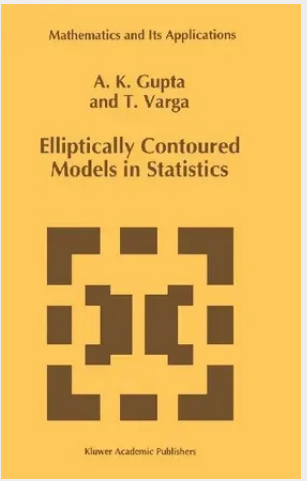
Gupta / Varga

Elliptically Contoured Models in Statistics



In multivariate statistical analysis, elliptical distributions have recently provided an alternative to the normal model. Most of the work, however, is spread out in journals throughout the world and is not easily accessible to the investigators. Fang, Kotz, and Ng presented a systematic study of multivariate elliptical distributions, however, they did not discuss the matrix variate case. Recently Fang and Zhang have summarized the results of generalized multivariate analysis which include vector as well as the matrix variate distributions. On the other hand, Fang and Anderson collected research papers on matrix variate elliptical distributions, many of them published for the first time in English. They published very rich material on the topic, but the results are given in paper form which does not provide a unified treatment of the theory. Therefore, it seemed appropriate to collect the most important results on the theory of matrix variate elliptically contoured distributions available in the literature and organize them in a unified manner that can serve as an introduction to the subject. The book will be useful for researchers, teachers, and graduate students in statistics and related fields whose interests involve multivariate statistical analysis. Parts of this book were presented by Arjun K Gupta as a one semester course at Bowling Green State University. Some new results have also been included which generalize the results in Fang and Zhang. Knowledge of matrix algebra and statistics at the level of Anderson is assumed. However, Chapter 1 summarizes some results of matrix algebra.

In multivariate statistical analysis, elliptical distributions have recently provided an alternative to the normal model. Most of the work, however, is spread out in journals throughout the world and is not easily accessible to the investigators. Fang, Kotz, and Ng presented a systematic study of multivariate elliptical distributions, however, they did not discuss the matrix variate case. Recently Fang and Zhang have summarized the results of generalized multivariate analysis which include vector as well as the matrix variate distributions. On the other hand, Fang and Anderson collected research papers on matrix variate elliptical distributions, many of them published for the first time in English. They published very rich material on the topic, but the results are given in paper form which does not provide a unified treatment of the theory. Therefore, it seemed appropriate to collect the most important results on the theory of matrix variate elliptically contoured distributions available in the literature and organize them in a unified manner that can serve as an introduction to the subject. The book will be useful for researchers, teachers, and graduate students in statistics and related fields whose interests involve multivariate statistical analysis. Parts of this book were presented by Arjun K Gupta as a one semester course at Bowling Green State University. Some new results have also been included which generalize the results in Fang and Zhang. Knowledge of matrix algebra and statistics at the level of Anderson is assumed. However, Chapter 1 summarizes some results of matrix algebra.

106,99 €
99,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780792321156
Medium: Buch
ISBN: 978-0-7923-2115-6
Verlag: Springer Netherlands
Erscheinungstermin: 31.01.1993
Sprache(n): Englisch
Auflage: 1. Auflage 1993
Serie: Mathematics and Its Applications
Produktform: Gebunden
Gewicht: 1460 g
Seiten: 327
Format (B x H): 160 x 241 mm

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)