høyrup (Editors)
Birkhäuser. ISBN 3-7643-1634/9 viii+416

This is an interesting book that should be read, not only for cultural, proposes by every mathematician, if you're interested in the history of mathematics it will be more interesting. This may hold be for high army ranks: it will be useful for opening their scientifically horizons. It contains papers presented at the International Meeting on Mathematics and War which took place in Karlskrona, Sweden in august 29/31, 2002.

The relations of mathematics with warfare are ancient, but this book concentrates in recent relations. It is divided into 3 parts. The first one (Perspective from Mathematics) deals with mathematics and the role that it played in II World War and I mainly. The work of mathematicians, some very well known as von Neumann, Wiener, Kolmorov , and others not so famous and known only in small circles is referred and analysed with some deepness. I appreciated the paper of K. William on two women: Grace Hooper and Mina Rees. Grace Hooper become in the only she-Admiral of the USA, perhaps of the world because of her mathematical work within the Navy. The authors of the 8 contributions as a whole painted a great landscape on the organisation, development of research and spread of results obtained for specific warfare's need. They as well as conflicts are described and documented. The papers give this view for the main countries involved in the wars: USA, SU, Germany, France, Italy, Japan and Poland thorough the incredible work developed by them in decoding German ciphering.

Military points of view are pointed out in Part II: Perspective from the military. What can mathematics solve or not solve, when it is usable or started to be a common tool for decision making, mainly in modern warfare. This part uses military technicalities which may be of interest to mathematicians, but similarly soldiers develop a similar task in Part I. Five papers are grouped in this part. They are seriously involved with the contemporary wears as Vietnam, Gulf War, Kosovo's involvement etc.

The 5 papers of Part 3 deals with Ethical Issues and it is interesting as some dark spots on the work of Niels Bohr, Alan Turing, very well known in the west and of K. Ogura are pointed out.

Part 4, Enlightenment Perspectives, close the book with two challenging papers.

The authors and their curriculum are listed.

I enjoyed its reading and recommend it especially for those interested in history.

N. Pal
Nosharkart Women's College

TESTING STATISTICAL HYPOTHESIS OF EQUIVALENCE

S. Welleck (2003)
Chapman & Hall/CRC xii-304
ISBN- 1-58488-160-7

The specifics of equivalence tests have recently been highlighted. The edited book addresses systematically this important problem for medical research. The theory and the computational aspects are explored. These results have appeared in different papers. This book is the first on, at least for me, bringing together and comprehensively the test of equivalences.

It starts with the placement of the problem: equivalence is a statistical problem. The author formalizes it by illustrating its applications. Once a main distributional parameter is identified limits can be specified. Different one and two sided equivalence test problems are discussed. He explored some in which normal, exponential distributions are involved. The paired observations problematic solutions included McNemar, signed Rank. The independent case treats Mann-Whitney. Multisampling, goodness of fit and Bioequivalence are also involved in the contents.

Overall the book is well organized and written, providing a coherent source for equivalence testing. I recommend it for the library of biostatisticians.

K.H. Singh
P.K.G- Hospital
Biometric Division

EXPLORING, INVESTIGATING AND DISCOVERING IN MATHEMATICS

V. Berinde (2004)
Birkhäuser xiii+216
ISBN3-7643-7010X

This book is intended to be used for developing mathematical skills in young mathematicians, to-be researchers. I recommend it for training them. It is an unabridged English version of a publication in Romanian. Of course mathematicians or those who enjoyed dealing with mathematics. Will be pleased of having the book. It presents 24 main problems. Each of them is a chapter. The emphasize is put on stimulating creative investigation. Generally, students love or hate mathematics but the source of this attitude is mainly connected with the way they are taught. A good young student should be interested in problem solving for warming up their brains. That is the role of mathematics for scientist as well as for a linguistic, for example. The author is successful in presenting the problems and in going from the statement of its solution to clearing up systematically the path followed by a researcher.

The book has two levels:

1st. Access to methods usable for problem solving

2nd. Develop methods that create investigative attitudes when face a mathematical problem.

As whole more than 100 problems are completely worked out and around 150 related the reader may solve ones.

It is a valuable source for those interested in training for mathematical competitions.

Z. A. Antoniescu
Sorain Institute of Computation

AN INTRODUCTION TO GENERALIZED LINEAR MODELS

A.J. Dohson (2002)
Chapman & Hall ix+225
ISBN 1-58488-165-8

This is an extended version of the first edition. It is more than 20% larger. The main additions are in the contents on nominal & ordinal logistic regression, survival analysis and clustered and longitudinal data.

A web site contains the solution to exercises.

