

1. Record Nr.	UNINA9910483118903321
Autore	Fujikoshi Yasunori
Titolo	Non-Asymptotic Analysis of Approximations for Multivariate Statistics / / by Yasunori Fujikoshi, Vladimir V. Ulyanov
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2020
ISBN	981-13-2616-9
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (133 pages)
Collana	JSS Research Series in Statistics, , 2364-0065
Disciplina	519.535
Soggetti	Statistics Mathematical statistics - Data processing Statistical Theory and Methods Statistics and Computing Applied Statistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. Introduction -- 2. Correlation Coefficient -- 3. MANOVA Test Statistics -- 4. Linear and Quadratic Discriminant Functions -- 5. Bootstrap Confidence Sets -- 6. Gaussian Comparison -- 7. Cornish- Fisher Expansions -- 8 Approximations for Statistics Based on Random Sample Sizes -- 9. Power-divergence Statistics -- 10.General Approach to Construct Non-asymptotic Bounds -- 11 - Other Topics -- Index.
Sommario/riassunto	This book presents recent non-asymptotic results for approximations in multivariate statistical analysis. The book is unique in its focus on results with the correct error structure for all the parameters involved. Firstly, it discusses the computable error bounds on correlation coefficients, MANOVA tests and discriminant functions studied in recent papers. It then introduces new areas of research in high- dimensional approximations for bootstrap procedures, Cornish–Fisher expansions, power-divergence statistics and approximations of statistics based on observations with random sample size. Lastly, it proposes a general approach for the construction of non-asymptotic bounds, providing relevant examples for several complicated statistics. It is a valuable resource for researchers with a basic understanding of multivariate statistics. .

