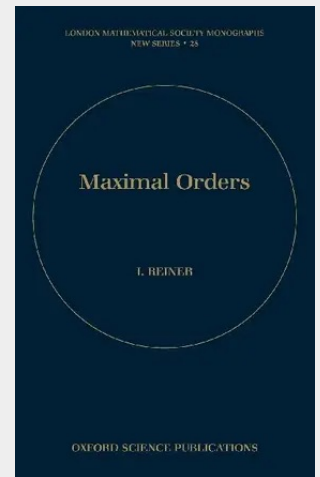


Maximal Orders

This is a reissue of a classic text, which includes the author's own corrections and provides a very accessible, self contained introduction to the classical theory of orders and maximal orders over a Dedekind ring. It starts with a long chapter that provides the algebraic prerequisites for this theory, covering basic material on Dedekind domains, localizations and completions, as well as semisimple rings and separable algebras. This is followed by an introduction to the basic tools in studying orders, such as reduced norms and traces, discriminants, and localization of orders. The theory of maximal orders is then developed in the local case, first in a complete setting, and then over any discrete valuation ring. This paves the way to a chapter on the ideal theory in global maximal orders, with detailed expositions on ideal classes, the Jordan-Zassenhaus Theorem, and genera. This is followed by a chapter on Brauer groups and crossed product algebras, where Hasse's theory of cyclic algebras over local fields is presented in a clear and self-contained fashion. Assuming a couple of facts from class field theory, the book goes on to present the theory of simple algebras over global fields, covering in particular Eichler's Theorem on the ideal classes in a maximal order, as well as various results on the KO group and Picard group of orders. The rest of the book is devoted to a discussion of non-maximal orders, with particular emphasis on hereditary orders and group rings. The ideas collected in this book have found important applications in the smooth representation theory of reductive p-adic groups. This text provides a useful introduction to this wide range of topics. It is written at a level suitable for beginning postgraduate students, is highly suited to class teaching and provides a wealth of exercises.

This is a reissue of a classic text, which includes the author's own corrections and provides a very accessible, self contained introduction to the classical theory of orders and maximal orders over a Dedekind ring. It starts with a long chapter that provides the algebraic prerequisites for this theory, covering basic material on Dedekind domains, localizations and completions, as well as semisimple rings and separable algebras. This is followed by an introduction to the basic tools in studying orders, such as reduced norms and traces, discriminants, and localization of orders. The theory of maximal orders is then developed in the local case, first in a complete setting, and then over any discrete valuation ring. This paves the way to a chapter on the ideal theory in global maximal orders, with detailed expositions on ideal classes, the Jordan-Zassenhaus Theorem, and genera. This is followed by a chapter on Brauer groups and crossed product algebras, where Hasse's theory of cyclic algebras over local fields is presented in a clear and self-contained fashion. Assuming a couple of facts from class field theory, the book goes on to present the theory of simple algebras over global fields, covering in particular Eichler's Theorem on the ideal classes in a maximal order, as well as various results on the KO group and Picard group of orders. The rest of the book is devoted to a discussion of non-maximal orders, with particular emphasis on hereditary orders and group rings. The ideas collected in this book have found important applications in the smooth representation theory of reductive p-adic groups. This text provides a useful introduction to this wide range of topics. It is written at a level suitable for beginning postgraduate students, is highly suited to class teaching and provides a wealth of exercises.



257,00 €
257,00 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780198526735
Medium: Buch
ISBN: 978-0-19-852673-5
Verlag: OUP Oxford
Erscheinungstermin: 01.03.2003
Sprache(n): Englisch
Auflage: Erscheinungsjahr 2003
Produktform: Gebunden
Gewicht: 781 g
Seiten: 410
Format (B x H): 161 x 240 mm

