

1. Record Nr.	UNINA9910967710203321
Autore	Diagana Toka
Titolo	Non-Archimedean linear operators and applications // Toka Diagana
Pubbl/distr/stampa	Hauppauge, N.Y., : Nova Science Lancaster, : Gazelle [distributor], 2009
ISBN	1-61470-561-5
Edizione	[1st ed.]
Descrizione fisica	1 online resource (108 p.)
Disciplina	515.7246
Soggetti	Linear operators Banach spaces Hilbert space
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	Intro -- NON-ARCHIMEDEANLINEAROPERATORSANDAPPLICATIONS -- NON-ARCHIMEDEANLINEAROPERATORSANDAPPLICATIONS -- Contents -- Preface -- Chapter1Non-ArchimedeanValuedFields -- 1.1 Introduction -- 1.2Non-ArchimedeanValuedFields -- 1.2.1 BasicDefinitions -- 1.2.2The-VectorSpaceKt -- 1.3ConstructionofQp -- 1.3.1Introduction -- 1.3.2TheFieldQp -- 1.3.3 ConvergenceofPowerSeriesoverQp -- 1.4ConstructionofK((x)) -- 1.5 BibliographicalNotes -- Chapter2Non- ArchimedeanBanachandHilbertSpaces -- 2.1Non- ArchimedeanBanachSpaces -- 2.1.1BasicDefinitions -- 2.1.2 ExamplesofNon-ArchimedeanBanachSpaces -- 2.2FreeBanachSpaces -- 2.2.1Definitions -- 2.2.2Examples -- 2.3Non- ArchimedeanHilbertSpaces -- 2.3.1Introduction -- 2.3.2Non- ArchimedeanHilbertSpaces -- 2.3.3TheHilbertSpaceEw1xEw2x...xEwt -- 2.4BibliographicalNotes -- Chapter3Non- ArchimedeanBoundedLinearOperators -- 3.1Introduction -- 3.2 BoundedLinearOperatorsonNon-ArchimedeanBanachSpaces -- 3.2.1 BasicDefinitions -- 3.2.2Examples -- 3.2.3TheBanachAlgebraB(X) -- 3.2.4FurtherPropertiesofBoundedLinearOperators -- 3.3 BoundedLinearOperatorsonHilbertSpacesEw -- 3.3.1Introduction -- 3.3.2RepresentationofBoundedOperatorsByInfiniteMatrices -- 3.3.3

ExistenceoftheAdjoint -- 3.3.4
 ExamplesofBoundedOperatorswithnoAdjoint -- 3.4PerturbationofBases
 -- 3.4.1Example -- 3.5Hilbert-SchmidtOperators -- 3.5.1
 BasicDefinitions -- 3.5.2FurtherPropertiesofHilbert-SchmidtOperators
 -- 3.5.3CompletelyContinuousOperators -- 3.5.4Trace -- 3.5.5
 Examples -- 3.6OpenProblems -- 3.7BibliographicalNotes --
 Chapter4Non-ArchimedeanUnboundedLinearOperators -- 4.1
 Introduction -- 4.2BasicDefinitions -- 4.2.1Example -- 4.2.2
 ExistenceoftheAdjoint -- 4.2.3
 ExamplesofUnboundedOperatorsWithnoAdjoint -- 4.3
 ClosedLinearOperatorsonEw -- 4.4DiagonalOperatorsonEw -- 4.5
 OpenProblems -- 4.6BibliographicalNotes -- Chapter5Non-
 ArchimedeanBilinearForms -- 5.1Introduction.
 5.2BasicDefinitions -- 5.2.1ContinuousLinearFunctionalsonew -- 5.2.2
 BoundedBilinearFormsonEwxEw -- 5.2.3
 UnboundedBilinearFormsonEwxEw -- 5.3ClosedandClosablenon-
 ArchimedeanBilinearForms -- 5.3.1ClosednessoftheFormSum -- 5.3.2
 Constructionofanon-ArchimedeanHilbertSpaceUsingQuadraticForms --
 5.3.3FurtherPropertiesoftheClosure -- 5.4
 RepresentationofBilinearFormsonEwxEwbyLinearOperators -- 5.5
 BibliographicalNotes -- Chapter6FunctionsofSomeSelf-
 adjointLinearOperatorsonEw -- 6.1Introduction -- 6.2
 ProductsandSumsofDiagonalOperators -- 6.3
 IntegerPowersofDiagonalOperators -- 6.4FunctionsofSelf-
 AdjointOperators -- 6.5
 FunctionsofSomeSymmetricSquareMatricesOverQp x Qp -- 6.5.1
 ThePowersoftheMatrixT -- 6.5.2ExponentialoftheMatrixT -- 6.6
 OpenProblems -- 6.7BibliographicalNotes -- Chapter7One-
 ParameterFamilyofBoundedLinearOperatorsonFreeBanachSpaces -- 7.1
 Introduction -- 7.2BasicDefinitions -- 7.3Propertiesofnon-
 ArchimedeanC0-Groups -- 7.4ExistenceofSolutionstoSomep-
 adicDifferentialEquations -- 7.5OpenProblems -- 7.6
 BibliographicalNotes -- References -- Index -- Blank Page.

Sommario/riassunto

This self-contained book provides the reader with a comprehensive presentation of recent investigations on operator theory over non-Archimedean Banach and Hilbert spaces. This includes, non-archimedean valued fields, bounded and unbounded linear operators, bilinear forms, functions of linear operators and one-parameter families of bounded linear operators on free branch spaces.
