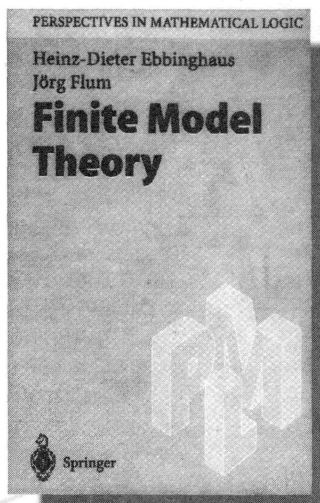


Finite model theory has its origin in classical model theory, but owes its systematic development to research from complexity theory. The book presents the main results of descriptive complexity theory, that is, the connections between axiomatizability of classes of finite structures and their complexity with respect to time and space bounds.

**A. Kanamori**  
**The Higher Infinite**  
**Large Cardinals in Set Theory from Their Beginnings**  
 1994. XXIV, 536 pages.  
 Hardcover DM 196,-  
 ISBN 3-540-57071-3

After describing the theory of large cardinals, a comprehensive account is given of the work in the 1960s on partition properties, forcing and sets of reals, and aspects of measurability (including saturated ideals and inner models of measurability). Then discussed are the strong hypotheses like supercompactness up to Kunen's inconsistency. The last sections describe the investigation of determinacy from its beginnings up to a survey of the recent consistency results of Woodin.



**H.-D. Ebbinghaus, J. Flum**  
**Finite Model Theory**  
 1995. XV, 327 pages.  
 Hardcover DM 148,-  
 ISBN 3-540-60149-X

Prices subject to change without notice.  
 In EU countries the local VAT is effective.

Please order by  
 Fax: +49 30 82787 301  
 e-mail: [orders@springer.de](mailto:orders@springer.de)  
 or through your bookseller



**Springer**

The model theory of fields is an area for important interactions between mathematical, logical and classical mathematics. Recently, there have been major applications of model theoretic ideas to real analytic geometry and diophantine geometry. The book provides an introduction to this fascinating subject.

Volume 4

A. Miller

## **Descriptive Set Theory and Forcing**

**How to Prove Theorems About Borel Sets the Hard Way**

1995. IV, 130 pages.

Softcover DM 54,-

ISBN 3-540-60059-0

This advanced graduate course assumes some knowledge of forcing as well as some elementary mathematical logic, e.g. the Lowenheim-Skolem Theorem. The first half deals with the general area of Borel hierarchies, probing lines of enquiry such as the possible lengths of a Borel hierarchy in a separable metric space. The second half goes on to include Harrington's Theorem together with a proof and applications of Louveau's Theorem on hyperprojective parameters.

**Lecture Notes in  
Logic**

5

D. Marker M. Messmer A. Pillay

## **Model Theory of Fields**



Volume 5

D. Marker, M. Messmer, A. Pillay

## **Model Theory of Fields**

1996. IX, 154 pages.

Softcover DM 58,-

ISBN 3-540-60741-2

Prices subject to change without notice.  
In EU countries the local VAT is effective.

Please order by  
Fax: +49 30 82787 301  
e-mail: [orders@springer.de](mailto:orders@springer.de)  
or through your bookseller



**Springer**



## **Buechler Essential Stability Theory**

This book provides the student with a quick route from basic model theory to research in stability theory. Besides preparing a student for research in any of today's branches of stability theory, it also gives an introduction to classification theory with an exposition of Morley's Categoricity Theorem. The concepts and techniques of geometrical stability theory are developed through a fine structure analysis of uncountably categorical theories. The basic tools of stability theory are developed in full generality around the focal point of the dimension theory on regular types.

ISB N 3-540-61011-1



ISSN 0172-6641