

<<代数拓扑的微分形式>>

图书基本信息

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作者：R.BottBottLoringW.Tu

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内容概要

The guiding principle in this book is to use differential forms as an aid in exploring some of the less digestible aspects of algebraic topology. Accordingly, we move primarily in the realm of smooth manifolds and use the de Rham theory as a prototype of all of cohomology. For applications to homotopy theory we also discuss by way of analogy cohomology with arbitrary coefficients. Although we have in mind an audience with prior exposure to algebraic or differential topology, for the most part a good knowledge of linear algebra, advanced calculus, and point-set topology should suffice. Some acquaintance with manifolds, simplicial complexes, singular homology and cohomology, and homotopy groups is helpful, but not really necessary. Within the text itself we have stated with care the more advanced results that are needed, so that a mathematically mature reader who accepts these background materials on faith should be able to read the entire book with the minimal prerequisites.

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书籍目录

Introduction
 CHAPTER De Rham Theory
 1 The de Rham Complex on W The de Rham complex
 Compact supports
 2 The Mayer-Vietoris Sequence The functor The Mayer-Vietoris sequence The functor and the Mayer-Vietoris sequence for compact supports
 3 Orientation and Integration Orientation and the integral of a differential form Stokes' theorem
 4 Poincare Lemmas The Poincare lemma for de Rham cohomology The Poincare'lemma for compactly supponed cohomology The degree of a proper map
 5 The Mayer-Vietoris Argument Existence of a good cover Finite dimensionality of de Rham cohomology Poincare duality on an orientable manifold The Kiinneth formula and the Leray-Hirsch theorem The Poincare dual of a closed oriented submanifold
 6 The Thom Isomorphism Vector bundles and the reduction of structure groups Operations on vector bundles Compact cohomology of a vector bundle Compact vertical cohomology and integration along the fibe Poincare duality and the Thom class The global angular form, the Euler class and the Thom class Relative de Rham theory
 7 The Nonorientable Case The twisted de Rham complex Integration of densities, Poincare duality and the Thom isomorphism
 CHAPTER The Cech-de Rham Complex
 8 The Generalized Mayer-Vietoris Principle Reformulation of the Mayer-Vietoris sequence Generalization to countably many open sets and applications
 9 More Examples and Applications of the Mayer-Vietoris Principle Examples: computing the de Rham cohomology from the combinatorics of a good cover Explicit isomorphisms between the double complex and de Rham and Cech The tic-tac-toe proof of the Kiinneth formula
 10 Presheaves and Cech Cohomology Presheaves Cech cohomology
 11 Sphere Bundles Orientability The Euler class of an oriented sphere bundle The global angular fonn Euler number and the isolated singularities of a section Euler characteristic and the Hopf index theorem
 12 The Thom Isomorphism and Poincare Duality Revisited
 CHAPTER Spectral Sequences and Applications
 CHAPTER Characteristic Classes
 References
 List of Notations
 Index

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