

# CONTENTS

INTRODUCTION	1
1. MULTIPLICATION BY $X^n$ (GAUSS CONTIGUITY)	13
2. ALGEBRAIC THEORY	16
3. VARIATION OF $\mathcal{W}_a$ WITH $g$	28
4. ANALYTIC THEORY	39
5. DEFORMATION THEORY	49
6. STRUCTURE OF $H_g$	57
7. LINEAR DIFFERENTIAL EQUATIONS OVER A RING	71
8. SINGULARITIES (GENERALITIES)	75
9. NON-REGULAR CASE	84
10. MODIFIED LAPLACE TRANSFORM	92
11. ALGEBRAIC THEORY OF LAPLACE TRANSFORM	102
12. EXAMPLES	107
13. DEGENERATIVE PARAMETERS	127
14. VALUE AT THE ORIGIN	135
15. GENERIC CASE	139
16. FORMAL ANALYTIC THEORY	142
17. DUALITY	150
18. DUALITY—ANALYTIC THEORY	159
19. NON DEGENERACY OF $\tilde{\Theta}_a$	165
20. FERMAT SURFACE	171
REFERENCES	180
INDEX OF NOTATION	182
INDEX	187