Record Nr. UNINA9910789068903321 Stochastic analysis, stochastic systems, and applications to finance Titolo [[electronic resource] /] / edited by Allanus Tsoi, David Nualart, George Yin Singapore, : World Scientific, c2011 Pubbl/distr/stampa **ISBN** 1-283-43395-8 9786613433954 981-4355-71-2 Descrizione fisica 1 online resource (274 p.) Altri autori (Persone) TsoiAllanus Hak-Man <1955-> NualartDavid <1951-> YinGeorge <1954-> Disciplina 332.0151922 Soggetti Finance - Mathematical models Stochastic systems Stochastic analysis Lingua di pubblicazione Inglese Formato Materiale a stampa Monografia Livello bibliografico "It is an expanded version of papers presented at the first Kansas-Note generali Missouri Winter School of Applied Probability, which was organized by Allanus Tsoi and was held at the University of Missouri, February 14 and 15, 2008"--P. vii. Nota di bibliografia Includes bibliographical references. Nota di contenuto pt. 1. Stochastic analysis and systems -- pt. 2. Finance and stochastics. Sommario/riassunto This book introduces some advanced topics in probability theories both pure and applied - is divided into two parts. The first part deals with the analysis of stochastic dynamical systems, in terms of Gaussian processes, white noise theory, and diffusion processes. The second part of the book discusses some up-to-date applications of optimization theories, martingale measure theories, reliability theories, stochastic filtering theories and stochastic algorithms towards mathematical finance issues such as option pricing and hedging, bond

market analysis, volatility studies and asset trading m