

Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

Nur Contents aufnehmen

Government policy questions and media planning tasks may be answered by this data set. It covers a wide range of different aspects of statistical matching that in Europe typically is called data fusion. A book about statistical matching will be of interest to researchers and practitioners, starting with data collection and the production of public use micro files, data banks, and data bases. People in the areas of database marketing, public health analysis, socioeconomic modeling, and official statistics will find it useful.

How does an algebraic geometer studying secant varieties further the understanding of hypothesis tests in statistics? Why would a statistician working on factor analysis raise open problems about determinantal varieties? Connections of this type are at the heart of the new field of "algebraic statistics". In this field, mathematicians and statisticians come together to solve statistical inference problems using concepts from algebraic geometry as well as related computational and combinatorial techniques. The goal of these lectures is to introduce newcomers from the different camps to algebraic statistics. The introduction will be centered around the following three observations: many important statistical models correspond to algebraic or semi-algebraic sets of parameters; the geometry of these parameter spaces determines the behaviour of widely used statistical inference procedures; computational

Acces PDF Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

algebraic geometry can be used to study parameter spaces and other features of statistical models.

The book is a collection of 80 short and self-contained lectures covering most of the topics that are usually taught in intermediate courses in probability theory and mathematical statistics. There are hundreds of examples, solved exercises and detailed derivations of important results. The step-by-step approach makes the book easy to understand and ideal for self-study. One of the main aims of the book is to be a time saver: it contains several results and proofs, especially on probability distributions, that are hard to find in standard references and are scattered here and there in more specialistic books. The topics covered by the book are as follows. PART 1 - MATHEMATICAL TOOLS: set theory, permutations, combinations, partitions, sequences and limits, review of differentiation and integration rules, the Gamma and Beta functions. PART 2 - FUNDAMENTALS OF PROBABILITY: events, probability, independence, conditional probability, Bayes' rule, random variables and random vectors, expected value, variance, covariance, correlation, covariance matrix, conditional distributions and conditional expectation, independent variables, indicator functions. PART 3 - ADDITIONAL TOPICS IN PROBABILITY THEORY: probabilistic inequalities, construction of probability distributions, transformations of probability distributions, moments and cross-moments, moment generating functions, characteristic functions. PART 4 - PROBABILITY DISTRIBUTIONS: Bernoulli, binomial, Poisson, uniform, exponential, normal, Chi-square, Gamma, Student's t, F, multinomial, multivariate

Acces PDF Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

normal, multivariate Student's t , Wishart. PART 5 - MORE DETAILS ABOUT THE NORMAL DISTRIBUTION: linear combinations, quadratic forms, partitions. PART 6 - ASYMPTOTIC THEORY: sequences of random vectors and random variables, pointwise convergence, almost sure convergence, convergence in probability, mean-square convergence, convergence in distribution, relations between modes of convergence, Laws of Large Numbers, Central Limit Theorems, Continuous Mapping Theorem, Slutsky's Theorem. PART 7 - FUNDAMENTALS OF STATISTICS: statistical inference, point estimation, set estimation, hypothesis testing, statistical inferences about the mean, statistical inferences about the variance.

The book covers basic concepts such as random experiments, probability axioms, conditional probability, and counting methods, single and multiple random variables (discrete, continuous, and mixed), as well as moment-generating functions, characteristic functions, random vectors, and inequalities; limit theorems and convergence; introduction to Bayesian and classical statistics; random processes including processing of random signals, Poisson processes, discrete-time and continuous-time Markov chains, and Brownian motion; simulation using MATLAB and R.

Machine Learning has become a key enabling technology for many engineering applications, investigating scientific questions and theoretical problems alike. To stimulate discussions and to disseminate new results, a summer school series was started in February 2002, the documentation of which is

Acces PDF Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

published as LNAI 2600. This book presents revised lectures of two subsequent summer schools held in 2003 in Canberra, Australia, and in Tübingen, Germany. The tutorial lectures included are devoted to statistical learning theory, unsupervised learning, Bayesian inference, and applications in pattern recognition; they provide in-depth overviews of exciting new developments and contain a large number of references. Graduate students, lecturers, researchers and professionals alike will find this book a useful resource in learning and teaching machine learning.

