- CONTENTS

1.	Introduction	
	1.1 General background	2
	1.2 Approximation theory in Banach spaces	3
2.	General theory	
	2.1 Notations and further definitions	9
	2.2 Jackson- and Bernstein-type inequalities	11
	2.3 A saturation theorem	12
	2.4 A Zamansky-type inequality; a comparison theorem	16
<u>3.</u>	Multiplier criteria for (C,α) -bounded expansions	
	3.1 Classical multiplier criteria via differences	18
	3.2 Estimates by integrals in the integer case	21
	3.3 Estimates by integrals in the fractional case	30
	3.3.1 Fractional integration and differentiation	
	on $BV_{\alpha+1}$, $\alpha \notin P$	30
	3.3.2 Sufficient multiplier criteria for	
	fractional α	38
4.	Particular summation methods	
	4.1 A polynomial summation method; a Bernstein-type	
	inequality for polynomials	51
	4.2 Abel-Cartwright means	54
	4.3 Riesz means	57
	4.4 Bessel potentials	63
	4.5 Cesàro means	65
	4.6 de La Vallée-Poussin means	67
5.	Applications to particular expansions	
	5.1 One-dimensional trigonometric system	71
	5.2 Multiple Fourier series	78
	5.3 Laguerre and Hermite series	81
	5.4 Jacobi series	87
	5.5 Surface spherical harmonics	90
	A conjecture concerning multiplier and summability	
	theory	92
	References	91
	List of Symbols	102