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Titolo	Exploring the Riemann Zeta Function : 190 years from Riemann's Birth / / edited by Hugh Montgomery, Ashkan Nikeghbali, Michael Th. Rassias
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Disciplina	512.7
Soggetti	Number theory Algebraic geometry Functions of complex variables Dynamics Ergodic theory Difference equations Functional equations Harmonic analysis Number Theory Algebraic Geometry Functions of a Complex Variable Dynamical Systems and Ergodic Theory Difference and Functional Equations Abstract Harmonic Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface (Dyson) -- 1. An introduction to Riemann's life, his mathematics, and his work on the zeta function (R. Baker) -- 2. Ramanujan's formula for zeta (2n+1) (B.C. Berndt, A. Straub) -- 3. Towards a fractal cohomology: Spectra of Polya-Hilbert operators, regularized determinants, and Riemann zeros (T. Cobler, M.L. Lapidus) -- The Temptation of the Exceptional Characters (J.B. Friedlander, H. Iwaniec) -- 4. The Temptation of the Exceptional Characters (J.B. Friedlander, H. Iwaniec) -- 5. Arthur's truncated Eisenstein series for SL

(2,Z) and the Riemann Zeta Function, A Survey (D. Goldfield) -- 6. On a Cubic moment of Hardy's function with a shift (A. Ivic) -- 7. Some analogues of pair correlation of Zeta Zeros (Y. Karabulut, C.Y. Yldrm) -- 8. Bagchi's Theorem for families of automorphic forms (E. Kowalski) -- 9. The Liouville function and the Riemann hypothesis (M.J. Mossinghoff, T.S. Trudgian) -- 10. Explorations in the theory of partition zeta functions (K. Ono, L. Rolen, R. Schneider) -- 11. Reading Riemann (S.J. Patterson) -- 12. A Taniyama product for the Riemann zeta function (D.E. Rohrlich).

Sommario/riassunto

This book is concerned with the Riemann Zeta Function, its generalizations, and various applications to several scientific disciplines, including Analytic Number Theory, Harmonic Analysis, Complex Analysis and Probability Theory. Eminent experts in the field illustrate both old and new results towards the solution of long-standing problems and include key historical remarks. Offering a unified, self-contained treatment of broad and deep areas of research, this book will be an excellent tool for researchers and graduate students working in Mathematics, Mathematical Physics, Engineering and Cryptography.