<<多复变量>>

图书基本信息

书名：<<多复变量>>

13位ISBN编号：9787510005176

10位ISBN编号：7510005175

出版时间：2009-8

出版时间：世界图书出版公司

作者：格兰特

页数：207

前言

The present book grew out of introductory lectures on the theory of functionsof several variables. Its intent is to make the reader familiar, by the discussionof examples and special cases, with the most important branches and methodsof this theory, among them, e.g., the problems of holomorphic continuation, the algebraic treatment of power series, sheaf and cohomology theory, andthe real methods which stem from elliptic partial differential equations. In the first chapter we begin with the definition of holomorphic functionsof several variables, their representation by the Cauchy integral, and theirpower series expansion on Reinhardt domains. It turns out that, in contrastto the theory of a single variable, for n > 2 there exist domains G, Gc Cnwith G G and G =G such that each function holomorphic in G has acontinuation on d. Domains G for which such a d does not exist are calleddomains of holomorphy. In Chapter 2 we give several characterizations ofthese domains of holomorphy （theorem of Cartan-Thullen, Levis problem）.We finally construct the holomorphic hull H（G） for each domain G, that isthe largest （not necessarily schlicht） domain over Cn into which each functionholomorphic on G can be continued. The third chapter presents the Weierstrass formula and the Weierstrasspreparation theorem with applications to the ring of convergent powerseries. It is shown that this ring is a factorization, a Noetherian, and a Henselring. Furthermore we indicate how the obtained algebraic theorems can beapplied to the local investigation of analytic sets. One achieves deep resultsin this connection by using sheaf theory, the basic concepts of which arediscussed in the fourth chapter. In Chapter V we introduce complex manifoldsand give several examples. We also examine the different closures of C andthe effects of modifications on complex manifolds.

内容概要

The third chapter presents the Weierstrass formula and the Weierstrasspreparation theorem with applications to the ring of convergent powerseries. It is shown that this ring is a factorization， a Noetherian， and a Henselring. Furthermore we indicate how the obtained algebraic theorems can beapplied to the local investigation of analytic sets. One achieves deep resultsin this connection by using sheaf theory， the basic concepts of which arediscussed in the fourth chapter. In Chapter V we introduce complex manifoldsand give several examples. We also examine the different closures of C andthe effects of modifications on complex manifolds.

<<多复变量>>

书籍目录

编辑推荐

sheaf and cohomology theory， andthe real methods which stem from elliptic partial differential equations.

版权说明