



# HINDUSTAN BOOK AGENCY

## ALGEBRAIC GEOMETRY II

David Mumford, *Brown University, Providence, RI*, and  
Tadao Oda, *Tohoku University, Japan*

Several generations of students of algebraic geometry have learned the subject from David Mumford's fabled "Red Book", which contains notes of his lectures at Harvard University. Their genesis and evolution are described by Mumford in the preface:

Initially, notes to the course were mimeographed and bound and sold by the Harvard mathematics department with a red cover. These old notes were picked up by Springer and are now sold as *The Red Book of Varieties and Schemes*. However, every time I taught the course, the content changed and grew. I had aimed to eventually publish more polished notes in three volumes...

This book contains what Mumford had then intended to be Volume II. It covers the material in the "Red Book" in more depth, with several topics added. Mumford has revised the notes in collaboration with Tadao Oda.

The book is a sequel to *Algebraic Geometry I*, published by Springer-Verlag in 1976.

**Hindustan Book Agency**; 2015; 516 pages; Hardcover; ISBN: 978-93-80250-80-9; List US\$76; AMS members US\$60.80; Order code HIN/70

## OPERATORS ON HILBERT SPACE

V. S. Sunder, *Institute of Mathematical Sciences, Chennai, India*

This book's principal goals are: (i) to present the spectral theorem as a statement on the existence of a unique continuous and measurable functional calculus, (ii) to present a proof without digressing into a course on the Gelfand theory of commutative Banach algebras, (iii) to introduce the reader to the basic facts concerning the various von Neumann-Schatten ideals, the compact operators, the trace-class operators and all bounded operators, and finally, (iv) to serve as a primer on the theory of bounded linear operators on separable Hilbert space.

**Hindustan Book Agency**; 2015; 110 pages; Softcover; ISBN: 978-93-80250-74-8; List US\$40; AMS members US\$32; Order code HIN/69

## PROBLEMS IN THE THEORY OF MODULAR FORMS

M. Ram Murty, Michael Dewar, and Hester Graves,  
*Queen's University, Kingston, Ontario, Canada*

This book introduces the reader to the fascinating world of modular forms through a problem-solving approach. As such, it can be used by undergraduate and graduate students for self-instruction. The topics covered include  $q$ -series, the modular group, the upper half-plane, modular forms of level one and higher level, the Ramanujan  $\tau$ -function, the Petersson inner product, Hecke operators, Dirichlet series attached to modular forms, and further special topics. It can be viewed as a gentle introduction for a deeper study of the subject. Thus, it is ideal for non-experts seeking an entry into the field.

**Hindustan Book Agency**; 2015; 310 pages; Softcover; ISBN: 978-93-80250-72-4; List US\$58; AMS members US\$46.40; Order code HIN/68

Publications of Hindustan Book Agency are distributed within the Americas by the American Mathematical Society. Maximum discount of 20% for all commercial channels.