1. Record Nr. UNINA9910350246503321 Autore Qian Tao Titolo Singular Integrals and Fourier Theory on Lipschitz Boundaries / / by Tao Qian, Pengtao Li Singapore:,: Springer Singapore:,: Imprint: Springer,, 2019 Pubbl/distr/stampa **ISBN** 981-13-6500-8 Edizione [1st ed. 2019.] 1 online resource (XV, 306 p. 28 illus., 6 illus. in color.) Descrizione fisica 515 Disciplina Soggetti Mathematical analysis Analysis (Mathematics) **Analysis** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Singular integrals and Fourier multipliers on infinite Lipschitz curves --Singular integral operators on closed Lipschitz curves -- Clifford analysis, Dirac operator and the Fourier transform -- Convolution singular integral operators on Lipschitz surfaces -- Holomorphic Fourier multipliers on infinite Lipschitz surfaces -- Bounded

holomorphic Fourier multipliers on closed Lipschitz surfaces -- The fractional Fourier multipliers on Lipschitz curves and surfaces --Fourier multipliers and singular integrals on Cn.

The main purpose of this book is to provide a detailed and

Sommario/riassunto

comprehensive survey of the theory of singular integrals and Fourier multipliers on Lipschitz curves and surfaces, an area that has been developed since the 1980s. The subject of singular integrals and the related Fourier multipliers on Lipschitz curves and surfaces has an extensive background in harmonic analysis and partial differential equations. The book elaborates on the basic framework, the Fourier methodology, and the main results in various contexts, especially addressing the following topics: singular integral operators with holomorphic kernels, fractional integral and differential operators with holomorphic kernels, holomorphic and monogenic Fourier multipliers, and Cauchy-Dunford functional calculi of the Dirac operators on Lipschitz curves and surfaces, and the high-dimensional Fueter

mapping theorem with applications. The book offers a valuable resource for all graduate students and researchers interested in singular integrals and Fourier multipliers. .