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Edizione	[Second edition.]
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Collana	Texts and Readings in Mathematics, , 2366-8717 ; ; 15
Disciplina	515.7222
Soggetti	Dynamics Ergodic theory Operator theory Topology Group theory Algebra Field theory (Physics) Statistical physics Dynamical Systems and Ergodic Theory Operator Theory Group Theory and Generalizations Field Theory and Polynomials Statistical Physics and Dynamical Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The Hahn-Hellinger Theorem -- The Spectral Theorem for Unitary Operators -- Symmetry and Denseness of the Spectrum -- Multiplicity and Rank -- The Skew Product -- A Theorem of Helson and Parry -- Probability Measures on the Circle Group -- Baire Category Theorems of Ergodic Theory -- Translations of Measures on the Circle -- B. Host's Theorem -- L Eigenvalues of Non-Singular Automorphisms -- Generalities on Systems of Imprimitivity -- Dual Systems of Imprimitivity -- Saturated Subgroups of the Circle Group -- Riesz Products As Spectral Measures -- Additional Topics -- Calculus of Generalized Riesz Products.

Sommario/riassunto

This book discusses basic topics in the spectral theory of dynamical systems. It also includes two advanced theorems, one by H. Helson and W. Parry, and another by B. Host. Moreover, Ornstein's family of mixing rank-one automorphisms is given with construction and proof. Systems of imprimitivity and their relevance to ergodic theory are also examined. Baire category theorems of ergodic theory, scattered in literature, are discussed in a unified way in the book. Riesz products are introduced and applied to describe the spectral types and eigenvalues of rank-one automorphisms. Lastly, the second edition includes a new chapter "Calculus of Generalized Riesz Products", which discusses the recent work connecting generalized Riesz products, Hardy classes, Banach's problem of simple Lebesgue spectrum in ergodic theory and flat polynomials.
