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	Sommario/riassunto	This monograph is written for advanced graduate students, Ph.D. students, and researchers in mathematical statistics and decision theory. All major topics are introduced on a fairly elementary level and then developed gradually to higher levels. The book is self-contained as it provides full proofs, worked-out examples, and problems. It can be used as a basis for graduate courses, seminars, Ph.D. programs, self-studies, and as a reference book. The authors present a rigorous account of the concepts and a broad treatment of the major results of classical finite sample size decision theory and modern asymptotic decision theory. Highlights are systematic applications to the fields of parameter estimation, testing hypotheses, and selection of populations. With its broad coverage of decision theory that includes results from other more specialized books as well as new material, this book is one of a kind and fills the gap between standard graduate texts in mathematical statistics and advanced monographs on modern asymptotic theory. One goal is to present a bridge from the classical

results of mathematical statistics and decision theory to the modern asymptotic decision theory founded by LeCam. The striking clearness and powerful applicability of LeCam's theory is demonstrated with its applications to estimation, testing, and selection on an intermediate level that is accessible to graduate students. Another goal is to present a broad coverage of both the frequentist and the Bayes approach in decision theory. Relations between the Bayes and minimax concepts are studied, and fundamental asymptotic results of modern Bayes statistical theory are included. The third goal is to present, for the first time in a book, a well-rounded theory of optimal selections for parametric families. Friedrich Liese, University of Rostock, and Klaus-J. Miescke, University of Illinois at Chicago, are professors of mathematical statistics who have published numerous research papers in mathematical statistics and decision theory over the past three decades.