Record Nr. UNISALENTO991003636349707536 Autore Roquette, Peter Titolo The Riemann hypothesis in characteristic p in historical perspective [ebook] / Peter Roquette **ISBN** 3319990675 9783319990675 3319990667 9783319990668 Descrizione fisica 1 online resource (ix, 235 p. 15 illus.) Collana Lecture notes in mathematics, 2193-1771; 2222 Classificazione AMS 11M26 AMS 01A60 AMS 11R58 AMS 14H05 LC QA3.L28 Disciplina 510.9 Soggetti Number theory Riemann hypothesis Characteristic functions Algebraic fields Lingua di pubblicazione Inglese Formato Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index Nota di contenuto Preface -- Overture -- Setting the stage -- The Beginning: Artin's Thesis -- Building the Foundations -- Enter Hasse. - Diophantine Congruences. - Elliptic Function Fields. - More on Elliptic Fields. -Towards Higher Genus. - A Virtual Proof. - Intermission. - A.Weil. -Appendix. - References. - Index This book tells the story of the Riemann hypothesis for function fields Sommario/riassunto (or curves) starting with Artin's 1921 thesis, covering Hasse's work in the 1930s on elliptic fields and more, and concluding with Weil's final proof in 1948. The main sources are letters which were exchanged among the protagonists during that time, found in various archives, mostly the University Library in Göttingen. The aim is to show how the

ideas formed, and how the proper notions and proofs were found,

providing a particularly well-documented illustration of how mathematics develops in general. The book is written for mathematicians, but it does not require any special knowledge of particular mathematical fields