Record Nr. UNINA9910814220403321 Autore Hofmann Karl Heinrich Titolo The structure of compact groups: a primer for students, a handbook for the expert / / by Karl H. Hofmann, Sidney A. Morris New York, : Walter de Gruyter, 2006 Pubbl/distr/stampa **ISBN** 1-282-19485-2 9786612194856 3-11-019977-7 Edizione [2nd rev. ed.] Descrizione fisica 1 online resource (876 p.) Collana De Gruyter studies in mathematics; ; 25 Classificazione SK 340 Altri autori (Persone) MorrisSidney A. <1947-> Disciplina 512/.55 Soggetti Compact groups Mathematics 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 and index. Nota di contenuto Front matter -- Contents -- Chapter 1 Basic Topics and Examples --Chapter 2 The Basic Representation Theory of Compact Groups --Chapter 3 The Ideas of Peter and Weyl -- Chapter 4 Characters --Chapter 5 Linear Lie Groups -- Chapter 6 Compact Lie Groups --Chapter 7 Duality for Abelian Topological Groups -- Chapter 8 Compact Abelian Groups -- Chapter 9 The Structure of Compact Groups -- Chapter 10 Compact Group Actions -- Chapter 11 The Structure of Free Compact Groups -- Chapter 12 Cardinal Invariants of Compact Groups -- Backmatter Sommario/riassunto Dealing with subject matter of compact groups that is frequently cited in fields like algebra, topology, functional analysis, and theoretical physics, this book has been conceived with the dual purpose of providing a text book for upper level graduate courses or seminars, and of serving as a source book for research specialists who need to apply the structure and representation theory of compact groups. After a gentle introduction to compact groups and their representation theory, the book presents self-contained courses on linear Lie groups, on compact Lie groups, and on locally compact abelian groups. However, the thrust of book points in the direction of the structure

theory of infinite dimensional, not necessarily commutative compact

groups, unfettered by weight restrictions or dimensional bounds. In the process it utilizes infinite dimensional Lie algebras and the exponential function of arbitrary compact groups. The first edition of 1998 was well received by reviewers and has been frequently "ed in the areas of instruction and research. For the present new edition the text has been cleaned of typographical flaws and some minor inaccuracies of content; it has been edited and improved in various sections. New material has been added in order to reflect ongoing research. In the process of revising the original edition, the integrity of the original section numbering was carefully respected so that citations of material from the first edition remains perfectly viable to the users of this edition.