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Nota di contenuto	; Part I. Overview: ; 1. Introduction and synopsis; ; 2. Rise and fall of the hadronic string / Gabriele Veneziano; ; 3. Gravity, unification, and the superstring / John H. Schwarz; ; 4. Early string theory as a challenging case study for philosophers / Elena Castellani -- ; Part II. The Prehistory: The Analytic S-Matrix: ; 5. Introduction to Part II; ; 6. Particle theory in the sixties: from current algebra to the Veneziano amplitude / Marc Ademollo; ; 7. The path to the Veneziano model / Hector R. Rubinstein; ; 8. Two-component duality and strings / Peter G.O. Freund; ; 9. Note on the prehistory of string theory / Murray Gell-Mann -- ; Part III. The Dual Resonance Model: ; 10. Introduction to Part III; ; 11. From the S-matrix to string theory / Paolo Di Vecchia; ; 12. Reminiscence on the birth of string theory / Joel A. Shapiro; ; 13. Personal recollections / Daniele Amati; ; 14. Early string theory at Fermilab and Rutgers / Louis Clavelli; ; 15. Dual amplitudes in higher

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Sommario/riassunto

String theory is currently the best candidate for a unified theory of all forces and all forms of matter in nature. As such, it has become a focal point for physical and philosophical discussions. This unique book explores the history of the theory's early stages of development, as told by its main protagonists. The book journeys from the first version of the theory (the so-called dual resonance model) in the late sixties, as an attempt to describe the physics of strong interactions outside the framework of quantum field theory, to its reinterpretation around the mid-seventies as a quantum theory of gravity unified with the other forces, and its successive developments up to the superstring revolution in 1984. Providing important background information to current debates on the theory, this book is essential reading for students and researchers in physics, as well as historians and philosophers of science.
