

<<代数曲面>>

图书基本信息

书名：<<代数曲面>>

13位ISBN编号：9787510005169

10位ISBN编号：7510005167

出版时间：2010-1

出版时间：世界图书出版公司

作者：扎里斯基

页数：270

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>

前言

The aim of the present monograph is to give a systematic exposition of the theory of algebraic surfaces emphasizing the interrelations between the various aspects of the theory : algebro-geometric , topological and transcendental. To achieve this aim , and still remain inside the limits of the allotted space , it was necessary to confine the exposition to topics which are absolutely fundamental. The present work therefore makes no claim to completeness , but it does , however , cover most of the central points of the theory. A presentation of the theory of surfaces , to be effective at all , must above all give the typical methods of proof used in the theory and their underlying ideas. It is especially true of algebraic geometry that in this domain the methods employed are at least as important as the results. The author has therefore avoided , as much as possible , purely formal accounts of results. The proofs given are of necessity condensed , for reasons of space , but no attempt has been made to condense them beyond the point of intelligibility. In many instances , due to exigencies of simplicity and rigor , the proofs given in the text differ , to a greater or less extent , from the proofs given in the original papers.

The author regrets that he has not been able , for the reasons outlined above , to include in his work two interesting and important developments of the theory : (I) the classification of surfaces by means of their in-variants , due chiefly to ENRIQUES; (II) the theory of real algebraic surfaces , due to CO.ESSA ? TI. Fortunately , excellent and quite recent accounts of these two developments are available (I. GEPPERT , a;II. COMESSATTI , b; see "Bibliography") . Thanks are due to Dr. S. F. BARBER , National Research Fellow , and to Dr. R. J , WALKER of Princeton University , for careful reading of the manuscript and for many valuable suggestions. Baltimore , June 12 , 1934 O. ZARISKI

<<代数曲面>>

内容概要

本书是《Classics in Mathematics》系列之一，以现代观点讲述了代数几何知识，将经典代数曲面和现代代数曲面有机结合，很好地表达出了数学的整体性，是同时期很难得的一本代数曲面教材。全书主要内容包括奇点理论和奇点还原；曲线的线性系统；伴随系和不变量理论；算术亏格和Riemann-Roch定理；连续非线性系统；代数曲面的拓扑性质；代数曲面上的单积分和双重积分；复平面上的Branch曲线和连续性。

<<代数曲面>>

书籍目录

Chapter I. Theory and Reduction of Singularities 1. Algebraic varieties and birational transformations 2. Singularities of plane algebraic curves 3. Singularities of space algebraic curves 4. Topological classification of singularities 5. Singularities of algebraic surfaces 6. The reduction of singularities of an algebraic surface

Chapter II. Linear Systems of Curves 1. Definitions and general properties 2. On the conditions imposed by infinitely near base points 3. Complete linear systems 4. Addition and subtraction of linear systems 5. The virtual characters of an arbitrary linear system 6. Exceptional curves 7. Invariance of the virtual characters 8. Virtual characteristic series. Virtual curves

Appendix to Chapter II by JOSEPH LIPMAN

Chapter III. Adjoint Systems and the Theory of Invariants 1. Complete linear systems of plane curves 2. Complete linear systems of surfaces in S_a 3. Subadjoint surfaces 4. Subadjoint systems of a given linear system 5. The distributive property of subadjunction 6. Adjoint systems 7. The residue theorem in its projective form 8. The canonical system 9. The pluricanonical systems

Appendix to Chapter III by DAVID MUMFORD

Chapter IV. The Arithmetic Genus and the Generalized Theorem of RIEMANN-ROCH 1. The arithmetic genus P_a 2. The theorem of RIEMANN-ROCH on algebraic surfaces 3. The deficiency of the characteristic series of a complete linear system 4. The elimination of exceptional curves and the characterization of ruled surfaces

Appendix to Chapter IV by DAVID MUMFORD

Chapter V. Continuous Non-linear Systems 1. Definitions and general properties 2. Complete continuous systems and algebraic equivalence 3. The completeness of the characteristic series of a complete continuous system 4. The variety of PICARD 5. Equivalence criteria 6. The theory of the base and the number of PICARD 7. The division group and the invariant a of SEVERI 8. On the moduli of algebraic surfaces

Appendix to Chapter V by DAVID MUMFORD

Chapter VI. Topological Properties of Algebraic Surfaces 1. Terminology and notations 2. An algebraic surface as a manifold M^4 3. Algebraic cycles on F and their intersections 4. The representation of F upon a multiple plane 5. The deformation of a variable plane section of F 6. The vanishing cycles π_i and the invariant cycles 7. The fundamental homologies for the i -cycles on F 8. The reduction of F to a cell 9. The three-dimensional cycles 10. The two-dimensional cycles 11. The group of torsion 12. Homologies between algebraic cycles and algebraic equivalence. The invariant 0 13. The topological theory of algebraic correspondences

Appendix to Chapter VI by DAVID MUMFORD

Chapter VII. Simple and Double Integrals on an Algebraic Surface 1. Classification of integrals 2. Simple integrals of the second kind 3. On the number of independent simple integrals of the first and of the second kind attached to a surface of irregularity q . The fundamental theorem 4. The normal functions of POINCARIE 5. The existence theorem of LEFSCHETZ-POINCARIE 6. Reducible integrals. Theorem of POINCARIE 7. Miscellaneous applications of the existence theorem 8. Double integrals of the first kind. Theorem of HODGE 9. Residues of double integrals and the reduction of the double integrals of the second kind 10. Normal double integrals and the determination of the number of independent double integrals of the second kind

Appendix to Chapter VII by DAVID MUMFORD

Chapter VIII. Branch Curves of Multiple Planes and Continuous Systems of Plane Algebraic Curves 1. The problem of existence of algebraic functions of two variables 2. Properties of the fundamental group G 3. The irregularity of cyclic multiple planes 4. Complete continuous systems of plane curves with d nodes 5. Continuous systems of plane algebraic curves with nodes and cusps

Appendix 1 to Chapter VIII by SHREERAM SHANKAR ABHYANKAR

Appendix 2 to Chapter VIII by DAVID MUMFORD

Appendix A. Series of Equivalence 1. Equivalence between sets of points 2. Series of equivalence 3. Invariant series of equivalence 4. Topological and transcendental properties of series of equivalence 5. (Added in 2nd edition, by D. MUMFORD)

Appendix B. Correspondences between Algebraic Varieties 1. The fixed point formula of LEFSCHETZ 2. The transcendental equations and the rank of a correspondence 3. The case of two coincident varieties. Correspondences with valence 4. The principle of correspondence of ZEUTHEN-SEVERI

Bibliography

Supplementary Bibliography for Second Edition

Index

<<代数曲面>>

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>