1. Record Nr. UNINA9910156339203321 Autore Pantsulaia Gogi Titolo Applications of Measure Theory to Statistics / / by Gogi Pantsulaia Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 9783319455785 **ISBN** Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (XV, 134 p.) 519.5 Disciplina **Statistics** Soggetti Mathematics Mathematical analysis Mathematical physics **Topology** Statistical Theory and Methods Applications of Mathematics **Analysis** Mathematical Physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto 1 Calculation of Improper Integrals by Using Uniformly Distributed Sequences -- 2 Infinite-Dimensional Monte-Carlo Integration -- 3 On structure of all real-valued sequences uniformly distributed in [-1/2; 1/2] from the point of view of shyness -- 4 On Moore-Yamasaki-Kharazishvili type measures and the infinite powers of Borel diffused probability measures on R -- 5 On objective and strong objective consistent estimates of unknown parameters for statistical structures in a Polish group admitting an invariant metric -- 6 Why Null Hypothesis is rejected for "almost every" infinite sample by the Hypothesis Testing of a maximal reliability?. Sommario/riassunto This book aims to put strong reasonable mathematical senses in notions of objectivity and subjectivity for consistent estimations in a

Polish group by using the concept of Haar null sets in the

corresponding group. This new approach – naturally dividing the class

of all consistent estimates of an unknown parameter in a Polish group into disjoint classes of subjective and objective estimates – helps the reader to clarify some conjectures arising in the criticism of null hypothesis significance testing. The book also acquaints readers with the theory of infinite-dimensional Monte Carlo integration recently developed for estimation of the value of infinite-dimensional Riemann integrals over infinite-dimensional rectangles. The book is addressed both to graduate students and to researchers active in the fields of analysis, measure theory, and mathematical statistics.