Record Nr. UNINA9910392722503321 Autore ekanaviius Vydas Titolo Approximation Methods in Probability Theory / / by Vydas ekanaviius Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 3-319-34072-7 **ISBN** Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (XII, 274 p.) Collana Universitext, , 0172-5939 Disciplina 511.4 Soggetti **Probabilities** Approximation theory Probability Theory and Stochastic Processes Approximations and Expansions Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Definitions and preliminary facts -- The method of convolutions --Local lattice estimates -- Uniform lattice estimates -- Total variation of lattice measures -- Non-uniform estimates for lattice measures --Discrete non-lattice approximations -- Absolutely continuous approximations -- The Esseen type estimates -- Lower estimates --The Stein method -- The triangle function method -- Heinrich's method for m-dependent variables -- Other methods -- Solutions to selected problems -- Bibliography -- Index. Sommario/riassunto This book presents a wide range of well-known and less common methods used for estimating the accuracy of probabilistic approximations, including the Esseen type inversion formulas, the Stein method as well as the methods of convolutions and triangle function. Emphasising the correct usage of the methods presented, each step required for the proofs is examined in detail. As a result, this textbook provides valuable tools for proving approximation theorems. While Approximation Methods in Probability Theory will appeal to everyone interested in limit theorems of probability theory, the book is particularly aimed at graduate students who have completed a standard intermediate course in probability theory. Furthermore, experienced

researchers wanting to enlarge their toolkit will also find this book