Record Nr. UNINA9910459336603321 Autore Dijk Gerrit van <1939-> Titolo Introduction to harmonic analysis and generalized Gelfand pairs [[electronic resource] /] / Gerrit van Dijik Berlin; ; New York, : Walter De Gruyter, 2009 Pubbl/distr/stampa **ISBN** 1-282-71487-2 9786612714870 3-11-022020-2 Descrizione fisica 1 online resource (233 p.) Collana Studies in mathematics;; 36 Classificazione SK 450 515.785 Disciplina Soggetti Harmonic analysis Fourier analysis Electronic books. 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. [217]-220) and index. Frontmatter -- Contents -- 1 Fourier Series -- 2 Fourier Integrals -- 3 Nota di contenuto Locally Compact Groups -- 4 Haar Measures -- 5 Harmonic Analysis on Locally Compact Abelian Groups -- 6 Classical Theory of Gelfand Pairs -- 7 Examples of Gelfand Pairs -- 8 Theory of Generalized Gelfand Pairs -- 9 Examples of Generalized Gelfand Pairs -- Backmatter Sommario/riassunto This book is intended as an introduction to harmonic analysis and generalized Gelfand pairs. Starting with the elementary theory of Fourier series and Fourier integrals, the author proceeds to abstract harmonic analysis on locally compact abelian groups and Gelfand pairs. Finally a more advanced theory of generalized Gelfand pairs is developed. This book is aimed at advanced undergraduates or beginning graduate students. The scope of the book is limited, with the aim of enabling students to reach a level suitable for starting PhD research. The main prerequisites for the book are elementary real, complex and functional analysis. In the later chapters, familiarity with some more advanced functional analysis is assumed, in particular with the spectral theory of (unbounded) self-adjoint operators on a Hilbert space. From the contents Fourier series Fourier integrals Locally

compact groups Haar measures Harmonic analysis on locally compact

abelian groups Theory and examples of Gelfand pairs Theory and examples of generalized Gelfand pairs