

1. Record Nr.	UNINA9910462590303321
Autore	Decker W.
Titolo	A first course in computational algebraic geometry // Wolfram Decker and Gerhard Pfister ; with pictures by Oliver Labs [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2013
ISBN	1-107-23864-1 1-139-56576-1 1-107-25588-0 1-107-30195-5 1-107-30704-X 1-107-31259-0 1-299-00635-3 1-107-31479-8 1-107-30924-7
Descrizione fisica	1 online resource (viii, 118 pages) : digital, PDF file(s)
Collana	AIMS library series
Disciplina	516.3/5
Soggetti	Geometry, Algebraic - Data processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Contents; Preface; Prologue: General Remarks on Computer Algebra Systems; 1 The Geometry-Algebra Dictionary; 1.1 Affine Algebraic Geometry; 1.1.1 Ideals in Polynomial Rings; 1.1.2 Affine Algebraic Sets; 1.1.3 Hilbert's Nullstellensatz; 1.1.4 Irreducible Algebraic Sets; 1.1.5 Removing Algebraic Sets; 1.1.6 Polynomial Maps; 1.1.7 The Geometry of Elimination; 1.1.8 Noether Normalization and Dimension; 1.1.9 Local Studies; 1.2 Projective Algebraic Geometry; 1.2.1 The Projective Space; 1.2.2 Projective Algebraic Sets; 1.2.3 Affine Charts and the Projective Closure 1.2.4 The Hilbert Polynomial 2 Computing; 2.1 Standard Bases and Singular; 2.2 Applications; 2.2.1 Ideal Membership; 2.2.2 Elimination; 2.2.3 Radical Membership; 2.2.4 Ideal Intersections; 2.2.5 Ideal Quotients; 2.2.6 Kernel of a Ring Map; 2.2.7 Integrality Criterion; 2.2.8 Noether Normalization; 2.2.9 Subalgebra Membership; 2.2.10 Homogenization; 2.3 Dimension and the Hilbert Function; 2.4 Primary

Decomposition and Radicals; 2.5 Buchberger's Algorithm and Field Extensions; 3 Sudoku; 4 A Problem in Group Theory Solved by Computer Algebra; 4.1 Finite Groups and Thompson's Theorem 4.2 Characterization of Finite Solvable GroupsBibliography; Index

Sommario/riassunto

A First Course in Computational Algebraic Geometry is designed for young students with some background in algebra who wish to perform their first experiments in computational geometry. Originating from a course taught at the African Institute for Mathematical Sciences, the book gives a compact presentation of the basic theory, with particular emphasis on explicit computational examples using the freely available computer algebra system, Singular. Readers will quickly gain the confidence to begin performing their own experiments.

2. Record Nr.

UNISA996214145503316

Titolo

Trama & texturas

Pubbl/distr/stampa

Madrid, : Trama Editorial, ©2006-

ISSN

2530-7282

Soggetti

Book industries and trade
Books and reading
Book industries and trade - Europe
Books and reading - Europe
Book industries and trade - Spain
Books and reading - Spain
Periodicals.
Europe
Spain

Lingua di pubblicazione

Spagnolo

Formato

Materiale a stampa

Livello bibliografico

Periodico