This volume contains lectures given at the Saint-Flour Summer School of Probability Theory during the period 8th-24th July, 1999. We thank the authors for all the hard work they accomplished. Their lectures are a work of reference in their domain. The School brought together 85 participants, 31 of whom gave a lecture concerning their research work. At the end of this volume you will find the list of participants and their papers. Finally, to facilitate research concerning previous schools we give here the number of the volume of "Lecture Notes" where they can be found: Lecture Notes in Mathematics 1975: n ° 539- 1971: n ° 307- 1973: n ° 390- 1974: n ° 480- 1979: n ° 876- 1976: n ° 598- 1977: n ° 678- 1978: n ° 774- 1980: n ° 929- 1981: n ° 976- 1982: n ° 1097- 1983: n ° 1117- 1988: n ° 1427- 1984: n ° 1180- 1985-1986 et 1987: n ° 1362- 1989: n ° 1464- 1990: n ° 1527- 1991: n ° 1541- 1992: n ° 1581- 1993: n ° 1608- 1994: n ° 1648- 1995: n ° 1690- 1996: n ° 1665- 1997: n ° 1717- 1998: n ° 1738- Lecture Notes in Statistics 1971: n ° 307- Table of Contents Part I Erwin

Acces PDF Theoretical Statistics Lecture 4

Statistics At Uc Berkeley

Bolthausen: Large Deviations and Interacting Random Walks

1 On the construction of the three-dimensional polymer measure.

. 7

2 Self-attracting random walks.

. 39

3 One-dimensional pinning-depinning transitions. 105

References.

.

Preface to the English edition This monograph Ten Lectur,es on Statistical and Structural Pattern Recognition uncovers the close relationship between various well known pattern recognition problems that have so far been considered independent. These relationships became apparent when formal procedures addressing not only known prob lems but also their generalisations were discovered. The generalised problem formulations were analysed mathematically and unified algorithms were found. The book unifies of two main streams ill pattern recognition-the statisti cal a11d structural ones. In addition to this bridging on the uppermost level, the book mentions several other unexpected relations within statistical and structural methods. The monograph is intended for experts, for students, as well as for those who want to enter the field of pattern recognition. The theory is built up from scratch with almost no assumptions about any prior knowledge of the reader. Even when rigorous mathematical language is used we make an effort to keep the text easy to comprehend. This approach makes the book suitable for students at the beginning of their scientific career. Basic building blocks are explained in a style of an accessible intellectual exercise, thus promoting good practice in reading mathematical text. The paradoxes, beauty, and pitfalls of scientific research are shown on examples from pattern recognition. Each lecture is amended by a discussion with an

Acces PDF Theoretical Statistics Lecture 4

Statistics At Uc Berkeley

inquisitive student that elucidates and deepens the explanation, providing additional pointers to computational procedures and deep rooted errors.

This text is intended for a first course in digital logic design, at the sophomore or junior level, for electrical engineering, computer engineering and computer science programs, as well as for a number of other disciplines such as physics and mathematics. The book can also be used for self-study or for review by practicing engineers and computer scientists not intimately familiar with the subject. After completing this text, the student should be prepared for a second (advanced) course in digital design, switching and automata theory, microprocessors or computer organization.

Part I, Bertoin, J.: Subordinators: Examples and Applications: Foreword.- Elements on subordinators.- Regenerative property.- Asymptotic behaviour of last passage times.- Rates of growth of local time.- Geometric properties of regenerative sets.- Burgers equation with Brownian initial velocity.- Random covering.- Lévy processes.- Occupation times of a linear Brownian motion.- Part II, Martinelli, F.: Lectures on Glauber Dynamics for Discrete Spin Models: Introduction.- Gibbs Measures of Lattice Spin Models.- The Glauber Dynamics.- One Phase Region.- Boundary Phase Transitions.- Phase Coexistence.- Glauber Dynamics for the Dilute Ising Model.- Part III, Peres, Yu.: Probability on Trees: An Introductory Climb: Preface.- Basic Definitions and a Few Highlights.- Galton-Watson Trees.- General percolation on a connected graph.- The first-Moment method.- Quasi-independent Percolation.- The second Moment Method.- Electrical Networks.- Infinite Networks.- The Method of Random Paths.- Transience of Percolation Clusters.- Subperiodic Trees.- The Random Walks $RW(\lambda)$.- Capacity.- Intersection-Equivalence.- Reconstruction for the Ising Model on a Tree.- Unpredictable Paths in Z and EIT in

Acces PDF Theoretical Statistics Lecture 4

Statistics At Uc Berkeley

Z3.- Tree-Indexed Processes.- Recurrence for Tree-Indexed Markov Chains.- Dynamical Pecsolation.- Stochastic Domination Between Trees.

