第一图书网, tushu007.com

<<亚纯函数值分布理论>>

图书基本信息

书名：<<亚纯函数值分布理论>>

13位ISBN编号：9787302223290

10位ISBN编号：7302223297

出版时间：2010-6

出版时间：清华大学出版社

作者：郑建华

页数：308

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

第一图书网, tushu007.com

<<亚纯函数值分布理论>>

前言

This book is devoted to the study of value distribution of functions which are mero-morphic on the complex plane or in an angular domain with vertex at the origin. Wecharacterize such meromorphic functions in terms of distribution of some of theirvalue points. The study, together with certain related topics, is known as theory ofvalue distribution of meromorphic functions. The theory is too vast to be justifiedwithin a single work. Therefore we selected and organized the content based on theirsignificant importance to our understanding and interests in this book. I gladly ac-knowledge my indebtedness in particular to the books of M. Tsuji, A. A. Goldbergand I. V. Ostrovskii, Yang L. and the papers of A. Eremenko. An outline of the book is provided below. The introduction of the Nevanlinnacharacteristic to the study of meromorphic functions is a new starting symbol ofthe theory of value distribution. The Nevanlinna characteristic is powerful, and itsthought has been used to produce various characteristics such as the Nevanlinnacharacteristic and Tsuji characteristic for an angular domain. And from geometricpoint of view, namely the Ahlfors theory of covering surfaces, the Ahlfors-Shimizucharacteristic have also been introduced. These characteristics are real-valued func-tions defined on the positive real axis. Therefore, in the first chapter, we collect thebasic results about positive real functions that are often used in the study of mero-morphic function theory. Some of these results are distributed in other books, somein published papers, and some have been newly established in order to serve ourspecific objectives in the book.

第一图书网, tushu007.com

<<亚纯函数值分布理论>>

内容概要

本书共7章，研究在复平面上或在以原点为顶点的角域上亚纯的函数的值分布，即通过某些值点来刻画亚纯函数。
前两章研究各类特征函数及这样的实函数的性质。
第3、4章放在新引入的奇异方向——T方向，包括存在性、分布，与其他方向的关系上，T方向与分布值和亏值总数的关系。
射线分布值确定亚纯函数的增长性的问题在第5章详细研究。
第6章研究亚纯函数对应的Riemann曲面，逆函数的奇异性及其与不动点的关系。
最后一章介绍具有重要地位的ENevanlinna猜想的Eremenko应用位势论的证明。

第一图书网, tushu007.com

<<亚纯函数值分布理论>>

作者简介

郑建华，Dr. Jianhua Zheng is a Professor at the Department of MathematicalSciences, Tsinghua University, China.

第一图书网, tushu007.com

<<亚纯函数值分布理论>>

书籍目录

1 Preliminaries of Real Functions 1.1 Functions of a Real Variable 1.1.1 The Order and Lower Order of a Real Function 1.1.2 The P61ya Peak Sequence of a Real Function 1.1.3 The Regularity of a Real Function 1.1.4 Quasi-invariance of Inequalities 1.2 Integral Formula and Integral Inequalities 1.2.1 The Green Formula for Functions with Two Real Variables 1.2.2 Several Integral Inequalities References 2 Characteristics of a Meromorphic Function 2.1 Nevanlinna's Characteristic in a Domain 2.2 Nevanlinna's Characteristic in an Angle 2.3 Tsuji's Characteristic 2.4 Ahlfors-Shimizu's Characteristic 2.5 Estimates of the Error Terms 2.6 Characteristic of Derivative of a Meromorphic Function 2.7 Meromorphic Functions in an Angular Domain 2.8 Deficiency and Deficient Values 2.9 Uniqueness of Meromorphic Functions Related to Some Angular Domains References 3 T Directions of a Meromorphic Function 3.1 Notation and Existence of T Directions 3.2 T Directions Dealing with Small Functions 3.3 Connection Among T Directions and Other Directions 3.4 Singular Directions Dealing with Derivatives 3.5 The Common T Directions of a Meromorphic Function and Its Derivatives 3.6 Distribution of the Julia, Borel Directions and T Directions 3.7 Singular Directions of Meromorphic Solutions of Some Equations 3.8 Value Distribution of Algebroid Functions References 4 Argument Distribution and Deficient Values 4.1 Deficient Values and T Directions 4.2 Retrospection References 5 Meromorphic Functions with Radially Distributed Values 5.1 Growth of Such Meromorphic Functions 5.2 Growth of Such Meromorphic Functions with Finite Lower Order 5.3 Retrospection References 6 Singular Values of Meromorphic Functions 6.1 Riemann Surfaces and Singularities 6.2 Density of Singularities 6.3 Meromorphic Functions of Bounded Type References 7 The Potential Theory in Value Distribution 7.1 Signed Measure and Distributions 7.2 8-Subharmonic Functions 7.2.1 Basic Results Concerning 8-Subharmonic Functions 7.2.2 Normality of Family of 8-Subharmonic Functions 7.2.3 The Nevanlinna Theory of 8-Subharmonic Functions 7.3 Eremenko's Proof of the Nevanlinna Conjecture References Index

第一图书网, tushu007.com

章节摘录

插图：

第一图书网, tushu007.com

<<亚纯函数值分布理论>>

编辑推荐

《亚纯函数值分布理论》：Value Distribution of Meromorphic Functions focuses on functionsmeromorphic in an angle or on the complex plane, T directions, deficientvalues, singular values, potential theory in value distribution and theproof of the celebrated Nevanlinna conjecture. The book introducesvarious characteristics of meromorphic functions and their connections,several aspects of new singular directions, new results on estimates of thenumber of deficient values, new results on singular values and behavioursof subharmonic functions which are the foundation for further discussionon the proof of the Nevanlinna conjecture. The independent significanceof normality of subharmonic function family is emphasized. This book isdesigned for scientists, engineers and post graduated students engaged inComplex Analysis and Meromorphic Functions.

第一图书网, tushu007.com

<<亚纯函数值分布理论>>

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