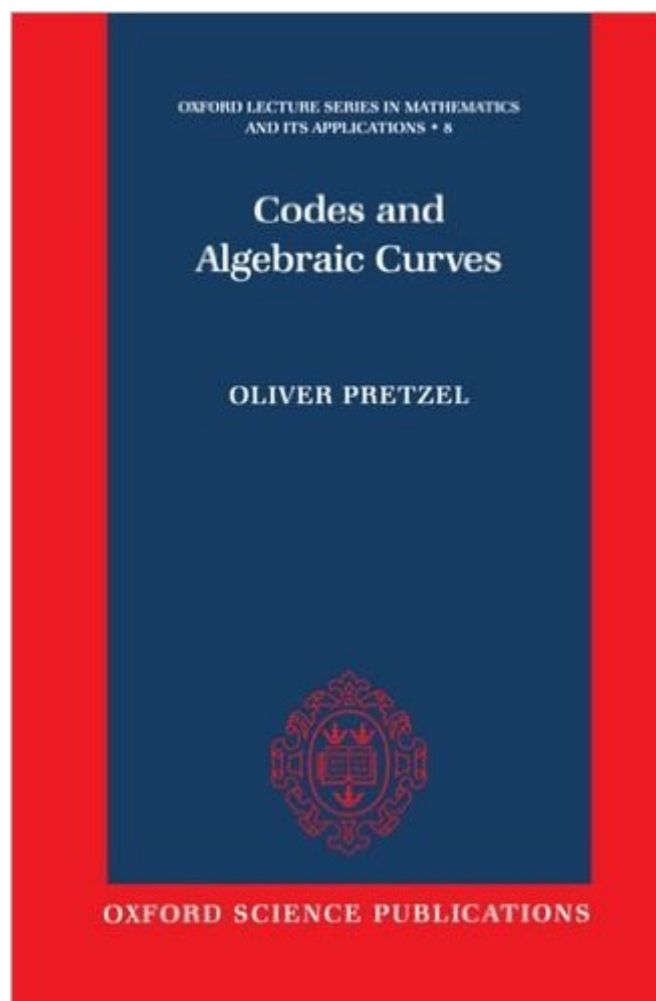


The book was found

# Codes And Algebraic Curves (Oxford Lecture Series In Mathematics And Its Applications)



## Synopsis

A fascinating branch of mathematics since antiquity, the geometry of curves has been extensively developed and become highly abstract. Recently links have been made with the subject of error correction, leading to the creation of geometric Goppa codes, a new and important area of coding theory. This book is an expanded and updated version of one part of the author's successful book *Error-Correcting Codes and Finite Fields*. Here he gives an elementary introduction to Goppa codes and includes many examples, calculations, and applications. The first part of the book emphasizes motivations, giving precedence to applications over proofs. The second part then provides the formal theory, with some concepts and proofs simplified without sacrificing rigor.

## Book Information

Series: Oxford Lecture Series in Mathematics and Its Applications (Book 8)

Hardcover: 208 pages

Publisher: Clarendon Press; 1 edition (March 5, 1998)

Language: English

ISBN-10: 0198500394

ISBN-13: 978-0198500391

Product Dimensions: 6.3 x 0.7 x 9.3 inches

Shipping Weight: 13.6 ounces (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars [See all reviews](#) (1 customer review)

Best Sellers Rank: #5,909,698 in Books (See Top 100 in Books) #76 in [Books > Computers & Technology > Programming > Software Design, Testing & Engineering > Coding Theory](#) #1190 in [Books > Science & Math > Mathematics > Geometry & Topology > Algebraic Geometry](#) #1654 in [Books > Computers & Technology > Computer Science > Information Theory](#)

## Customer Reviews

This is the best book I've seen explaining Goppa codes and their mathematical background. The explanation of algebraic curves is much easier to follow than the other two books I know of on this topic, "Algebraic Function Fields and Codes" by Stichtenoth and "Algebraic Curves over Finite Fields" by Moreno. In fact, even if you aren't especially interested in Goppa codes, this would be a good book from which to learn the basics of algebraic curves. The book has one of the few treatments of algebraic curves that explains them first concretely as zeros of a polynomial  $f(x,y)$ , and then more abstractly as a function field, a finite extension of  $K(x)$ .

[Download to continue reading...](#)

Codes and Algebraic Curves (Oxford Lecture Series in Mathematics and Its Applications) Codes on Algebraic Curves Geometry and Codes (Mathematics and its Applications) Applications of Finite Fields (Institute of Mathematics and its Applications Conference Series, New Series) Error-Correcting Codes and Finite Fields. Student Edition (Oxford Applied Mathematics and Computing Science Series) Error-Correcting Codes and Finite Fields (Oxford Applied Mathematics and Computing Science Series) LISP, Lore, and Logic: An Algebraic View of LISP Programming, Foundations, and Applications Cryptography and Coding (The Institute of Mathematics and its Applications Conference Series, New Series) Secrets of Making and Breaking Codes: A Hands-on Guide to Both Simple and Sophisticated Codes to Easily Help You Become a Codemaster Black & Decker Codes for Homeowners, Updated 3rd Edition: Electrical - Mechanical - Plumbing - Building - Current with 2015-2017 Codes (Black & Decker Complete Guide) Error Correcting Codes: A Mathematical Introduction (Chapman Hall/CRC Mathematics Series) Quaternary Codes (Series on Applied Mathematics) The Theory of Information and Coding (Encyclopedia of Mathematics and its Applications No. 86) Fundamentals of Information Theory and Coding Design (Discrete Mathematics and Its Applications) RSA and Public-Key Cryptography (Discrete Mathematics and Its Applications) Mathematical Physics of Quantum Wires and Devices: From Spectral Resonances to Anderson Localization (Mathematics and Its Applications) An Introduction to Cryptography (Discrete Mathematics and Its Applications) Theory of Information Coding (Encyclopedia of Mathematics and its Applications) A Practical Handbook of Speech Coders (Discrete Mathematics and Its Applications) Introduction to Coding Theory and Algebraic Geometry (Oberwolfach Seminars)

[Dmca](#)