The book is aimed at people looking for an introduction to GLIM through graduate courses.

A.C. Qui
Graduate School on Business Administration

VARIATIONAL METHODS FOR DISCONTINUOUS STRUCTURES

International Workshop at Villa Erba (Cernobbio), Italy, July 2001

G. Dal Maso and F. Tomarelli (2003)

Birkhäuser xiii+216

ISBN 3-7643-6913-2

We have a set of 12 contributions presented at the homonym International Workshop which took place on Lago di Como at Villa Erba. They focused recent results in the study of discontinuities that appear when the problem solving in variational calculus generates singularities. A brief account to the papers is the following.

E. Cerbi presented a model for mixtures of magnetic material and applied it to optimal design. G. Bellettini-R. March studied a model for image representation by reconstructing piecewise smooth approximation of the input image, the contours and the hidden portion. G. Bouchitté-I. Fragalá adopted a unified approach for surveying several variational problems with weak geometric structure. G. Buttazzo-E. Oudet-E. Stepanov studied the optimal transportation problem when the Dirichlet region is unknown but it varies in a class of closed and connected subsets. They derive an optimal region and characterized its shape numerically. M. Carriero-A. Leaci-F. Tomarelli developed necessary conditions for obtaining local minimizers of the Blake & Zisserman functional. V. Caselles-J. M. Morel analyzed the problem posed by irrigation and established the existence of maximal irrigable sets under minimal costs. A Cianchi- N. Fusco took the equality case of Polyá-Szegó type inequalities and studied regularizing effects. G Del Piero considered an elastic plastic bar and an interface energy, which is concave except in a neighborhood of the origin and a model, allows deriving the adequate regime. I. Fonseca- G. Leoni illustrated how to deal with higher order variational problems for non-linear elastic materials. M. Paolini – F. Pasquarelli established the un-stability of the evaluation of certain choice of the Wulf shape. D. Percivale presented the state of the art of the problem related with the distribution in Γ -convergence with varying domains for dimensional reduction problems. Finally J. Shah paper provided Maximum Likelihood estimation procedures of the parameters of the reaction diffusion equations. It is book for specialists.

A.A. Chung
Ashunta Teachers College

IN ALL LIKELIHOOD: STATISTICAL MODELLING AND INFERENCE USING LIKELIHOOD

Y. Pawitan (2001)
Clarendon Press x+185
ISBN 0-19-850765-8

This book describes a wide range of models using likelihood. The specific topics covered go from the basic models to very special ones. It also provides a large set of examples and exercises. Most of the material have not been covered in previous texts. I look at it as a good source for advanced courses in Statistics.

L.F. Murtheagyhi
Western School of Computer Science

STATISTICAL SCIENCE IN THE COURTROOM

J.L. Gastwirht (editors)
Springer xxii+443
ISBN 0-387-98997-8

This book contains 22 contributions that describe statistical experiences in trials. Nowadays statistics is going to the court for providing evidence. This is a source of methodological developments in statistics. The contributors have worked for prosecutors and defenders. How to overcome the difficulties for obtaining data, the technical discussions which arise on the appropriateness of the used statistical methods is the kernel of a large set of contributions. The defense of tobacco companies used a huge data base with entries from medical sources. The extent of offenses placed interesting estimation problems. The contributors claim that a large part of their work should be understood by judges, lawyers and the jury. This fact places the need of solving the statistical literacy of jurists.

M.I. Sen
Western School of Computer Science

CONTROL AND ESTIMATION OF DISTRIBUTED PARAMETER SYSTEMS

W. Desch, F. Kppel y K. Kunisch, Editores (2003)
Birkhäuser, Boston ISBN 3-7643-7004-1 x+269

El volumen 143 de la Internacional Series of Numerical Mathematics dedicado a la Conferencia Internacional celebrada del 15 al 21 de Julio del 2001 en Graz, Austria y editada por W. Desch, F. Kappel y K. Kunisch contiene 16 trabajos de participantes.

Las temáticas tratadas son diversas, una amplia gama de problemas relacionados con las ecuaciones en derivadas parciales. El énfasis está en casi todos los casos en la teoría y la solución numérica de problemas de control optimal.

Para aquellos interesados en estas temáticas que deseen mantenerse actualizados es este volumen de obligada consulta.

Marta Lourdes Baguer
Universidad de La Habana

NUMERICAL METHODS FOR SCIENTISTS AND ENGINEERS

H. M. Antia (2002)
Birkhäuser, Boston ISBN 3-7643-6715-6 xxii+842

El presente libro publicado por la Birkhäuser en el 2000 es la segunda edición de una guía práctica orientada tanto a estudiantes como a científicos interesados sobre todo en hacer uso de los Métodos Numéricos.

