

<<有限域上典型群的几何学>>

图书基本信息

书名：<<有限域上典型群的几何学>>

13位ISBN编号：9787030105950

10位ISBN编号：7030105958

出版时间：2006-3

出版时间：科学

作者：Wan Zhexian

页数：460

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>

<<有限域上典型群的几何学>>

内容概要

This monograph is a comprehensive survey of the results obtained on the geometry of classical groups over finite fields mainly in the 1960s and early 1990s. For the convenience of the readers I start with the affine geometry and projective geometry over finite fields in Chapters 1 and 2, respectively. Among other things, the affine classification of quadrics is included in Chapter 1, and conics and ovals are studied in detail in Chapter 2. From Chapter 3 and onwards the geometries of symplectic, pseudo-symplectic, unitary, and orthogonal groups are studied in succession. The book ends with two appendices, on the axiomatic projective geometry, and on polar spaces and finite generalized quadrangles, respectively.

<<有限域上典型群的几何学>>

书籍目录

Preface to the Second Edition Preface Chapter 1 Affine Geometry over Finite Fields 1.1 Vector Spaces and Matrices over Finite Fields 1.2 Affine Spaces and Affine Groups over Finite Fields 1.3 Quadrics in $AG(n, F_q)$ for q Odd 1.4 Quadrics in $AG(n, F_q)$ for q Even 1.5 Comments 1.6 Exercises Chapter 2 Projective Geometry over Finite Fields 2.1 Projective Spaces and Projective Groups over Finite Fields 2.2 Quadrics in $PG(n, F_q)$ 2.3 Conics in $PG(n, F_q)$ 2.4 Ovals in $PG(n, F_q)$ 2.5 Comments 2.6 Exercises Chapter 3 Geometry of Symplectic Groups over Finite Fields 3.1 Symplectic Groups and Symplectic Spaces over Finite Fields 3.2 Anzahl Theorems in Symplectic Geometry over Finite Fields 3.3 Singular Symplectic Geometry over Finite Fields 3.4 Symplectic Polarities and Polar Spaces Arising from Them 3.5 Comments 3.6 Exercises Chapter 4 Geometry of Pseudo-symplectic Groups over Finite Fields of Characteristic 2 4.1 Pseudo-symplectic Groups over Finite Fields of Characteristic 2 4.2 Pseudo-symplectic Geometry over Finite Fields of Characteristic 2 4.3 Singular Pseudo-symplectic Geometry over Finite Fields of Characteristic 2 4.4 Pseudo-symplectic Geometry over Finite Fields of Characteristic 2 Again 4.5 Pseudo-symplectic Polarities 4.6 Comments 4.7 Exercises Chapter 5 Geometry of Unitary Groups over Finite Fields 5.1 Unitary Geometry over Finite Fields 5.2 Anzahl Theorems in Unitary Geometry over Finite Fields 5.3 Singular Unitary Geometry over Finite Fields 5.4 Unitary Polarities and Polar Spaces Arising from Them 5.5 Hermitian varieties in $PG(n, F_{q^2})$ and $AG(n, F_{q^2})$ 5.6 Comments 5.7 Exercises Chapter 6 Geometry of Orthogonal Groups over Finite Fields of Odd Characteristic 6.1 Orthogonal Geometry over Finite Fields of Odd Characteristic 6.2 Anzahl Theorems in Orthogonal Geometry over Finite Fields of Odd Characteristic 6.3 Singular Orthogonal Geometry over Finite Fields of Odd Characteristic 6.4 Orthogonal Polarities and Polar Spaces Arising from Them 6.5 Comments 6.6 Exercises Chapter 7 Geometry of Orthogonal Groups over Finite Fields of Characteristic 2 7.1 Orthogonal Geometry over Finite Fields of Characteristic 2 7.2 Anzahl Theorems in Orthogonal Geometry over Finite Fields of Characteristic 2 7.3 Singular Orthogonal Geometry over Finite Fields of Characteristic 2 7.4 Polar Spaces Arising from Orthogonal Geometry over Finite Fields of Characteristic 2 7.5 Comments 7.6 Exercises Appendix A Axiomatic Projective Geometry A.1 Incidence Structures A.2 Axioms of Projective Planes and the Principle of Duality A.3 Finite Projective Planes A.4 Collineations in Projective Planes A.5 Desargues Planes A.6 Projective Spaces Appendix B Polar Spaces and Generalized Quadrangles.. B.1 Polar Spaces B.2 Generalized Quadrangles Appendix C Critical Problems C.1 A Critical Problem in Finite Vector Spaces C.2 Critical Problems in Finite Unitary Spaces C.3 A Critical Problem in Finite Symplectic Spaces C.4 Comments Appendix D Moor-Penrose Generalized Inverses of Matrices over Finite Fields D.1 Definition and Properties D.2 Construction of Enumeration of M-P Invertible Matrices D.3 Generalization to Matrices over F_{q^2} D.4 Comments Appendix E Representations of Forms by Forms in a Finite Field E.1 Representations of Bilinear Forms E.2 Representations of Alternate Forms E.3 Representations of Hermitian Forms E.4 Representations of Quadratic Forms (Odd Characteristic Case) E.5 Representations of Quadratic Forms (Even Characteristic Case) E.6 Representations of Symmetric Bilinear Forms over Finite Fields of Even Characteristic E.7 Comments E.8 Exercises Bibliography Notation Index

<<有限域上典型群的几何学>>

编辑推荐

《有限域上典型群的几何学(第2版)(英文版)》是科学出版社出版。

<<有限域上典型群的几何学>>

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>