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Nota di contenuto	Preface -- Introduction -- 1.Athanase Papadopoulos: Looking backward: From Euler to Riemann -- 2.Jeremey Gray: Riemann on geometry, physics, and philosophy – some remarks -- 3.Hubert Goenner: Some remarks on a contribution to electrodynamics by Bernhard Riemann -- 4.Christian Houzel: Riemann's Memoir Über das Verschwinden der Theta-Functionen -- 5.Sumio Yamada: Riemann's work on minimal surfaces -- 6. Athanase Papadopoulos: Physics in Riemann's mathematical papers -- 7.Athanase Papadopoulos: Cauchy and Puiseux: Two precursors of Riemann -- 8.Athanase Papadopoulos: Riemann surfaces: Reception by the French school -- 9. Ken'ichi Ohshika: The origin of the notion of manifold: from Riemann's Habilitationsvortrag onward -- 10.Franck Jedrzejewski: Deleuze et la géométrie riemannienne : une topologie des multiplicités -- 11.Arkady Plotnitsky: Comprehending the Connection of Things: Bernhard Riemann and the Architecture of Mathematical Concepts -- 12.Feng Luo: The Riemann mapping theorem and its discrete counterparts -- 13.Norbert A'Campo, Vincent Alberge and Elena Frenkel: The Riemann–Roch theorem -- 14.Victor Pambuccian, Horst Struve and Rolf

Struve: Metric geometries in an axiomatic perspective -- 15. Toshikazu Sunada: Generalized Riemann sums -- 16. Jacques Franchi: From Riemannian to Relativistic Diffusions -- 17. Andreas Hermann and Emmanuel Humbert: On the Positive Mass Theorem for closed Riemannian manifolds -- 18. Marc Mars: On local characterization results in geometry and gravitation -- 19. Jean-Philippe Nicolas: The conformal approach to asymptotic analysis -- 20. Lizhen Ji: Bernhard Riemann and his work.

Sommario/riassunto

This book explores the work of Bernhard Riemann and its impact on mathematics, philosophy and physics. It features contributions from a range of fields, historical expositions, and selected research articles that were motivated by Riemann's ideas and demonstrate their timelessness. The editors are convinced of the tremendous value of going into Riemann's work in depth, investigating his original ideas, integrating them into a broader perspective, and establishing ties with modern science and philosophy. Accordingly, the contributors to this volume are mathematicians, physicists, philosophers and historians of science. The book offers a unique resource for students and researchers in the fields of mathematics, physics and philosophy, historians of science, and more generally to a wide range of readers interested in the history of ideas.
