Record Nr. UNINA9910783914903321 Autore Rogers Alice (Frances Alice) Titolo Supermanifolds [[electronic resource]]: theory and applications // Alice Rogers Singapore; ; Hackensack, NJ, : World Scientific, c2007 Pubbl/distr/stampa **ISBN** 1-281-12072-3 9786611120726 981-270-885-5 Descrizione fisica 1 online resource (262 p.) Disciplina 514.223 Soggetti Supermanifolds (Mathematics) Differentiable manifolds Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Includes bibliography (p. 239-248) and index. Nota di bibliografia Nota di contenuto Preface; Contents; 1. Introduction; 2. Super algebras; 3. Superspace; 4. Functions of anticommuting variables; 5. Supermanifolds: The concrete approach; 6. Functions and vector fields; 7. Supermanifolds: The algebro-geometric approach; 8. The structure of supermanifolds; 9. Super Lie groups; 10. Tensors and forms; 11. Integration on supermanifolds; 12. Geometric structures on supermanifolds; 13. Supermanifolds and supersymmetric theories: 14. Super Riemann surfaces; 15. Path integrals on supermanifolds; 16. Supermanifolds and BRST quantization; 17. Supermanifolds and geometry Appendix A. NotationBibliography; Index This book aims to fill the gap in the available literature on Sommario/riassunto supermanifolds, describing the different approaches to supermanifolds together with various applications to physics, including some which rely on the more mathematical aspects of supermanifold theory. The first part of the book contains a full introduction to the theory of supermanifolds, comparing and contrasting the different approaches

that exist. Topics covered include tensors on supermanifolds, super fibre bundles, super Lie groups and integration theory. Later chapters

emphasise applications, including the superspace approach