1. Record Nr. UNINA9910463727703321 Autore Lorenzi A. Titolo An introduction to identification problems via functional analysis / / A. Lorenzi Utrecht;; Boston:,: VSP,, 2001 Pubbl/distr/stampa **ISBN** 3-11-094092-2 [Reprint 2014] Edizione Descrizione fisica 1 online resource (254 pages): illustrations Collana Inverse and ill-posed problems series, , 1381-4524 Classificazione SK 920 Disciplina 515/.7 Soggetti Inverse problems (Differential equations) Functional analysis Electronic books. 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. Nota di contenuto Frontmatter -- Preface -- Contents -- Introduction -- Chapter 1. Parameter Identification In Linear Ordinary Differential Equations --Chapter 2. Identification Problems In Hilbert Spaces -- Chapter 3. Proper Riemann Integrals For Banach-Valued Functions. Curvilinear Integrals And Banach-Valued Holomorphic Functions -- Chapter 4. Riemann-Stielti Es Integrals Of Banach-Valued Functions -- Chapter 5. Improper Riemann Integrals For Banach Space-Valued Functions --Chapter 6. Banach Algebras And Spectral Analysis For Linear Bounded Operators -- Chapter 7. Identifying Parameters In First-Order Partial Differential Equations -- Chapter 8. Identification Problems Relative To Linear Bounded Operators I -- Chapter 9. Identification Problems Relative To Linear Bounded Operators Ii -- Chapter 10. Analysis Of The Continuous Dependence On The Data -- Chapter 11. Linear Closed Operators And Analytic Semigroups Of Linear Bounded Operators --Chapter 12. Cauchy Problems For Linear Abstract Differential Equations Relative To Sectorial Operators And Applications -- Chapter 13. Identification Problems For Linear Abstract Differential Equations Relative To Sectorial Operators And Applications -- Bibliography -- List

> this monograph is based on two courses in computational mathematics and operative research, which were given by the author in recent years

of Symbols

Sommario/riassunto

to doctorate and PhD students. The text focuses on an aspect of the theory of inverse problems, which is usually referred to as identification of parameters (numbers, vectors, matrices, functions) appearing in differential - or integrodifferential - equations. The parameters of such equations are either quite unknown or partially unknown, however knowledge about these is usually essential as they describe the intrinsic properties of the material or substance under consideration.