1. Record Nr. UNINA9910300138803321 Autore Roquette Peter Titolo The Riemann Hypothesis in Characteristic p in Historical Perspective // by Peter Roquette Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-99067-5 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (IX, 235 p. 15 illus.) Collana History of Mathematics Subseries, , 2193-1771;; 2222 Disciplina 512.73 Soggetti Mathematics History Number theory History of Mathematical Sciences **Number Theory** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia - Overture -- Setting the stage -- The Beginning: Artin's Thesis --Nota di contenuto 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.