

# Contents

## Chapter 1

Essentials of Nevanlinna Theory .....	1
1.1 The Poisson-Jensen Formula .....	1
1.2 Characteristic Functions and the First Fundamental Theorem ..	5
1.3 The Second Fundamental Theorem .....	13
1.4 Applications of the Second Fundamental Theorem .....	25
1.5 Generalizations of the Second Fundamental Theorem .....	34

## Chapter 2

Normal Families .....	42
2.1 Normal Families of Holomorphic Functions .....	42
2.2 Montel's Criterion .....	47
2.3 Montel Cycle, Normal Families of Meromorphic Functions ..	54

## Chapter 3

Borel Directions .....	58
3.1 Preliminaries .....	58
3.2 Fundamental Theorems .....	65
3.3 Filling Disks and Borel Directions .....	75
3.4 Properties of Borel Directions .....	85

## Chapter 4

Value Distribution of Meromorphic Functions Together with Their Derivatives .....	93
4.1 Comparison Between Growths of $T(r, f)$ and $T(r, f')$ .....	93

4.2 Modular Distribution of Meromorphic Functions Together with Their Derivatives .....	99
4.3 An Inequality of Hayman .....	108
4.4 A General Criterion for Normality .....	112
4.5 Total Deficiency of Meromorphic Derivatives .....	121
4.6 A New Method for Proving Normality .....	131
Chapter 5	
Recent Studies on Borel Directions .....	138
5.1 Distribution of Borel Directions .....	138
5.2 Common Borel Directions of a Meromorphic Function and Its Derivatives .....	148
5.3 Angular Distribution of Meromorphic Functions Together with Their Derivatives .....	163
Chapter 6	
Deficient Values and Borel Directions of Meromorphic Functions .....	172
6.1 Precise Order and Three Lemmas .....	172
6.2 Distribution of Borel Directions of Meromorphic Functions with Deficient Values .....	184
6.3 Deficient Values and Borel Directions of Meromorphic Functions .....	190
6.4 Deficient Values, Borel Directions and the Order of Entire Functions .....	197
Chapter 7	
The Spread Relation and Its Applications .....	216
7.1 Sequence of Pólya Peaks and Its Existence .....	216
7.2 The $T^*$ Function .....	221
7.3 The Spread Relation .....	231
7.4 Applications of the Spread Relation .....	240
7.5 The Deficiency Problem .....	246
Bibliography .....	
Index .....	259
Index .....	269