Record Nr. UNINA9910746998003321 Control and Inverse Problems: The 2022 Spring Workshop in Monastir, **Titolo** Tunisia / / Kais Ammari, Chaker Jammazi, and Faouzi Triki, editors Pubbl/distr/stampa Cham, Switzerland:,: Birkhauser,, [2023] ©2023 **ISBN** 3-031-35675-6 Edizione [First edition.] Descrizione fisica 1 online resource (276 pages) Collana Trends in Mathematics Series Disciplina 629.8312 Soggetti Control theory Inverse problems (Differential equations) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Stabilization of one dimensional wave equation with variable potential Nota di contenuto and torque -- Controlling a dynamic system through reinforcement learning -- Landweber iterative method for an inverse source problem of space-fractional diffusion equations -- On the Spectrum Distribution of Parametric Second-order Delay Differential Equations. Perspectives in Partial Pole Placement -- Exact controllability of the linear Biharmonic Schrdinger equation with space-dependent coefficients --Carleman estimate and application to the stabilization of a dissipative hyperbolic system -- On the transfer of information in multiplier equations -- A Global Carleman Estimates of the linearized sixth-order 1 D-Boussinesq equation Application -- Nonparametric instrumental regression via mollification -- Finite-time stabilization of some classes of infinite dimensional systems -- Dispersion on certain Cartesian products of graphs -- Tracking Control of Chained Systems: application to nonholonomic unicycle mobile robots -- A short elementary proof of the Gearhart-Pruss theorem for bounded semigroups -- Revisit the damped wave equation. Sommario/riassunto This volume presents a timely overview of control theory and inverse problems, and highlights recent advances in these active research areas. The chapters are based on talks given at the spring school

"Control & Inverse Problems" held in Monastir, Tunisia in May 2022. In addition to providing a snapshot of these two areas, chapters also

highlight breakthroughs on more specific topics, such as: Controllability of dynamical systems Information transfer in multiplier equations Nonparametric instrumental regression Control of chained systems The damped wave equation Control and Inverse Problems will be a valuable resource for both established researchers as well as more junior members of the community.