1. Record Nr. UNINA9910813548203321

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Titolo	The Riesz transform of codimension smaller than one and the Wolff energy / / Benjamin Jaye [and three others]
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , [2020] ©2020
ISBN	1-4704-6249-4
Descrizione fisica	1 online resource (110 pages)
Collana	Memoirs of the American Mathematical Society ; ; Number 1293
Classificazione	42B3731B15
Disciplina	515.73
Soggetti	Harmonic analysis Calderon-Zygmund operator Laplacian operator Lipschitz spaces Potential theory (Mathematics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Forthcoming, volume 266, number 1293."
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	The general scheme : finding a large Lipschitz oscillation coefficient -- Upward and downward domination -- Preliminary results regarding reflectionless measures -- The basic energy estimates -- Blow up I : The density drop -- The choice of the shell -- Blow up II : doing away with [epsilon] -- Localization around the shell -- The scheme -- Suppressed kernels -- Step I : Calderon-Zygmund theory (from a distribution to an Lp-function) -- Step II : The smoothing operation -- Step III : The variational argument -- Contradiction.
Sommario/riassunto	"Fix d [greater than or equal to] 2, and s [epsilon] (d - 1, d). We characterize the non-negative locally finite non-atomic Borel measures [mu] in Rd for which the associated s-Riesz transform is bounded in L^2 ([mu]) in terms of the Wolff energy. This extends the range of s in which the Mateu-Prat-Verdera characterization of measures with bounded s-Riesz transform is known. As an application, we give a metric characterization of the removable sets for locally Lipschitz continuous solutions of the fractional Laplacian operator (-[delta]) [infinity]/2, [infinity] [epsilon] (1, 2), in terms of a well-known capacity from non-linear potential theory. This result contrasts sharply with

removability results for Lipschitz harmonic functions"--