1. Record Nr. UNINA9910254063803321 Autore Shiryaev Albert N **Titolo** Probability-1 / / by Albert N. Shiryaev New York, NY:,: Springer New York:,: Imprint: Springer,, 2016 Pubbl/distr/stampa 0-387-72206-8 **ISBN** Edizione [3rd ed. 2016.] Descrizione fisica 1 online resource (XVII, 486 p. 39 illus.) Graduate Texts in Mathematics, , 0072-5285 ; ; 95 Collana 519.2 Disciplina Soggetti **Probabilities** Probability Theory and Stochastic Processes Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references (pages [465]-469) and indexes. Nota di contenuto Introduction -- Elementary Probability Theory -- Mathematical Foundations of Probability Theory -- Convergence of Probability Measures. Central Limit Theorem. Sommario/riassunto This book contains a systematic treatment of probability from the ground up, starting with intuitive ideas and gradually developing more sophisticated subjects, such as random walks, martingales, Markov chains, the measure-theoretic foundations of probability theory, weak convergence of probability measures, and the central limit theorem. Many examples are discussed in detail, and there are a large number of exercises. The book is accessible to advanced undergraduates and can be used as a text for independent study. To accommodate the greatly expanded material in the third edition of Probability, the book is now divided into two volumes. This first volume contains updated references and substantial revisions of the first three chapters of the second edition. In particular, new material has been added on generating functions, the inclusion-exclusion principle, theorems on

monotonic classes (relying on a detailed treatment of "-" systems),

and the fundamental theorems of mathematical statistics.