This volume provides an exposition of some fundamental aspects of the asymptotic theory of statistical experiments.

The most important of them is “how to construct asymptotically optimal decisions if we know the structure of optimal decisions for the limit experiment”.

Contents:Statistical Experiments and Their ComparisonConvergence of Statistical

Experiments(? ,?) -Models. Convergence to (? ,?) -ModelsLocal Convergence of Statistical Experiments and Global

EstimationStatistical Inference for Autoregressive Models of the First Order Readership: Researchers in probability and

statistics. Keywords:Comparison of Statistical

Experiments;Mixed Local Asymptotic Normality;Convergence of Experiments;Likelihood Ratio

Processes;Contiguity;Autoregressive Models;Minimax

Bound;Local Asymptotic NormalityReviews: “It is an

interesting, welcome addition to the literature, and it contains many new insights. I congratulate the authors for writing this comprehensive monograph on a difficult subject.”

Mathematical Reviews “The book is a highlight in modern mathematical statistics which offers a lot of new concepts. It recalls the brilliant methodology of Le Cam's Theory and the first chapters may be used as introduction into this field.”

Mathematics Abstracts

'Sidney Coleman was the master teacher of quantum field theory. All of us who knew him became his students and disciples. Sidney's legendary course remains fresh and bracing, because he chose his topics with a sure feel for the essential, and treated them with elegant economy.' Frank WilczekNobel Laureate in Physics 2004 Sidney Coleman was a physicist's physicist. He is largely unknown outside of the

Acces PDF Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

theoretical physics community, and known only by reputation to the younger generation. He was an unusually effective teacher, famed for his wit, his insight and his encyclopedic knowledge of the field to which he made many important contributions. There are many first-rate quantum field theory books (the venerable Bjorken and Drell, the more modern Itzykson and Zuber, the now-standard Peskin and Schroeder, and the recent Zee), but the immediacy of Prof. Coleman's approach and his ability to present an argument simply without sacrificing rigor makes his book easy to read and ideal for the student. Part of the motivation in producing this book is to pass on the work of this outstanding physicist to later generations, a record of his teaching that he was too busy to leave himself.

Recent developments in the neurosciences have considerably modified our knowledge of both the operating modes of neurons and information processing in the cortex. Multi-unit recordings have enabled temporal correlations to be detected, within temporal windows of the order of 1ms. Oscillations corresponding to a quasi-periodic spike-giving, synchronized over several visual cortical areas, have been observed in anaesthetized cats and monkeys. Recent studies have also focused on the role played by the dendritic arborization. These developments have led to considerable interest in a coding scheme which relies on precise spatio-temporal patterns from both the theoretical and experimental points of view. This prompts us to look into new models for information processing which will proceed, for example, from a synchronous detection of correlated spike giving, and is particularly robust against noise. Such models could bring about original technical applications for information processing and control. Further developments in this field may be of major importance for our understanding of the basic mechanisms of perception and cognition. They could

Acces PDF Theoretical Statistics Lecture 4

Statistics At Uc Berkeley

also lead to new concepts in applications directed towards artificial perception and pattern recognition. Up to now, artificial systems for pattern recognition are far from reaching the standards of human vision. Systems based on a temporal coding by spikes may now be expected to bring about major improvements in this field. This book covers the lectures delivered at a summer school on neuronal information processing. It includes information on all the above-mentioned developments, and also provides the reader with the state-of-the-art in every relevant field, including the neurosciences, physics, mathematics, and information and control theory. Contents: Temporal Coding With and Without Clocks (R Lestienne) Modeling Synfire Networks (J A Hertz) Neuronal Decoding of Temporal Signal (O Parodi) Algorithms for the Detection of Connectedness and Their Neural Implementation (P R Roelfsema et al.) From Complex Signal to Adapted Behavior. A Theoretical Approach of the Honeybee Olfactory Brain (B Quenet et al.) Reducing the Complexity of Neural Nets for Industrial Applications and Biological Models (G Dreyfus) Positive Regulation Circuits and Memory (J Demongeot) Sensory Coding: Information Maximization and Redundancy Reduction (J-P Nadal & N Parga) Learning: A Geometrical Approach (G Burdet et al.)

