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Titolo	Stochastic Comparisons with Applications : In Order Statistics and Spacings // by Subhash C. Kochar
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Descrizione fisica	1 online resource (280 pages)
Disciplina	519.2 519.22
Soggetti	Statistics Probabilities Statistical Theory and Methods Applied Probability
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction and Preliminaries -- Magnitude Orders -- Variability Orders -- Skewness and Relative Aging Orders -- Dependence Orders -- Stochastic comparisons of sample spacings -- Dependence among order statistics and spacings -- Stochastic Comparisons of Weighted Sums of Random Variables -- Stochastic comparisons of mixtures of distributions.
Sommario/riassunto	This book emphasizes the use of stochastic orders as motivational tools for developing new statistical procedures. Stochastic orders have found useful applications in many disciplines, including reliability theory, survival analysis, risk theory, finance, nonparametric methods, economics and actuarial science. Written by a statistician, this volume clarifies the connection between stochastic orders and nonparametric methods. The importance of order statistics and spacings is well recognized. Classically, they mainly focus on the case when the observations are independent and identically distributed, however, several new developments have extended the comparison of order statistics to the case of non-identically distributed or non-independent

observations. In addition to giving a detailed discussion of various topics in the general area of stochastic orders, a substantial part of the book is devoted to recent research on stochastic comparisons of order statistics and spacings, including a long chapter on dependence among them. The book will be useful for graduate students and researchers in statistics, economics, actuarial science and other related disciplines. In particular, with close to 300 references, it will be a valuable resource for reliability theorists, applied probabilists and statisticians. Readers are expected to have taken a first-year graduate level course in mathematical statistics or in applied probability. .
