



Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics)

By J. W.P. Hirschfeld, G. Korchmáros, F. Torres

Download now

Read Online ➔

Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) By J. W.P. Hirschfeld, G. Korchmáros, F. Torres

This book provides an accessible and self-contained introduction to the theory of algebraic curves over a finite field, a subject that has been of fundamental importance to mathematics for many years and that has essential applications in areas such as finite geometry, number theory, error-correcting codes, and cryptology. Unlike other books, this one emphasizes the algebraic geometry rather than the function field approach to algebraic curves.

The authors begin by developing the general theory of curves over any field, highlighting peculiarities occurring for positive characteristic and requiring of the reader only basic knowledge of algebra and geometry. The special properties that a curve over a finite field can have are then discussed. The geometrical theory of linear series is used to find estimates for the number of rational points on a curve, following the theory of Stöhr and Voloch. The approach of Hasse and Weil via zeta functions is explained, and then attention turns to more advanced results: a state-of-the-art introduction to maximal curves over finite fields is provided; a comprehensive account is given of the automorphism group of a curve; and some applications to coding theory and finite geometry are described. The book includes many examples and exercises. It is an indispensable resource for researchers and the ideal textbook for graduate students.

↓ [Download Algebraic Curves over a Finite Field \(Princeton Se ...pdf](#)

📖 [Read Online Algebraic Curves over a Finite Field \(Princeton ...pdf](#)

Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics)

By J. W.P. Hirschfeld, G. Korchmáros, F. Torres

Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) By J. W.P. Hirschfeld, G. Korchmáros, F. Torres

This book provides an accessible and self-contained introduction to the theory of algebraic curves over a finite field, a subject that has been of fundamental importance to mathematics for many years and that has essential applications in areas such as finite geometry, number theory, error-correcting codes, and cryptology. Unlike other books, this one emphasizes the algebraic geometry rather than the function field approach to algebraic curves.

The authors begin by developing the general theory of curves over any field, highlighting peculiarities occurring for positive characteristic and requiring of the reader only basic knowledge of algebra and geometry. The special properties that a curve over a finite field can have are then discussed. The geometrical theory of linear series is used to find estimates for the number of rational points on a curve, following the theory of Stöhr and Voloch. The approach of Hasse and Weil via zeta functions is explained, and then attention turns to more advanced results: a state-of-the-art introduction to maximal curves over finite fields is provided; a comprehensive account is given of the automorphism group of a curve; and some applications to coding theory and finite geometry are described. The book includes many examples and exercises. It is an indispensable resource for researchers and the ideal textbook for graduate students.

Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) By J. W.P. Hirschfeld, G. Korchmáros, F. Torres **Bibliography**

- Sales Rank: #3166525 in Books
- Brand: Brand: Princeton University Press
- Published on: 2008-03-23
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x 1.50" w x 6.14" l, 3.51 pounds
- Binding: Hardcover
- 744 pages

 [Download Algebraic Curves over a Finite Field \(Princeton Se ...pdf](#)

 [Read Online Algebraic Curves over a Finite Field \(Princeton ...pdf](#)

Editorial Review

Users Review

From reader reviews:

Frances Small:

Why don't make it to be your habit? Right now, try to ready your time to do the important action, like looking for your favorite publication and reading a publication. Beside you can solve your long lasting problem; you can add your knowledge by the book entitled Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics). Try to face the book Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) as your friend. It means that it can to get your friend when you truly feel alone and beside that of course make you smarter than in the past. Yeah, it is very fortunated to suit your needs. The book makes you far more confidence because you can know every little thing by the book. So , we need to make new experience and knowledge with this book.

Robert Hollinger:

The book Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) gives you the sense of being enjoy for your spare time. You can utilize to make your capable much more increase. Book can to get your best friend when you getting strain or having big problem with the subject. If you can make studying a book Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) for being your habit, you can get considerably more advantages, like add your own personal capable, increase your knowledge about a few or all subjects. You are able to know everything if you like start and read a book Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics). Kinds of book are several. It means that, science publication or encyclopedia or other people. So , how do you think about this reserve?

Maranda Shoemaker:

This Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) book is not really ordinary book, you have it then the world is in your hands. The benefit you have by reading this book will be information inside this publication incredible fresh, you will get details which is getting deeper you actually read a lot of information you will get. That Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) without we recognize teach the one who reading through it become critical in imagining and analyzing. Don't always be worry Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) can bring whenever you are and not make your tote space or bookshelves' come to be full because you can have it in your lovely laptop even phone. This Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) having fine arrangement in word in addition to layout, so you will not experience uninterested in reading.

Sophia Hardee:

Reading a book to get new life style in this year; every people loves to go through a book. When you go through a book you can get a wide range of benefit. When you read ebooks, you can improve your knowledge, since book has a lot of information onto it. The information that you will get depend on what kinds of book that you have read. If you need to get information about your review, you can read education books, but if you want to entertain yourself look for a fiction books, such us novel, comics, and also soon. The Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) will give you new experience in examining a book.

**Download and Read Online Algebraic Curves over a Finite Field
(Princeton Series in Applied Mathematics) By J. W.P. Hirschfeld,
G. Korchmáros, F. Torres #HF89TGU17J5**

Read Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) By J. W.P. Hirschfeld, G. Korchmáros, F. Torres for online ebook

Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) By J. W.P. Hirschfeld, G. Korchmáros, F. Torres Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) By J. W.P. Hirschfeld, G. Korchmáros, F. Torres books to read online.

Online Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) By J. W.P. Hirschfeld, G. Korchmáros, F. Torres ebook PDF download

Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) By J. W.P. Hirschfeld, G. Korchmáros, F. Torres Doc

Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) By J. W.P. Hirschfeld, G. Korchmáros, F. Torres Mobipocket

Algebraic Curves over a Finite Field (Princeton Series in Applied Mathematics) By J. W.P. Hirschfeld, G. Korchmáros, F. Torres EPub