Record Nr. UNINA9910960760203321 Autore David Guy Titolo Elliptic Theory for Sets with Higher Co-Dimensional Boundaries Pubbl/distr/stampa Providence:,: American Mathematical Society,, 2022 ©2021 **ISBN** 9781470469153 1470469154 Edizione [1st ed.] Descrizione fisica 1 online resource (136 pages) Memoirs of the American Mathematical Society: v.274 Collana 31B0535J2528A7528A7835J7042B2042B2542B37 Classificazione FeneuilJoseph Altri autori (Persone) MayborodaSvitlana Disciplina 518/.64 Soggetti Differential equations, Elliptic Degenerate differential equations Harmonic functions Harmonic analysis Boundary value problems Potential theory -- Higher-dimensional theory -- Harmonic, subharmonic, superharmonic functions Partial differential equations -- Elliptic equations and systems --Boundary value problems for second-order elliptic equations Measure and integration -- Classical measure theory -- Length, area, volume, other geometric measure theory Measure and integration -- Classical measure theory -- Hausdorff and packing measures Partial differential equations -- Elliptic equations and systems --Degenerate elliptic equations Harmonic analysis on Euclidean spaces -- Harmonic analysis in several variables -- Singular and oscillatory integrals (Calderon-Zygmund, etc.) Harmonic analysis on Euclidean spaces -- Harmonic analysis in several variables -- Maximal functions, Littlewood-Paley theory Harmonic analysis on Euclidean spaces -- Harmonic analysis in several variables -- Harmonic analysis and PDE Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia

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Includes bibliographical references.

The Harnack chain condition and the doubling property -- Traces --

Note generali

Nota di bibliografia

Nota di contenuto

Poincare inequalities -- Completeness and density of smooth functions -- The chain rule and applications -- The extension operator -- Definition of solutions -- Harmonic measure -- Green functions -- The comparison principle.

Sommario/riassunto

"Many geometric and analytic properties of sets hinge on the properties of elliptic measure, notoriously missing for sets of higher codimension. The aim of this manuscript is to develop a version of elliptic theory, associated to a linear PDE, which ultimately yields a notion analogous to that of the harmonic measure, for sets of codimension higher than 1"--