

1. Record Nr.	UNISA996418270503316
Titolo	Control Theory of Infinite-Dimensional Systems [[electronic resource] /] / edited by Joachim Kerner, Hafida Laasri, Delio Mugnolo
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2020
ISBN	3-030-35898-4
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (201 pages)
Collana	Linear Operators and Linear Systems, , 2504-3609 ; ; 277
Disciplina	629.8312
Soggetti	System theory Partial differential equations Operator theory Systems Theory, Control Partial Differential Equations Operator Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Consensus Dynamics and its Control on Networks with Time Delays -- Stabilization of a Drude-vacuum model -- A distance of operators acting in different Hilbert spaces and operator convergence -- Abstract boundary delay systems and application to flow in a network with memory -- Stabilization of port-Hamiltonian systems by nonlinear dynamic boundary control -- Polynomial stability of two coupled strings -- Towards funnel control of a moving water tank -- Multi-scale unique continuation principle applied to control theory of the heat equation -- The Hamiltonian approach to Riccati equations for infinite-dimensional systems -- Control theory for hyperbolic Maxwell variational inequalities in type-II superconductivity.
Sommario/riassunto	This book presents novel results by participants of the conference "Control theory of infinite-dimensional systems" that took place in January 2018 at the FernUniversität in Hagen. Topics include well-posedness, controllability, optimal control problems as well as stability of linear and nonlinear systems, and are covered by world-leading experts in these areas. A distinguishing feature of the contributions in

this volume is the particular combination of researchers from different fields in mathematics working in an interdisciplinary fashion on joint projects in mathematical system theory. More explicitly, the fields of partial differential equations, semigroup theory, mathematical physics, graph and network theory as well as numerical analysis are all well-represented.