Readership: Students and researchers in neural networks and artificial intelligence. Keywords: Neuroscience; Information Processing; Dendritic Arborization; Perception; Cognition; Pattern Recognition; Control Theory; Neural Nets; Sensory Coding; Temporal Coding

This volume contains two of the three lectures that were given at the 33rd Probability Summer School in Saint-Flour (July 6-23, 2003). Amir Dembo's course is devoted to recent studies of the fractal nature of random sets, focusing on some fine properties of the sample path of random walk and

Acces PDF Theoretical Statistics Lecture 4

Statistics At Uc Berkeley

Brownian motion. In particular, the cover time for Markov chains, the dimension of discrete limsup random fractals, the multi-scale truncated second moment and the Ciesielski-Taylor identities are explored. Tadahisa Funaki's course reviews recent developments of the mathematical theory on stochastic interface models, mostly on the so-called $\nabla\varphi$ interface model. The results are formulated as classical limit theorems in probability theory, and the text serves with good applications of basic probability techniques.

The Current Index to Statistics (CIS) is a bibliographic index of publications in statistics, probability, and related fields.

Lectures on Probability Theory and Mathematical Statistics - 3rd Edition Createspace Independent Publishing Platform

The book presents the Invited Lectures given at 13th International Congress on Mathematical Education

(ICME-13). ICME-13 took place from 24th- 31st July 2016 at the University of Hamburg in Hamburg (Germany). The congress was hosted by the Society of Didactics of Mathematics (Gesellschaft für Didaktik der Mathematik - GDM) and took place under the auspices of the International Commission on Mathematical Instruction (ICMI). ICME-13 – the biggest ICME so far - brought together about 3500 mathematics educators from 105 countries, additionally 250 teachers from German speaking countries met for specific activities. The scholars came together to share their work on the improvement of mathematics education at all educational levels.. The papers present the work of prominent mathematics educators from all over the globe and give insight into the current discussion in mathematics education. The Invited Lectures cover a wide spectrum of topics, themes and issues and aim to give direction to future research towards educational improvement in the teaching and learning of mathematics education. This book is of particular interest to researchers, teachers and curriculum developers in

Acces PDF Theoretical Statistics Lecture 4

Statistics At Uc Berkeley

mathematics education.

This text is for a one semester graduate course in statistical theory and covers minimal and complete sufficient statistics, maximum likelihood estimators, method of moments, bias and mean square error, uniform minimum variance estimators and the Cramer-Rao lower bound, an introduction to large sample theory, likelihood ratio tests and uniformly most powerful tests and the Neyman Pearson Lemma. A major goal of this text is to make these topics much more accessible to students by using the theory of exponential families. Exponential families, indicator functions and the support of the distribution are used throughout the text to simplify the theory. More than 50 "brand name" distributions are used to illustrate the theory with many examples of exponential families, maximum likelihood estimators and uniformly minimum variance unbiased estimators. There are many homework problems with over 30 pages of solutions.

Despite its short history, wavelet theory has found applications in a remarkable diversity of disciplines: mathematics, physics, numerical analysis, signal processing, probability theory and statistics. The abundance of intriguing and useful features enjoyed by wavelet and wavelet packed transforms has led to their application to a wide range of statistical and signal processing problems. On November 16-18, 1994, a conference on Wavelets and Statistics was held at Villard de Lans, France, organized by the Institute IMAG-LMC, Grenoble, France. The meeting was the 15th in the series of the Rencontres Franco-Belges des Statisticiens and was attended by 74 mathematicians from 12 different countries. Following tradition, both theoretical statistical results and practical contributions of this active field of statistical research were presented. The editors and the local organizers hope that this volume reflects the broad spectrum of the conference. as it includes 21 articles contributed by

Acces PDF Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

specialists in various areas in this field. The material compiled is fairly wide in scope and ranges from the development of new tools for non parametric curve estimation to applied problems, such as detection of transients in signal processing and image segmentation. The articles are arranged in alphabetical order by author rather than subject matter. However, to help the reader, a subjective classification of the articles is provided at the end of the book. Several articles of this volume are directly or indirectly concerned with several aspects of wavelet-based function estimation and signal denoising.

