Marco Fontana, Sophie Frisch, Sarah Glaz (Eds.)

Commutative Algebra

Recent Advances in Commutative Rings, Integer-Valued Polynomials, and Polynomial Functions

- **Contributions cover the flourishing areas of commutative algebra, not yet well represented in published literature**
- **Contains 100 open problems supplied by the authors**
- **Provides a multi-dimensional survey of the recent development of the field and an extensive bibliography**

This volume presents a multi-dimensional collection of articles highlighting recent developments in commutative algebra. It also includes an extensive bibliography and lists a substantial number of open problems that point to future directions of research in the represented subfields. The contributions cover areas in commutative algebra that have flourished in the last few decades and are not yet well represented in book form. Highlighted topics and research methods include Noetherian and non- Noetherian ring theory as well as integer-valued polynomials and functions. Specific topics include: · Homological dimensions of Prüfer-like rings · Quasi complete rings · Total graphs of rings · Properties of prime ideals over various rings · Bases for integer-valued polynomials · Boolean subrings · The portable property of domains · Probabilistic topics in Intn(D) · Closure operations in Zariski-Riemann spaces of valuation domains · Stability of domains · Non-Noetherian grade · Homotopy in integer-valued polynomials · Localizations of global properties of rings · Topics in integral closure · Monoids and submonoids of domains The book includes twenty articles written by many of the most prominent researchers in the field. Most contributions are authored by attendees of the conference in commutative algebra held at the Graz University of Technology in December 2012. There is also a small collection of invited articles authored by those who did not attend the conference. Following the model of the Graz conference, the volume contains a number of comprehensive survey articles along with related research articles featuring recent results that have not yet been published elsewhere.

2014, VIII, 375 p. 20 illus.

Printed book

Hardcover

109,99 € | £99.99 | $139.99
[1]117,69 € (D) | 120,99 € (A) | CHF 130,00

Softcover

94,99 € | £85.50 | $129.00
[1]101,64 € (D) | 104,49 € (A) | CHF 126,62

eBook

80,24 € | £67.99 | $99.00
[2]80,24 € (D) | 80,24 € (A) | CHF 101,00

Available from your library or springer.com/shop

MyCopy [3]

Printed eBook for just

€ | $ 24.99

springer.com/mycopy

Part of **SPRINGER NATURE**