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3.9 The saturation problem of the uniform approximation3.10 Strong summation; 4 The conjugate Fourier integral and series; 4.1 The conjugate integral and the estimate of the kernel; 4.2 Convergence of Bochner-Riesz means for conjugate Fourier integral; 4.3 The conjugate Fourier series; 4.4 Kernel of Bochner-Riesz means of conjugate Fourier series; 4.5 The maximal operator of the conjugate partial sum; 4.6 The relations between the conjugate series and integral; 4.7 Convergence of Bochner-Riesz means of conjugate Fourier series; 4.8 (C,1) means in the conjugate case
4.9 The strong summation of the conjugate Fourier series4.10 Approximation of continuous functions; Bibliography; Index

Sommario/riassunto

This book mainly deals with the Bochner-Riesz means of multiple Fourier integral and series on Euclidean spaces. It aims to give a systematical introduction to the fundamental theories of the Bochner-Riesz means and important achievements attained in the last 50 years. For the Bochner-Riesz means of multiple Fourier integral, it includes the Fefferman theorem which negates the Disc multiplier conjecture, the famous Carleson-Sjolin theorem, and Carbery-Rubio de Francia-Vega's work on almost everywhere convergence of the Bochner-Riesz means below the critical index. For the Bochner-Riesz means o