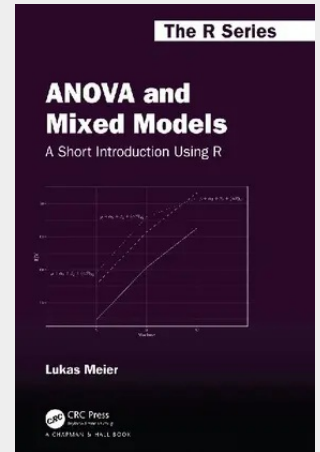


ANOVA and Mixed Models

A Short Introduction Using R

ANOVA and Mixed Models: A Short Introduction Using R provides both the practitioner and researcher a compact introduction to the analysis of data from the most popular experimental designs. Based on knowledge from an introductory course on probability and statistics, the theoretical foundations of the most important models are introduced. The focus is on an intuitive understanding of the theory, common pitfalls in practice, and the application of the methods in R. From data visualization and model fitting, up to the interpretation of the corresponding output, the whole workflow is presented using R. The book does not only cover standard ANOVA models, but also models for more advanced designs and mixed models, which are common in many practical applications. Features - Accessible to readers with a basic background in probability and statistics - Covers fundamental concepts of experimental design and cause-effect relationships - Introduces classical ANOVA models, including contrasts and multiple testing - Provides an example-based introduction to mixed models - Features basic concepts of split-plot and incomplete block designs - R code available for all steps - Supplementary website with additional resources and updates are available here. This book is primarily aimed at students, researchers, and practitioners from all areas who wish to analyze corresponding data with R. Readers will learn a broad array of models hand-in-hand with R, including the applications of some of the most important add-on packages.

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