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Collana	Inverse and ill-posed problems series
Disciplina	510
Soggetti	Inverse problems (Differential equations) Differential equations Electronic books.
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Nota di contenuto	Frontmatter -- CONTENTS -- INTRODUCTION -- CHAPTER 1. Operator Equations and Inverse Problems -- CHAPTER 2. Inverse Problems for Kinetic Equations -- CHAPTER 3. Geometry of Convex Surfaces in the Large and Inverse Problems of Scattering Theory -- CHAPTER 4. Integral Geometry -- References
Sommario/riassunto	Inverse problems are usually nonlinear and are separated into one-dimensional and multidimensional problems, depending on whether the sought function (or functions) is a function of one variable or of many. Multidimensionality of inverse problems has particular value at present, because practice shows that many investigating processes are described by an equation, of which the co-efficient essentially depends on many variables. This monograph is devoted to statements of multidimensional inverse problems, in particular to methods of their investigation. Questions of the uniqueness of solution, solvability and stability are studied. Methods to construct a solution are given and, in certain cases, inversion formulas are given as well. Concrete applications of the theory developed here are also given. Where possible, the author has stopped to consider the method of investigation of the problems, thereby sometimes losing generality and quantity of the problems, which can be examined by such a method. The book should be of interest to researchers in the field of applied mathematics, geophysics and mathematical biology.

