Record Nr. UNINA9910461629703321 Autore Bhar Ramaprasad Titolo Stochastic filtering with applications in finance [[electronic resource] /] / Ramaprasad Bhar Singapore; ; Hackensack, N.J., : World Scientific, c2010 Pubbl/distr/stampa **ISBN** 1-283-14452-2 9786613144522 981-4304-86-7 Descrizione fisica 1 online resource (400 p.) 332.01/51922 Disciplina Soggetti Finance - Mathematical models Stochastic analysis Electronic books. 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 and index. Nota di contenuto Preface; Contents; 1. Introduction: Stochastic Filtering in Finance; 2. Foreign Exchange Market - Filtering Applications; 3. Equity Market -Filtering Applications; 4. Filtering Application - Inflation and the Macroeconomy; 5. Interest Rate Model and Non-Linear Filtering; 6. Filtering and Hedging using Interest Rate Futures; 7. A Multifactor Model of Credit Spreads; 8. Credit Default Swaps - Filtering the Components: 9. CDS Options, Implied Volatility and Unscented Kalman Filter; 10. Stochastic Volatility Model and Non-Linear Filtering Application: 11. Applications for Filtering with Jumps BibliographyIndex This book provides a comprehensive account of stochastic filtering as a Sommario/riassunto modeling tool in finance and economics. It aims to present this very important tool with a view to making it more popular among researchers in the disciplines of finance and economics. It is not intended to give a complete mathematical treatment of different stochastic filtering approaches, but rather to describe them in simple terms and illustrate their application with real historical data for problems normally encountered in these disciplines. Beyond laying out

the steps to be implemented, the steps are demonstrated in