This tutorial volume is based on a summer school on cryptology and data security held in Aarhus, Denmark, in July 1998. The ten revised lectures presented are devoted to core topics in modern cryptology. In accordance with the educational objectives of the school, elementary introductions are provided to central topics, various examples are given of the problems encountered, and this is supplemented with solutions, open problems, and reference to further reading. The resulting book is ideally suited as an up-to-date introductory text for students and IT professionals interested in modern cryptology.

This book provides the reader with the basic skills and tools of statistics and probability in the context of engineering modeling and analysis. The emphasis is on the application and the reasoning behind the application of these skills and tools for the purpose of enhancing decision making in engineering. The purpose of the book is to ensure that the reader will acquire the required theoretical basis and technical skills such as to feel comfortable with the theory of basic statistics and probability. Moreover, in this book, as opposed to many standard books on the same subject, the perspective is to focus on the use of the theory for the purpose of engineering model building and decision making. This work is

Acces PDF Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

suitable for readers with little or no prior knowledge on the subject of statistics and probability.

This book contains work-outs of the notes of three 15-hour courses of lectures which constitute surveys on the concerned topics given at the St. Flour Probability Summer School in July 1992. The first course, by D. Bakry, is concerned with hypercontractivity properties and their use in semi-group theory, namely Sobolev and Log Sobolev inequalities, with estimations on the density of the semi-groups. The second one, by R.D. Gill, is about statistics on survival analysis; it includes product-integral theory, Kaplan-Meier estimators, and a look at cryptography and generation of randomness. The third one, by S.A. Molchanov, covers three aspects of random media: homogenization theory, localization properties and intermittency. Each of these chapters provides an introduction to and survey of its subject.

This volume of proceedings contains an updated glance at recent developments in statistical physics. Topics discussed include structural and transport properties of colloidal suspensions and polymeric systems, Monte Carlo and Molecular Dynamics simulations of fluids, topological aspects of wetting and other critical phenomena, reaction-diffusion equations and the statistical mechanics of solids under stress.

This is yet another indispensable volume for all

Acces PDF Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

probabilists and collectors of the Saint-Flour series, and is also of great interest for mathematical physicists. It contains two of the three lecture courses given at the 32nd Probability Summer School in Saint-Flour (July 7-24, 2002). Tsirelson's lectures introduce the notion of nonclassical noise produced by very nonlinear functions of many independent random variables, for instance singular stochastic flows or oriented percolation. Werner's contribution gives a survey of results on conformal invariance, scaling limits and properties of some two-dimensional random curves. It provides a definition and properties of the Schramm-Loewner evolutions, computations (probabilities, critical exponents), the relation with critical exponents of planar Brownian motions, planar self-avoiding walks, critical percolation, loop-erased random walks and uniform spanning trees.

Lectures on Selected Topics in Statistical Mechanics is a collection of lectures given at the 1971 Simla Summer School of Statistical Mechanics held in India. The lectures explore a wide range of topics related to statistical mechanics, including occupation number representation; the Green function method; the pair Hamiltonian model of an imperfect Bose gas; fluctuations in a perfect Bose gas; and the equation of state of an imperfect gas. A simple derivation of the Bloch equation is also presented, along with the statistical mechanics of stellar

Acces PDF Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

systems. Comprised of eight chapters, this volume begins with a discussion on the occupation number representation by considering some relevant formulae from ensemble theory. Classical petit and grand ensembles are described, together with quanta¹ petit and grand ensembles. Subsequent chapters focus on the Green function method in statistical mechanics; the pair Hamiltonian model of the imperfect Bose gas and its solution in the absence of Bose-Einstein condensation using Green function methods and diagrammatic techniques; fluctuations in a perfect Bose gas; the equation of state of an imperfect gas; and a simple derivation of the Bloch equation. Finally, the statistical mechanics of stellar systems and an approach to equilibrium are described. This book will be of interest to physicists.

This proceedings provides an updated glance on recent developments in statistical physics.

Contributions include thermal behavior in complex liquids, dynamical instabilities in colloidal and lattice gas models, transport and relaxation phenomena near the glass transition, as well as studies in fluctuations and kinetic theories of fluids far from equilibrium.

