1. Record Nr. UNINA9910823966303321 Autore Walschap Gerard Titolo Multivariable calculus and differential geometry / / Gerard Walschap Pubbl/distr/stampa Berlin, Germany;; Boston, Massachusetts:,: De Gruyter,, 2015 ©2015 **ISBN** 3-11-039279-8 Descrizione fisica 1 online resource (366 p.) Collana De Gruyter Textbook Disciplina 515 Soggetti Calculus Mathematical analysis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Includes index. Note generali Nota di contenuto Front matter -- Preface -- Contents -- 1. Euclidean Space -- 2. Differentiation -- 3. Manifolds -- 4. Integration on Euclidean space --5. Differential Forms -- 6. Manifolds as metric spaces -- 7. Hypersurfaces -- Appendix A -- Appendix B -- Index This book offers an introduction to differential geometry for the non-Sommario/riassunto specialist. It includes most of the required material from multivariable calculus, linear algebra, and basic analysis. An intuitive approach and a minimum of prerequisites make it a valuable companion for students of mathematics and physics. The main focus is on manifolds in Euclidean space and the metric properties they inherit from it. Among the topics discussed are curvature and how it affects the shape of space, and the generalization of the fundamental theorem of calculus known as

Stokes' theorem.

2. Record Nr. UNINA9911019667803321 Autore Federer Walter Theodore <1915-> Titolo Variations on split plot and split block experiment designs // Walter T. Federer, Freedom King Hoboken, N.J., : Wiley-Interscience, 2007 Pubbl/distr/stampa **ISBN** 9786610721863 9781280721861 1280721863 9780470108581 0470108584 9780470108574 0470108576 Descrizione fisica 1 online resource (286 p.) Collana Wiley series in probability and statistics Altri autori (Persone) KingFreedom <1955-> Disciplina 519.5/7 Soggetti Experimental design Blocks (Group theory) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Variations on Split Plot and Split Block Experiment Designs; Contents; Preface; Chapter 1. The standard split plot experiment design; 1.1. Introduction; 1.2. Statistical design; 1.3. Examples of split-plotdesigned experiments; 1.4. Analysis of variance; 1.5. F-tests; 1.6. Standard errors for means and differences between means; 1.7. Numerical examples: 1.8. Multiple comparisons of means: 1.9. One replicate of a split plot experiment design and missing observations: 1.10. Nature of experimental variation; 1.11. Repeated measures experiments; 1.12. Precision of contrasts; 1.13. Problems 1.14. ReferencesAppendix 1.1. Example 1.1 code; Appendix 1.2. Example 1.2 code; Chapter 2. Standard split block experiment design; 2.1. Introduction; 2.2. Examples; 2.3. Analysis of variance; 2.4. F-tests; 2.5. Standard errors for contrasts of effects; 2.6. Numerical examples;

2.7. Multiple comparisons; 2.8. One replicate of a split block design; 2.9. Precision; 2.10. Comments; 2.11. Problems; 2.12. References; Appendix 2.1. Example 2.1 code; Appendix 2.2. Example 2.2 code;

Appendix 2.3. Problems 2.1 and 2.2 data; Chapter 3. Variations of the split plot experiment design; 3.1. Introduction 3.2. Split split plot experiment design 3.3. Split split split plot experiment design; 3.4. Whole plots not in a factorial arrangement; 3.5. Split plot treatments in an incomplete block experiment design within each whole plot; 3.6. Split plot treatments in a row-column arrangement within each whole plot treatment and in different whole plot treatments; 3.7. Whole plots in a systematic arrangement; 3.8. Split plots in a systematic arrangement; 3.9. Characters or responses as split plot treatments; 3.10. Observational or experimental error? 3.11. Time as a discrete factor rather than as a continuous factor 3.12. Inappropriate model?; 3.13. Complete confounding of some effects and split plot experiment designs; 3.14. Comments; 3.15. Problems; 3.16. References; Appendix 3.1. Table 3.1 code and data; Chapter 4. Variations of the split block experiment design; 4.1. Introduction; 4.2. One set of treatments in a randomized complete block and the other in a Latin square experiment design; 4.3. Both sets of treatments in split block arrangements; 4.4. Split block split block or strip strip block experiment design

- 4.5. One set of treatments in an incomplete block design and the second set in a randomized complete block design4.6. An experiment design split blocked across the entire experiment; 4.7. Confounding in a factorial treatment design and in a split block experiment design; 4.8. Split block experiment design with a control; 4.9. Comments; 4.10. Problems; 4.11. References; Appendix 4.1. Example 4.1 code; Chapter 5. Combinations of SPEDs and SBEDs; 5.1. Introduction; 5.2. Factors A and B in a split block experiment design and factor C in a split plot arrangement to factors A and B
- 5.3. Factor A treatments are the whole plot treatments and factors B and C treatments are in a split block arrangement within each whole plot

Sommario/riassunto

A complete and up-to-date discussion of optimal split plot and split block designs Variations on Split Plot and Split Block Experiment Designs provides a comprehensive treatment of the design and analysis of two types of trials that are extremely popular in practice and play an integral part in the screening of applied experimental designs--split plot and split block experiments. Illustrated with numerous examples, this book presents a theoretical background and provides two and three error terms, a thorough review of the recent work in the area of split plot and split blocked experimen