Record Nr. UNINA9910779907403321 Autore Jayne John E (John Eben), <1943-> Titolo Selectors [[electronic resource] /] / John E. Jayne and C. Ambrose Rogers Princeton, N.J.,: Princeton University Press, c2002 Pubbl/distr/stampa **ISBN** 1-282-15893-7 9786612158933 1-4008-2512-1 1-4008-1440-5 Edizione [Course Book] Descrizione fisica 1 online resource (181 p.) Classificazione SK 150 Altri autori (Persone) RogersC. A <1920-> (Claude Ambrose) Disciplina 511.3/22 Selection theorems Soggetti 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 (p. [161]-163) and index. Nota di contenuto Front matter -- Contents -- Preface -- Introduction -- Chapter 1. Classical results -- Chapter 2. Functions that are constant on the sets of a Functions that are constant on the sets of a disjoint discretely decomposable family of F-sets -- Chapter 3. Selectors for upper semi-continuous functions with non-empty compact values -- Chapter 4. Selectors for compact sets -- Chapter 5. Applications -- Chapter 6. Selectors for upper semi-continuous set-valued maps with nonempty values that are otherwise arbitrary -- Chapter 7. Further applications --Bibliography -- Index Sommario/riassunto Though the search for good selectors dates back to the early twentieth century, selectors play an increasingly important role in current research. This book is the first to assemble the scattered literature into a coherent and elegant presentation of what is known and proven about selectors--and what remains to be found. The authors focus on selection theorems that are related to the axiom of choice, particularly selectors of small Borel or Baire classes. After examining some of the relevant work of Michael and Kuratowski & Ryll-Nardzewski and presenting background material, the text constructs selectors obtained

as limits of functions that are constant on the sets of certain partitions of metric spaces. These include selection theorems for maximal

monotone maps, for the subdifferential of a continuous convex function, and for some geometrically defined maps, namely attainment and nearest-point maps. Assuming only a basic background in analysis and topology, this book is ideal for graduate students and researchers who wish to expand their general knowledge of selectors, as well as for those who seek the latest results.