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   Collana   Cambridge monographs on mathematical physics

   Disciplina   539.721

   Soggetti   Regge theory
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   Nota di bibliografia   Includes bibliographical references and index.

   Nota di contenuto   Preface; 1. The scattering matrix; 2. The complex angular-momentum
                            plane; 3. Some models containing Regge poles; 4. Spin; 5. Regge
                            trajectories and resonances; 6. Introduction; 7. Duality; 8. Regge cuts;
                            9. Multi-Regge theory; 10. Inclusive processes; 11. Regge models for
                            many-particle cross-sections; 12. Regge poles, elementary particles
                            and weak interactions; Appendices; References; Index.

   Sommario/riassunto   This book presents an extended introduction to the theory of hadrons,
                            the elementary particles that occur in the atomic nucleus. The main
                            emphasis is on the theory of the complex angular momentum plane
                            'Regge theory'. In 1959 Tullio Regge demonstrated that it is useful to
                            regard angular momentum as a complex variable when discussing
                            solutions of the Schrodinger equation for non-relativistic potential
                            scattering. This theory helps to classify the many different particles we
                            know of, to explain the forces between them and to predict the results
                            of high-energy scattering experiments. Regge theory thus serves as a
                            unifying concept drawing together many different features of high-
                            energy physics. This monograph is intended primarily for research
                            students just beginning in particle physics, but experienced
                            practitioners will also find much of interest. Originally published in
                            1977, this title has been reissued as an Open Access publication on
                            Cambridge Core.