1. Record Nr. UNICAMPANIAVAN00063378

Autore	Liverino, Basilio
Titolo	Il corallo : esperienze e ricordi di un corallaro / Basilio Liverino
Pubbl/distr/stampa	Torre del Greco, : Banca di credito popolare ; Bologna, : Li Causi, 1983
Descrizione fisica	IX, 229 p. : ill. ; 29 cm.
Disciplina	593
Soggetti	Coralli
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910254292803321

Autore	Bellassoued Mourad
Titolo	Carleman Estimates and Applications to Inverse Problems for Hyperbolic Systems / / by Mourad Bellassoued, Masahiro Yamamoto
Pubbl/distr/stampa	Tokyo : , : Springer Japan : , : Imprint : Springer, , 2017
ISBN	4-431-56600-7
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XII, 260 p. 7 illus., 2 illus. in color.)
Collana	Springer Monographs in Mathematics, , 1439-7382
Disciplina	515.353
Soggetti	Differential equations, Partial Functional analysis Geometry, Differential Manifolds (Mathematics) Complex manifolds Mathematical physics Partial Differential Equations Functional Analysis Differential Geometry Manifolds and Cell Complexes (incl. Diff.Topology) Mathematical Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa

Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Basics of Carleman estimates -- 2. Basic tools of Riemannian geometry -- 3. Well-posedness and regularity of the wave equation with variable coefficients -- 4. Carleman estimate of the wave equation in a Riemannian manifold -- 5. Inverse problem and Exact controllability for the wave equation in a Riemannian manifold -- 6. Carleman estimates for some thermoelasticity systems -- 7. Inverse heat source problem for the thermoelasticity system with variable coefficients -- 8. New realization of the pseudoconvexity -- 9. Stability in an inverse problem for a hyperbolic equation with a finite set of boundary data -- 10. Global Carleman estimate for the Laplace-Beltrami operator with an extra elliptic variable and applications.
Sommario/riassunto	This book is a self-contained account of the method based on Carleman estimates for inverse problems of determining spatially varying functions of differential equations of the hyperbolic type by non-overdetermining data of solutions. The formulation is different from that of Dirichlet-to-Neumann maps and can often prove the global uniqueness and Lipschitz stability even with a single measurement. These types of inverse problems include coefficient inverse problems of determining physical parameters in inhomogeneous media that appear in many applications related to electromagnetism, elasticity, and related phenomena. Although the methodology was created in 1981 by Bukhgeim and Klibanov, its comprehensive development has been accomplished only recently. In spite of the wide applicability of the method, there are few monographs focusing on combined accounts of Carleman estimates and applications to inverse problems. The aim in this book is to fill that gap. The basic tool is Carleman estimates, the theory of which has been established within a very general framework, so that the method using Carleman estimates for inverse problems is misunderstood as being very difficult. The main purpose of the book is to provide an accessible approach to the methodology. To accomplish that goal, the authors include a direct derivation of Carleman estimates, the derivation being based essentially on elementary calculus working flexibly for various equations. Because the inverse problem depends heavily on respective equations, too general and abstract an approach may not be balanced. Thus a direct and concrete means was chosen not only because it is friendly to readers but also is much more relevant. By practical necessity, there is surely a wide range of inverse problems and the method delineated here can solve them. The intention is for readers to learn that method and then apply it to solving new inverse problems.