

**Puri, Madan Lal; Sen, Pranab Kumar**

**Nonparametric methods in general linear models.** (English) Zbl 0569.62024

Wiley Series in Probability and Mathematical Statistics. New York - Chichester etc.: John Wiley & Sons. IX, 399 p. £57.80 (1985).

In the authors' previous monograph "Nonparametric methods in multivariate analysis." (1971; [Zbl 0237.62033](#)) there is practically no detailed treatment of nonparametric procedures in a systematic and integrated form. The main emphasis of the present book is on the approach of *J. Hájek* [see: *A course in nonparametric statistics.* (1969; [Zbl 0193.169](#))], which is characterized by the relaxation of basic regularity conditions and by adaptability to general linear models (containing the single- and several sample problems as special cases).

The rapid growth of theory in the last two decades is integrated. The first part of the book concentrates on distribution theory of rank order statistics for general alternatives. The second part illustrates the use of rank order statistics in problems of statistical inference. This monograph provides specialists and advanced graduate students in a precise theoretical manner with the recent developments, including profile analysis, rank tests for some growth-curve models, for grouped data, and rank tests under censoring of various types.

Reviewer: [H.Grimm](#)

**MSC:**

- [62Gxx](#) Nonparametric inference
- [62G30](#) Order statistics; empirical distribution functions
- [62-02](#) Research exposition (monographs, survey articles) pertaining to statistics
- [62Hxx](#) Multivariate analysis
- [62G05](#) Nonparametric estimation
- [62G10](#) Nonparametric hypothesis testing

Cited in **1** Review  
Cited in **67** Documents

**Keywords:**

general linear models; rank order statistics; general alternatives; profile analysis; rank tests; growth-curve models; grouped data; censoring