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Soggetti	Operator theory Differential equations, Partial Operator Theory Partial Differential Equations
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Preliminaries -- 2 Representation of compact linear operators -- 3 Representation of bounded linear operators.
Sommario/riassunto	The book deals with the representation in series form of compact linear operators acting between Banach spaces, and provides an analogue of the classical Hilbert space results of this nature that have their roots in the work of D. Hilbert, F. Riesz and E. Schmidt. The representation involves a recursively obtained sequence of points on the unit sphere of the initial space and a corresponding sequence of positive numbers that correspond to the eigenvectors and eigenvalues of the map in the Hilbert space case. The lack of orthogonality is partially compensated by the systematic use of polar sets. There are applications to the p-Laplacian and similar nonlinear partial differential equations. Preliminary material is presented in the first chapter, the main results being established in Chapter 2. The final chapter is devoted to the problems encountered when trying to represent non-compact maps.