Este volumen dividido en 13 capítulos y 3 apéndices contiene un resumen de los Métodos Numéricos más usados en las principales áreas de la Matemática. Comenzando con una amplia Introducción y un primer capítulo acerca de los Errores de Redondeo, la Aritmética de Punto Flotante y de conceptos tan importantes como Estabilidad y Condición transita por los Problemas del Álgebra Lineal y no Lineal, por los Problemas de Aproximación e Integración Numéricas, por los Problemas de Ecuaciones Diferenciales Ordinarias y Parciales y hasta por algunos Problemas de Optimización. Cada Capítulo está escrito en lenguaje claro y sencillo, a pesar de que supone un razonable nivel matemático del lector, y termina con un listado de referencias bibliográficas y de ejercicios.

El material que se ofrece se complementa con un primer apéndice que contiene las respuestas a los ejercicios propuestos en cada capítulo y dos apéndices con programas de los métodos expuestos en Fortran y en C respectivamente.

Esta guía práctica constituye un excelente material de trabajo y estudio que les recomiendo porque brinda las herramientas para aprender resolviendo problemas. La mejor manera de hacerlo!

Marta Lourdes Baguer
Universidad de La Habana

FITTING STATISTICAL DISTRIBUTIONS TO GENERALIZED LAMBDA DISTRIBUTIONS AND GENERALIZED BOOTSTRAP METHODS

Z.A. Karian and J. Dudewicz (2003)
Chapman and Hall xvii+438
ISBN 1-58488-069-4

There have been excellent books which study continuous distributions. This is one devoted to the study of a new class of them. The so called generalized lambda distribution depends of 4 parameters and has an explicit analytical form. The moments of order higher than 2 are derived. Then the approximation criteria of different continuous distribution functions by the generalized lambda distribution are derived. The goodness of fitting data by using this distribution is studied. The mixture of a generalized beta distribution and the generalized lambda permits to generate skewed distributions. The bivariantes situation of the subject of the 5th chapter.

The announced generalized Bootstrap methods are the last chapter contents. It was brightened in the title but amounts less than 1/40th of the pages. I expected another treatment of the problem: a discussion of its convergence, for example.

For my surprise the 25% of the book on the pages is amounted by lists of tables and Maple based programs.

The authors proclaimed intended that the book will be of interest for mathematicians and statisticians. I see no the concern. In addition neither engineers, nor biologists or social scientist could understand how to use the proposed generalized distributions. I am unable to define the targeted readers. My second concern is with the practical usefulness of them.

M. A. Sawa
Western School of Computer Science

STATISTICS FOR LAWYERS

M.O. Finkelstein and B. Levin (201)
Springer Verlag xxx+617
ISBN 0-387-95007-9

Contemporáneamente la estadística es con frecuencia utilizada en las cortes para dar evidencia. Los estadísticos actúan para la defensa o la fiscalía y las consultorías se especializan en desarrollar modelos particulares para soportar planteamientos legales. La discusión estadística, técnica y convincente hace ganar juicios en lo criminal y en lo civil por igual. Es un problema estadístico también seleccionar el jurado en forma 'representativa' de la población. Este hecho hace ver que los juristas tengan que someterse al estudio de la estadística para ser competitivos en el campo legal. Este libro trata de ser elemental y didáctico. Lo logra. Con ello los autores esperan que los juristas se adentren en la filosofía que se basa en la estocasticidad del mundo objetivo y que comprendan como las herramientas que la estadística puede ser usada para darle verosimilitud a sus criterios. Tener un estadístico en el jurado obligará a una mayor profesionalidad de los planteamientos.

El libro se estructura al estilo clásico: Estadística descriptiva, colección de datos, pruebas para proporciones, y pruebas T para 2 clasificaciones, estimación máximo verosímil, etc. Los ejemplos están hechos a la medida para los juristas, al provenir de problemas legales reales o ficticios. Es un buen libro para cursos para especialistas en leyes.

Algunas técnicas son discutidas a través de ejemplos numéricos provenientes de casos. El libro es leíble con muy poco conocimiento matemático. Lógica y aritmética debe ser suficiente para ir a través de su contenido. Sin embargo dudo que un jurista clásico pase del primer capítulo a menos que siga un curso y deba aprobarle. Por otra parte un estudiante o un profesional de la estadística puede disfrutar con su lectura extrayendo experiencias substanciales, un abogado solo el conocimiento de la necesidad de contratar un estadístico de vez en vez.

