Record Nr. UNINA9910451464003321 Autore Binetruy P Titolo Supersymmetry [[electronic resource]]: theory, experiment, and cosmology / / P. Binetruy Oxford: New York,: Oxford University Press, 2006 Pubbl/distr/stampa **ISBN** 1-280-75889-9 9786610758890 0-19-152325-9 1-4294-5988-3 Descrizione fisica 1 online resource (533 p.) Collana Oxford Graduate Texts 539.7/25 Disciplina Soggetti Supersymmetry Quantum theory Electronic books. 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 Contents: Introduction: 1 The problems of the Standard Model: 2 The singular role of supersymmetry; 3 Basic supermultiplets; 4 The supersymmetry algebra and its representations; 5 The minimal supersymmetric model: 6 Supergravity: 7 Phenomenology of supersymmetric models: supersymmetry at the quantum level; 8 Dynamical breaking. Duality; 9 Supersymmetric grand unification; 10 An overview of string theory and string models; 11 Supersymmetry and the early Universe; 12 The challenges of supersymmetry; Appendix A: A review of the Standard Model and of various notions of quantum field theory Appendix B: SpinorsAppendix C: Superfields; Appendix D: An introduction to cosmology; Appendix E: Renormalization group equations; Bibliography; Index A general graduate level presentation of supersymmetry, a symmetry Sommario/riassunto which plays a central role in the theory of elementary particles. Useful for graduate students who want to specialize in high energy experimental or theoretical physics, high energy astrophysics or

cosmology. - ;This book describes the basic concepts of

supersymmetric theories. It is aimed at theorists, experimentalists and cosmologists interested in supersymmetry, and its content is correspondingly divided into three distinct tracks of study. The topics covered include a discussion of the motivation for supersymmetry in fundam