Optimum Experimental Designs, With SAS

Atkinson, Anthony and Donev, Alexander and Tobias, Randall

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Optimum Experimental Designs, With SAS

Anthony Atkinson, Alexander Donev, and Randall Tobias

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528 pages, numerous line figures, 240x168 mm

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Description

- Extremely timely
- Experienced author team
- Numerous figures
- End of chapter notes on further reading
- Ideal for students and researchers in Statistics, and experimentalists in Medical, Pharmaceutical and Chemical Industries
- Supporting website with SAS program codes, problems and solutions

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Experiments on patients, processes or plants all have random error, making methods essential for their efficient design and analysis. This book presents and explains the methods of optimum experimental design, making them available through the use of SAS, so providing a practical guide to their efficient implementation. The book stresses the importance of models in the analysis of data and introduces least squares fitting and simple optimum experimental designs. The second part presents a more detailed discussion of the general theory and of a wide variety of designs, blocking of experiments, designs for mixture experiments and generalized linear models. Understanding is aided by the provision of "SAS tasks" after most chapters as well as by more traditional exercises and a fully supported website.

There is an alternative edition

Readership: Students and researchers in statistics, and experimentalists in the medical, pharmaceutical and chemical industries.

Contents

- Numerical figures
- End of chapter notes on further reading
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Bibliography

Authors, editors, and contributors

Anthony Atkinson, London School of Economics,
Alexander Donev, School of Mathematics, University of Manchester, an
Randall Tobias, SAS Institute Inc.

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