1. Record Nr. UNISA996466494803316

Autore	Lorenz Thomas
Titolo	Mutational Analysis [[electronic resource]] : A Joint Framework for Cauchy Problems in and Beyond Vector Spaces / / by Thomas Lorenz
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2010
ISBN	1-280-39175-8 9786613569677 3-642-12471-2
Edizione	[1st ed. 2010.]
Descrizione fisica	1 online resource (XIV, 509 p. 57 illus. in color.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 1996
Classificazione	34A6034G1035K2049J5360H2093B03
Disciplina	515.35
Soggetti	Mathematical analysis Analysis (Mathematics) Functions of real variables Dynamics Ergodic theory Differential equations Partial differential equations System theory Analysis Real Functions Dynamical Systems and Ergodic Theory Ordinary Differential Equations Partial Differential Equations Systems Theory, Control
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references (p. 497-503) and indexes.
Nota di contenuto	Extending Ordinary Differential Equations to Metric Spaces: Aubin’s Suggestion -- Adapting Mutational Equations to Examples in Vector Spaces: Local Parameters of Continuity -- Less Restrictive Conditions on Distance Functions: Continuity Instead of Triangle Inequality -- Introducing Distribution-Like Solutions to Mutational Equations -- Mutational Inclusions in Metric Spaces.

Sommario/riassunto	Ordinary differential equations play a central role in science and have been extended to evolution equations in Banach spaces. For many applications, however, it is difficult to specify a suitable normed vector space. Shapes without a priori restrictions, for example, do not have an obvious linear structure. This book generalizes ordinary differential equations beyond the borders of vector spaces with a focus on the well-posed Cauchy problem in finite time intervals. Here are some of the examples: - Feedback evolutions of compact subsets of the Euclidean space - Birth-and-growth processes of random sets (not necessarily convex) - Semilinear evolution equations - Nonlocal parabolic differential equations - Nonlinear transport equations for Radon measures - A structured population model - Stochastic differential equations with nonlocal sample dependence and how they can be coupled in systems immediately - due to the joint framework of Mutational Analysis. Finally, the book offers new tools for modelling.

2.

Record Nr.	UNINA9910712881003321
Titolo	Empirical data on longitudinal dispersion in rivers
Pubbl/distr/stampa	Lakewood, Colorado, : U.S. Geological Survey
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia