1. Record Nr. UNISA996466648803316

Autore	Alabau-Boussouira Fatiha
Titolo	Control of Partial Differential Equations [[electronic resource]] : Cetraro, Italy 2010, Editors: Piermarco Cannarsa, Jean-Michel Coron / / by Fatiha Alabau-Boussouira, Roger Brockett, Olivier Glass, Jérôme Le Rousseau, Enrique Zuazua
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2012
ISBN	3-642-27893-0
Edizione	[1st ed. 2012.]
Descrizione fisica	1 online resource (XIII, 344 p. 66 illus., 49 illus. in color.)
Collana	C.I.M.E. Foundation Subseries ; ; 2048
Disciplina	515.353
Soggetti	Differential equations System theory Control theory Continuum mechanics Numerical analysis Differential Equations Systems Theory, Control Continuum Mechanics Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"CIME Foundation subseries".--Cover. "The CIME Course on Control of Partial Differential Equations ... took place in Cetraro (CS, Italy), July 19-23, 2010. ... The course consisted of five series of lectures, which are now the source of the chapters of this monograph".--Pref.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1 On some recent advances on stabilization for hyperbolic equations -- 2 Notes on the Control of the Liouville Equation -- 3 Some questions of control in uid mechanics -- 4 Carleman estimates and some applications to control theory -- 5 The Wave Equation: Control and Numerics.
Sommario/riassunto	The term “control theory” refers to the body of results - theoretical, numerical and algorithmic - which have been developed to influence the evolution of the state of a given system in order to meet a

prescribed performance criterion. Systems of interest to control theory may be of very different natures. This monograph is concerned with models that can be described by partial differential equations of evolution. It contains five major contributions and is connected to the CIME Course on Control of Partial Differential Equations that took place in Cetraro (CS, Italy), July 19 - 23, 2010. Specifically, it covers the stabilization of evolution equations, control of the Liouville equation, control in fluid mechanics, control and numerics for the wave equation, and Carleman estimates for elliptic and parabolic equations with application to control. We are confident this work will provide an authoritative reference work for all scientists who are interested in this field, representing at the same time a friendly introduction to, and an updated account of, some of the most active trends in current research.