1. Record Nr. UNINA9910151929103321 Autore Carmeli Claudio Titolo Mathematical Foundations of Supersymmetry [[electronic resource] /] / Claudio Carmeli, Lauren Caston, Rita Fioresi Pubbl/distr/stampa Zuerich, Switzerland, : European Mathematical Society Publishing House, 2011 Zurich, Switzerland: ,: European Mathematical Society Publishing House, , [2011] **ISBN** 9783037195970 (electronic book) 3-03719-597-5 Descrizione fisica 1 online resource (300 pages) Collana EMS Series of Lectures in Mathematics (ELM); , 2523-5176 EMS series of lectures in mathematics Classificazione 58-xx14-xx17-xx32-xx Altri autori (Persone) CastonLauren FioresiRita, 1966-Soggetti Supersymmetry Supermanifolds (Mathematics) Lie superalgebras Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico

Sommario/riassunto

Supersymmetry is a highly active area of considerable interest among physicists and mathematicians. It is not only fascinating in its own right, but there is also indication that it plays a fundamental role in the physics of elementary particles and gravitation. The purpose of the book is to lay down the foundations of the subject, providing the reader with a comprehensive introduction to the language and techniques, with a special attention to giving detailed proofs and many clarifying examples. It is aimed ideally at a second year graduate student. After the first three introductory chapters, the text divides into two parts: the theory of smooth supermanifolds and Lie supergroups, including the Frobenius theorem, and the theory of algebraic superschemes and supergroups. There are three appendices, the first introducing Lie superalgebras and representations of classical Lie superalgebras, the second collecting some relevant facts on categories,

sheafification of functors and commutative algebra, and the third explaining the notion of Frechet space in the super context.