C. Bouza
Universidad de La Habana

GENERALIZED ANALYTIC AUTOMORPHIC FORMS IN HYPERCOMPLEX SPACES

R.S. Krausshar (2004)
Birkhäuser ISBN 3-7643-7059-9 xv+167

This book presents results of the research developed by the author in the theme. He reports 15 contributions of his own where his Phd dissertation, made in 2003, is included. The result is a comprehensive theoretical exposition. The needed basic concepts of Clifford's analysis (differentiability, conformality and analyticity) are given and the main problems appearing, when the dimension is higher are developed. This permits to give representations for s-homogenic rational functions for example. The applications of s-monogenic Eisenstein series and automorphic forms for general polyedron type arithmetic subgroups of Vahlen groups and the related aspects of congruence are discussed.

This book will only be useful for specialists in the field of generalized analytic functions, analytic number theory and related branches of mathematics connected with modern aspects of physics such as instanton and quantum problems.

I.S. Mukopaddy
Ward & Chow Engineering and Computation College

HANDBOOK OF PARAMETRIC AND NONPARAMETRIC STATISTICAL PROCEDURES

D. J. Sheskin (2003)
Chapman and Hall ISBN 1-58488-440-1

This is the third edition of this well known oeuvre. It presents a similar structure: Inferential procedures for testing in one sample, two sample (independent or no) and more samples (independent and dependent) situations and measures of association. It has 200 hundred pages more than the previous edition.

I recommend it to the library of the library of the statistical department.

S. Chow
Ward & Chow Engineering and Computation College

STATISTIK DER WEG ZUR DATENANALYSE

L. Fahermeir, R. Künstler, I. Pigeot and G. Tutz (2003)
Springer xvi+680 ISBN 3-540-4400-3

This is a textbook where data analysis, the reason-to-be of statistics, is leading the presentation. It goes from descriptive statistics to sophisticated methods. Inferential statistics is used as it is needed for developing generalizations from the data at hand.

It will be a good source for the teacher Statistics with knowledge of German language

J. Scheneweiss
BROUQUE-Consultors

CASE STUDIES IN BAYESIAN STATISTICS (Volume IV)

C. Gatsovis, E. Kass, A. Carriquiry, D. Hisdon, D.K. Pauler and I. Verdinelli (2002)
Springer xiv+376
ISBN 0-387-95472-4 Price € 69.95

The book contains some of the contributions presented at the Workshop on Case Studies in Bayesian Statistics held at Carnegie Mellon University in 201. Three invited papers constitute the first section. The second one contains sixteen contributions. The majority of the analyzed cases are of biomedical nature. It will be a god source for illustrating how Bayesian point of view allows to model complex problems and to work out inferences with the mathematical elegance of that theory.

Prabahakar A. Shi
Institute of Agricultural Research and Development

APPLIED LONGITUDINAL DATA ANALYSIS FOR EPIDEMIOLOGY: A PRACTICAL GUIDE

J.W.R. Twiss (2003)

Cambridge University Press xvi+311
ISBN 0-521-81976-8 (hardback) Price US \$ 95.00
ISBN 0-521-52580-2 (paperback) Price US \$ 35.00

We have witnessed the welcome of several methods for longitudinal studies in Epidemiology. The result is a challenge for the researchers with a modest background in Statistics for being in the front line of the existing softwares and the need of providing good responses to the asking of their clients. The book presents different topics that allow performing the analysis of longitudinal statistical data: continuous, binary count outcome. Methods for reducing data, for using cross sectional models regression for longitudinal data, sample distribution are discussed in depth and are illustrated by examples based on the Amsterdam Growth and Health Study. I recommend this book for those involved in Longitudinal Studies.

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IIDB-Epidemiological Division

MATHEMATICAL STATISTICS (2nd Edition)

J. Shao (2003)

Springer xvi+591
ISBN 0-387-9538205 Price US \$ 89.95

The contents of the book permits to teach a two smelter course on Mathematical Statistics. It includes new material (semiparametric modeling, asymptotic accuracy of confidence sets) to the 1998's edition. The book will serve the purposes of the teacher.

Inna C. Johnson
INMAT-Biometria

MULTILEVEL STATISTICAL MODELS (KENDALL LIBRARY OF STATISTICS 3), (3rd Edition)

H. Goldstein (2003)

Arnold Publishers xviii+253
ISBN 0-340-80655-9 £ 45.00

This book is formed of 15 chapters and presents the statistical models for studying hierarchical data. The areas where these models are of common use are presented in chapter 1. Is particularly remarkable the discussion on discrete data, factor analysis, cross-classification, multiple membership, mixed error and missing data. Chapter 15 presents an account of the available software packages in use. Several examples serve to illustrate how the models work in practice.

Sujit H. Souza
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