1. Record Nr. UNINA9910974304403321 Autore Shiriaev Albert Nikolaevich Titolo Optimal Stopping Rules / / by Albert N. Shiryaev Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2008 1-281-11631-9 **ISBN** 9786611116316 3-540-74011-2 Edizione [1st ed. 2008.] Descrizione fisica 1 online resource (227 p.) Stochastic Modelling and Applied Probability, , 2197-439X;; 8 Collana Altri autori (Persone) AriesA. B Disciplina 519.5/4 **Probabilities** Soggetti **Statistics Probability Theory** Statistics in Business, Management, Economics, Finance, Insurance Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "Reprint of the 1978 edition with a new preface." Note generali Nota di bibliografia Includes bibliographical references (p. 208-213) and index. Nota di contenuto Random Processes: Markov Times -- Optimal Stopping of Markov Sequences -- Optimal Stopping of Markov Processes -- Some Applications to Problems of Mathematical Statistics. Sommario/riassunto Although three decades have passed since first publication of this book reprinted now as a result of popular demand, the content remains upto-date and interesting for many researchers as is shown by the many references to it in current publications. The "ground floor" of Optimal Stopping Theory was constructed by A.Wald in his sequential analysis in connection with the testing of statistical hypotheses by non-traditional (sequential) methods. It was later discovered that these methods have. in idea, a close connection to the general theory of stochastic optimization for random processes. The area of application of the Optimal Stopping Theory is very broad. It is sufficient at this point to emphasise that its methods are well tailored to the study of American (-type) options (in mathematics of finance and financial engineering), where a buyer has the freedom to exercise an option at any stopping time. In this book, the general theory of the construction of optimal

stopping policies is developed for the case of Markov processes in

discrete and continuous time. One chapter is devoted specially to the applications that address problems of the testing of statistical hypotheses, and quickest detection of the time of change of the probability characteristics of the observable processes. The author, A. N.Shiryaev, is one of the leading experts of the field and gives an authoritative treatment of a subject that, 30 years after original publication of this book, is proving increasingly important.