

1. Record Nr.	UNISA996466475403316
Autore	Bogdan Krzysztof
Titolo	Potential analysis of stable processes and its extensions // Krzysztof Bogdan, 6 others, volume editors Piotr Graczyk, Andrzej Stos
Pubbl/distr/stampa	Berlin, Germany : , : Springer, , [2009] ©2009
ISBN	1-282-65579-5 9786612655791 3-642-02141-7
Edizione	[1st ed. 2009.]
Descrizione fisica	1 online resource (200 p.)
Collana	Lecture notes in mathematics ; ; 1980
Classificazione	60J4560G5260J5060J7531B2531C0531C3531C25 MAT 315f MAT 605f MAT 607f SI 850
Disciplina	510
Soggetti	Functional analysis Potential theory (Mathematics) Analyse fonctionnelle
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (pages [177]-183) and index.
Nota di contenuto	Boundary Potential Theory for Schrödinger Operators Based on Fractional Laplacian -- Nontangential Convergence for $\mathbb{B}_1$ -harmonic Functions -- Eigenvalues and Eigenfunctions for Stable Processes -- Potential Theory of Subordinate Brownian Motion.
Sommario/riassunto	Stable Lévy processes and related stochastic processes play an important role in stochastic modelling in applied sciences, in particular in financial mathematics. This book is about the potential theory of stable stochastic processes. It also deals with related topics, such as the subordinate Brownian motions (including the relativistic process) and Feynman–Kac semigroups generated by certain Schrödinger operators. The authors focus on classes of stable and related processes that contain the Brownian motion as a special case. This is the first book devoted to the probabilistic potential theory of stable stochastic

processes, and, from the analytical point of view, of the fractional Laplacian. The introduction is accessible to non-specialists and provides a general presentation of the fundamental objects of the theory. Besides recent and deep scientific results the book also provides a didactic approach to its topic, as all chapters have been tested on a wide audience, including young mathematicians at a CNRS/HARP Workshop, Angers 2006. The reader will gain insight into the modern theory of stable and related processes and their potential analysis with a theoretical motivation for the study of their fine properties.

---