Most of the matter in our universe is in a gaseous or plasma state. Yet, most textbooks on quantum statistics focus on examples from and applications in condensed matter systems, due to the prevalence of solids and liquids in our day-to-day lives. In an

Acces PDF Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

attempt to remedy that oversight, this book consciously focuses on teaching the subject matter in the context of (dilute) gases and plasmas, while aiming primarily at graduate students and young researchers in the field of quantum gases and plasmas for some of the more advanced topics. The majority of the material is based on a two-semester course held jointly by the authors over many years, and has benefited from extensive feedback provided by countless students and co-workers. The book also includes many historical remarks on the roots of quantum statistics: firstly because students appreciate and are strongly motivated by looking back at the history of a given field of research, and secondly because the spirit permeating this book has been deeply influenced by meetings and discussions with several pioneers of quantum statistics over the past few decades.

In World Mathematical Year 2000 the traditional St. Flour Summer School was hosted jointly with the European Mathematical Society. Sergio Albeverio reviews the theory of Dirichlet forms, and gives applications including partial differential equations, stochastic dynamics of quantum systems, quantum fields and the geometry of loop spaces. The second text, by Walter Schachermayer, is an introduction to the basic concepts of mathematical finance, including the Bachelier and Black-Scholes models. The fundamental theorem of asset pricing is

Acces PDF Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

discussed in detail. Finally Michel Talagrand, gives an overview of the mean field models for spin glasses. This text is a major contribution towards the proof of certain results from physics, and includes a discussion of the Sherrington-Kirkpatrick and the p-spin interaction models.

This volume is intended for the advanced study of several topics in mathematical statistics. The first part of the book is devoted to sampling theory (from one-dimensional and multidimensional distributions), asymptotic properties of sampling, parameter estimation, sufficient statistics, and statistical estimates. The second part is devoted to hypothesis testing and includes the discussion of families of statistical hypotheses that can be asymptotically distinguished. In particular, the author describes goodness-of-fit and sequential statistical criteria (Kolmogorov, Pearson, Smirnov, and Wald) and studies their main properties. The book is suitable for graduate students and researchers interested in mathematical statistics. It is useful for independent study or supplementary reading.

This textbook for graduates and advanced undergraduates in physics and physical chemistry covers the major areas of statistical mechanics and concludes with the level of current research. It begins with the fundamental ideas of averages and ensembles, focusing on classical systems described by continuous variables such as position and momentum, and using the ideal gas as an example. It then turns to quantum systems, beginning with diatomic molecules and working up through blackbody radiation and chemical equilibria. The discussion of equilibrium properties of systems of interacting particles includes such techniques as cluster expansions and distribution functions and uses non-ideal gases, liquids, and solutions. Dynamic behavior -- treated here more extensively

Acces PDF Theoretical Statistics Lecture 4 Statistics At Uc Berkeley

than in other texts -- is discussed from the point of view of correlation functions. The text concludes with the problem of diffusion in a suspension of interacting hard spheres and what can be learned about such a system from scattered light. Intended for a one-semester course, the text includes several "asides" on topics usually omitted from introductory courses, as well as numerous exercises.

This volume contains lectures given at the 31st Probability Summer School in Saint-Flour (July 8-25, 2001). Simon Tavaré's lectures serve as an introduction to the coalescent, and to inference for ancestral processes in population genetics. The stochastic computation methods described include rejection methods, importance sampling, Markov chain Monte Carlo, and approximate Bayesian methods. Ofer Zeitouni's course on "Random Walks in Random Environment" presents systematically the tools that have been introduced to study the model. A fairly complete description of available results in dimension 1 is given. For higher dimension, the basic techniques and a discussion of some of the available results are provided. The contribution also includes an updated annotated bibliography and suggestions for further reading. Olivier Catoni's course appears separately.

"In the Winter Quarter of the academic year 1984-1985, Raj Bahadur gave a series of lectures on estimation theory at the University of Chicago"--Page i.

This volume contains lectures given at the Saint-Flour Summer School of Probability Theory during the period 10th - 26th July, 1995. These lectures are at a postgraduate research level. They are works of reference in their domain.

[Copyright: f0dc495ebacd8ee69a6e2b0361d69c95](https://www.cambridge.org/core/terms/f0dc495ebacd8ee69a6e2b0361d69c95)