Record Nr. UNISA996466511003316 Autore **Duquesne Thomas** Titolo Lévy Matters I [[electronic resource]]: Recent Progress in Theory and Applications: Foundations, Trees and Numerical Issues in Finance / / by Thomas Duguesne, Oleg Reichmann, Ken-iti Sato, Christoph Schwab: edited by Ole E Barndorff-Nielsen, Jean Bertoin, Jean Jacod, Claudia Klüppelberg Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2010 **ISBN** 1-280-39180-4 9786613569721 3-642-14007-6 Edizione [1st ed. 2010.] Descrizione fisica 1 online resource (XIV, 206 p.) Lévy Matters, A Subseries on Lévy Processes, , 2190-6637 ; ; 2001 Collana Disciplina 519.2 Soggetti **Probabilities** Probability Theory and Stochastic Processes Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "With a short biography of Paul Levy by Jean Jacod". Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Fractional Integrals and Extensions of Selfdecomposability -- Packing and Hausdorff Measures of Stable Trees -- Numerical Analysis of Additive, Lévy and Feller Processes with Applications to Option Pricing. Sommario/riassunto This is the first volume of a subseries of the Lecture Notes in Mathematics which will appear randomly over the next years. Each volume will describe some important topic in the theory or applications of Lévy processes and pay tribute to the state of the art of this rapidly evolving subject with special emphasis on the non-Brownian world. The three expository articles of this first volume have been chosen to reflect the breadth of the area of Lévy processes. The first article by Ken-iti Sato characterizes extensions of the class of selfdecomposable distributions on R<sup>d</sup>. The second article by Thomas Duquesne discusses Hausdorff and packing measures of stable trees. The third article by Oleg Reichmann and Christoph Schwab presents numerical

solutions to Kolmogoroff equations, which arise for instance in financial engineering, when Lévy or additive processes model the

dynamics of the risky assets.