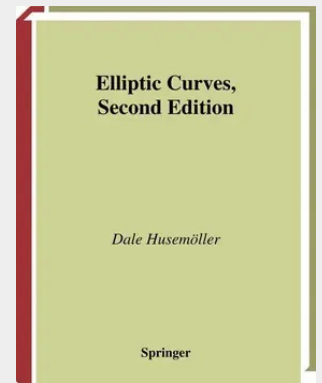


Elliptic Curves

There are three new appendices, one by Stefan Theisen on the role of Calabi–Yau manifolds in string theory and one by Otto Forster on the use of elliptic curves in computing theory and coding theory. In the third appendix we discuss the role of elliptic curves in homotopy theory. In these three introductions the reader can get a clue to the far-reaching implications of the theory of elliptic curves in mathematical sciences. During the final production of this edition, the ICM 2002 manuscript of Mike Hopkins became available. This report outlines the role of elliptic curves in homotopy theory. Elliptic curves appear in the form of the Weierstrass equation and its related changes of variable. The equations and the changes of variable are coded in an algebraic structure called a Hopf algebroid, and this Hopf algebroid is related to a cohomology theory called topological modular forms. Hopkins and his coworkers have used this theory in several directions, one being the explanation of elements in stable homotopy up to degree 60. In the third appendix we explain how what we described in Chapter 3 leads to the Weierstrass Hopf algebroid making a link with Hopkins' paper.

This book is an introduction to the theory of elliptic curves, ranging from its most elementary aspects to current research. This manuscript grew out of Tate's Haverford Lectures. For the second edition, the author has written three new chapters and there are also two new appendices which were written by S. Theisen and O. Forster.



69,54 €

64,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9781441930255

Medium: Buch

ISBN: 978-1-4419-3025-5

Verlag: Springer

Erscheinungstermin: 19.11.2010

Sprache(n): Englisch

Auflage: 2. Auflage 2004

Serie: Graduate Texts in Mathematics

Produktform: Kartoniert

Gewicht: 774 g

Seiten: 490

Format (B x H): 155 x 235 mm

