1.	
Record Nr.	UNINA9910270906903321
Autore	Rasch Dieter
Titolo	Mathematical statistics / / Dieter Rasch, Dieter Schott
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2018 ©2018
ISBN	1-119-38526-1 1-119-38523-7 1-119-38529-6
Edizione	[1st edition]
Descrizione fisica	1 online resource (839 pages) : illustrations
Disciplina	519.5
Soggetti	Mathematical statistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Publication date from resource description page (viewed April 18, 2018).
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Sommario/riassunto	Explores mathematical statistics in its entirety—from the fundamentals to modern methods This book introduces readers to point estimation, confidence intervals, and statistical tests. Based on the general theory of linear models, it provides an in-depth overview of the following: analysis of variance (ANOVA) for models with fixed, random, and mixed effects; regression analysis is also first presented for linear models with fixed, random, and mixed effects before being expanded to nonlinear models; statistical multi-decision problems like statistical selection procedures (Bechhofer and Gupta) and sequential tests; and design of experiments from a mathematical-statistical point of view. Most analysis methods have been supplemented by formulae for minimal sample sizes. The chapters also contain exercises with hints for solutions. Translated from the successful German text, Mathematical Statistics requires knowledge of probability theory (combinatorics, probability distributions, functions and sequences of random variables), which is typically taught in the earlier semesters of scientific and mathematical study courses. It teaches readers all about statistical analysis and covers the design of experiments. The book also describes

optimal allocation in the chapters on regression analysis. Additionally, it features a chapter devoted solely to experimental designs. Classroom-tested with exercises included Practice-oriented (taken from day-to-day statistical work of the authors) Includes further studies including design of experiments and sample sizing Presents and uses IBM SPSS Statistics 24 for practical calculations of data Mathematical Statistics is a recommended text for advanced students and practitioners of math, probability, and statistics.