Record Nr. UNINA9910300376603321 Breaking of Supersymmetry and Ultraviolet Divergences in Extended **Titolo** Supergravity: Proceedings of the INFN-Laboratori Nazionali di Frascati School 2013 / / edited by Stefano Bellucci Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2014 **ISBN** 3-319-03774-9 Edizione [1st ed. 2014.] 1 online resource (250 p.) Descrizione fisica Springer Proceedings in Physics, , 0930-8989;; 153 Collana 530.1 Disciplina Soggetti Quantum field theory String theory Elementary particles (Physics) Quantum physics Mathematical physics Gravitation Quantum Field Theories, String Theory Elementary Particles, Quantum Field Theory **Quantum Physics** Mathematical Physics Classical and Quantum Gravitation, Relativity 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. Nota di contenuto Superconformal Symmetry and Higher-Derivative Lagrangians --Constitutive relations, o_ shell duality rotations and the hypergeometric form of Born-Infeld theory -- Vector Branes -- Pure spinor superfields — an overview -- Loop amplitude diagrams in manifest, maximal supergravity -- Perturbative Ultraviolet Calculations in Supergravity --Scalars with higher derivatives in supergravity and cosmology -- The leading eikonal operator in string-brane scattering at high energy --Ghost Condensation in N = 1 Supergravity -- Thermodynamic

curvature and black holes.

Sommario/riassunto

This is the seventh volume in a series on the general topics of

supersymmetry, supergravity, black objects (including black holes), and the attractor mechanism. The present volume is based on lectures held in March 2013 at the INFN-Laboratori Nazionali di Frascati during the Breaking of supersymmetry and Ultraviolet Divergences in extended Supergravity Workshop (BUDS 2013), organized by Stefano Bellucci, with the participation of prestigious speakers including P. Aschieri, E. Bergshoeff, M. Cederwall, T. Dennen, P. Di Vecchia, S. Ferrara, R. Kallosh, A. Karlsson, M. Koehn, B. Ovrut, A. Van Proeyen, G. Ruppeiner. Special attention is devoted to discussing topics related to the cancellation of ultraviolet divergences in extended supergravity and Born-Infeld-like actions. All talks were followed by extensive discussions and subsequent reworking of the various contributions, a feature which is reflected in the unique "flavor" of this volume.