

<<环上矩阵几何>>

图书基本信息

书名：<<环上矩阵几何>>

13位ISBN编号：9787030169822

10位ISBN编号：7030169824

出版时间：2006-8

出版时间：科学出版社发行部

作者：Huang Liping

页数：340

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

## <<环上矩阵几何>>

### 内容概要

环与模，环上矩阵论，非交换主理想整环上的仿射几何与射影几何，非交换主理想整环上的长方矩阵几何，交换主理想整环上的对称矩阵几何，除环上Hermitian矩阵几何，除环上分块三角矩阵几何，以及矩阵几何在代数学、几何学、图论等方面的应用。

## &lt;&lt;环上矩阵几何&gt;&gt;

## 书籍目录

Preface  
 Notation  
 Chapter 1 Rings and Modules  
 1.1 Rings  
 1.2 Modules and  $K$ -algebras  
 1.3 Principal ideal domains  
 1.4 Semisimple rings and Jacobson semisimple rings  
 1.5 Rings with involution  
 Chapter 2 Matrices and Modules over Ring  
 2.1 Matrix over ring  
 2.2 Semifir, Hermite rings and Bezout domains  
 2.3 The rank of matrices  
 2.4 Elementary operations and reduction of matrices over PID  
 2.5 Hermitian and symmetric matrices  
 2.6 Determinants over commutative ring  
 Chapter 3 Affine Geometry and Projective Geometry over Ring  
 3.1 Subspaces of free module  
 3.2 Subspaces over Bezout domain  
 3.3 Affine geometry over Bezout domain  
 3.4 Fundamental theorems of affine geometry over Bezout domain  
 3.5 Affine geometry over division ring  
 3.6 Projective geometry over rings which have IBN  
 Chapter 4 Geometry of Rectangular Matrices over Bezout Domains  
 4.1 Geometry of rectangular matrices over division ring  
 4.2 Affine geometry structures of maximal sets on matrices over Bezout domain  
 4.3 Fundamental Theorem of geometry of rectangular matrices over Bezout domain  
 4.4 Applications of fundamental theorem  
 4.5 Projective geometry of rectangular matrices over Bezout domain  
 Chapter 5 Geometries of Hermitian and Skew-Hermitian Matrices over Division Ring  
 5.1 Maximal sets of rank 1 of  $H_n(D)$   
 5.2 Adjacency preserving bijections on Hermitian matrices  
 5.3 Maximal sets of rank 2 in  $H_n(D)$   
 5.4 Affine geometry structures of maximal sets of rank 2 in  $H_2(D)$   
 5.5 Geometry of  $2 \times 2$  Hermitian matrices over division ring  
 5.6 Fundamental theorem of geometry of  $n \times n$  ( $n > 3$ ) Hermitian matrices  
 5.7 Geometry of skew-Hermitian matrices over division ring  
 5.8 Applications to algebra  
 5.9 Projective geometry of Hermitian and symmetric matrices  
 Chapter 6 Geometry of Symmetric Matrices over Commutative PID  
 6.1 Arithmetic distance and distance on symmetric matrices  
 6.2 Maximal sets of rank one and two  
 6.3 Adjacency and invertibility of determinant divisors preserving maps  
 6.4 Fundamental theorem of geometry of symmetric matrices over commutative PID  
 Chapter 7 Geometry of Block Triangular Matrices over Division Ring  
 7.1 Introduction  
 7.2 Affine geometry structures on maximal sets  
 7.3 Adjacency preserving bijective maps on block triangular matrices  
 7.4 Fundamental theorem of geometry of block triangular matrices  
 7.5 Applications of Fundamental Theorem  
 Chapter 8 Geometry of Matrices over Semisimple Ring  
 8.1 Geometry of block diagonal matrices over some division rings  
 8.2 Geometry of rectangular matrices over semisimple ring  
 8.3 Geometry of block triangular matrices over simple Artinian ring  
 Reference  
 Index

<<环上矩阵几何>>

编辑推荐

The book discusses the geometry of matrices over some rings and their applications in algebra and geometry. The first part of the book is concerned with rings and modules , matrices over a ring , affine geometry and projective geometry over a Bezout domain. Later in the book , more advanced topics , such as the geometry of rectangular matrices over a Bezout domain or a semisimple ring , the geometry of Hermilian matrices or skew-Hermitian matrices over a division ring , the geometry of symmetric matrices over a principal ideal domain and the geometry of block triangular matrices over a division ring are discussed in detail.

<<环上矩阵几何>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>