

Introduction to Empirical Processes and Semiparametric Inference

[Introduction to Empirical Processes and Semiparametric Inference 下载链接1](#)

著者:Michael R. Kosorok

出版者:Springer

出版时间:2008-1-31

装帧:Hardcover

isbn:9780387749778

This book provides a self-contained, linear, and unified introduction to empirical processes and semiparametric inference. These powerful research techniques are surprisingly useful for developing methods of statistical inference for complex models and in understanding the properties of such methods. The targeted audience includes statisticians, biostatisticians, and other researchers with a background in mathematical statistics who have an interest in learning about and doing research in empirical processes and semiparametric inference but who would like to have a friendly and gradual introduction to the area. The book can be used either as a research reference or as a textbook. The level of the book is suitable for a second year graduate course in statistics or biostatistics, provided the students have had a year of graduate level mathematical statistics and a semester of probability.

The book consists of three parts. The first part is a concise overview of all of the main concepts covered in the book with a minimum of technicalities. The second and third parts cover the two respective main topics of empirical processes and semiparametric inference in depth. The connections between these two topics is also demonstrated and emphasized throughout the text. Each part has a final chapter with several case studies that use concrete examples to illustrate the concepts developed so far. The last two parts also each include a chapter which covers the needed mathematical preliminaries. Each main idea is introduced with a non-technical motivation, and examples are given throughout to illustrate important concepts. Homework problems are also included at the end of each chapter to help the reader gain additional insights.

Michael R. Kosorok is Professor and Chair, Department of Biostatistics, and Professor, Department of Statistics and Operations Research, at the University of North Carolina at Chapel Hill. His research has focused on the application of empirical processes and semiparametric inference to statistics and biostatistics. He is a Fellow of both the American Statistical Association and the Institute of Mathematical Statistics. He is an

Associate Editor of the Annals of Statistics, Electronic Journal of Statistics, International Journal of Biostatistics, Statistics and Probability Letters, and Statistics Surveys.

作者介绍:

Michael Kosorok is currently professor and Chair of Biostatistics Department at University of North Carolina Chapel Hill.

The following self description is adopted from his academic website.

I am a composer in my spare time. I have a B.M. in Music Composition from Brigham Young University (1988) and an M.M. in Music Composition from the University of Wisconsin-Madison (1999).

My "Mechanizations" for piano (4 movements, 10 minutes duration) was performed Fall 1995; my "Interactions for Violin and Piano" (4 minutes duration) was performed Spring 1997; and my "Instant Motion" (2 minutes duration) and "February Refractions" (8 minutes duration) for flute, cello, and piano were both performed Spring 1999 in Morphy Hall at the University of Wisconsin-Madison School of Music.

In Spring 2000, my "Elliptical Ascent" (11.5 minutes duration) was performed by the Contemporary Chamber Ensemble in Music Hall at the University of Wisconsin-Madison: the scoring was for flute, oboe, clarinet, bassoon, french horn, trumpet, trombone, percussion, piano, two violins, viola, cello, and double bass.

On December 4, 2007, "A Singular Continuity" for orchestra (about 4 minutes duration) was premiered by the Chapel Hill High School Orchestra under the direction of Barbara Bridges Smith at the Hanes Auditorium in Chapel Hill, North Carolina.

The style of my music is "contemporary classical," or what some people refer to as "new music," and includes works for voice, chamber instrumental groups, orchestra, and percussion.

目录: Preface

I Overview

1 Introduction

2 An Overview of Empirical Processes

3 Overview of Semiparametric Inference

4 Case Studies I

II

5 Introduction to Empirical Processes

6 Preliminaries for Empirical Processes

7 Stochastic Convergence

8 Empirical Process Methods

9 Entropy Calculations

10 Bootstrapping Empirical Processes

11 Additional Empirical Process Results

12 The Functional Delta Method 235

13 Z-Estimators

14 M-Estimators

15 Case Studies II

III Semiparametric Inference

17 Preliminaries for Semiparametric Inference

18 Semiparametric Models and Efficiency

19 Efficient Inference for Finite-Dimensional Parameters

20 Efficient Inference for Infinite-Dimensional Parameters

21 Semiparametric M-Estimation

22 Case Studies III

• • • • • [\(收起\)](#)

[Introduction to Empirical Processes and Semiparametric Inference_ 下载链接1](#)

标签

统计

数学

评论

[Introduction to Empirical Processes and Semiparametric Inference_ 下载链接1](#)

书评

[Introduction to Empirical Processes and Semiparametric Inference_ 下载链接1](#)