

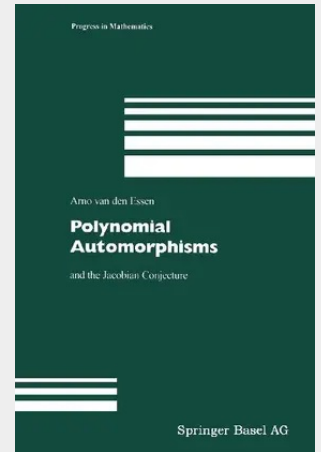
van den Essen

Polynomial Automorphisms

and the Jacobian Conjecture

Motivated by some notorious open problems, such as the Jacobian conjecture and the tame generators problem, the subject of polynomial automorphisms has become a rapidly growing field of interest. This book, the first in the field, collects many of the results scattered throughout the literature. It introduces the reader to a fascinating subject and brings him to the forefront of research in this area. Some of the topics treated are invertibility criteria, face polynomials, the tame generators problem, the cancellation problem, exotic spaces, DNA for polynomial automorphisms, the Abhyankar-Moh theorem, stabilization methods, dynamical systems, the Markus-Yamabe conjecture, group actions, Hilbert's 14th problem, various linearization problems and the Jacobian conjecture. The work is essentially self-contained and aimed at the level of beginning graduate students. Exercises are included at the end of each section. At the end of the book there are appendices to cover used material from algebra, algebraic geometry, D-modules and Gröbner basis theory. A long list of "strong" examples and an extensive bibliography conclude the book.

Motivated by some notorious open problems, such as the Jacobian conjecture and the tame generators problem, the subject of polynomial automorphisms has become a rapidly growing field of interest. This book, the first in the field, collects many of the results scattered throughout the literature. It introduces the reader to a fascinating subject and brings him to the forefront of research in this area. Some of the topics treated are invertibility criteria, face polynomials, the tame generators problem, the cancellation problem, exotic spaces, DNA for polynomial automorphisms, the Abhyankar-Moh theorem, stabilization methods, dynamical systems, the Markus-Yamabe conjecture, group actions, Hilbert's 14th problem, various linearization problems and the Jacobian conjecture. The work is essentially self-contained and aimed at the level of beginning graduate students. Exercises are included at the end of each section. At the end of the book there are appendices to cover used material from algebra, algebraic geometry, D-modules and Gröbner basis theory. A long list of "strong" examples and an extensive bibliography conclude the book.



128,39 €
119,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783034895675
Medium: Buch
ISBN: 978-3-0348-9567-5
Verlag: Birkhäuser
Erscheinungstermin: 24.10.2012
Sprache(n): Englisch
Auflage: Erscheinungsjahr 2012
Serie: Progress in Mathematics
Produktform: Kartoniert
Gewicht: 534 g
Seiten: 329
Format (B x H): 155 x 235 mm

