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Sommario/riassunto

This book focuses on the theory of linear operators on non-Archimedean Banach spaces. The topics treated in this book range from a basic introduction to non-Archimedean valued fields, free non-Archimedean Banach spaces, bounded and unbounded linear operators in the non-Archimedean setting, to the spectral theory for some classes of linear operators. The theory of Fredholm operators is emphasized and used as an important tool in the study of the spectral theory of non-Archimedean operators. Explicit descriptions of the spectra of some operators are worked out. Moreover, detailed background materials on non-Archimedean valued fields and free non-Archimedean Banach spaces are included for completeness and for reference. The readership of the book is aimed toward graduate and postgraduate students, mathematicians, and non-mathematicians such as physicists and engineers who are interested in non-Archimedean functional analysis. Further, it can be used as an introduction to the study of non-Archimedean operator theory in general and to the study of spectral theory in other special cases. .