1. Record Nr. UNINA9910437904303321 Autore Luo Albert C. J Titolo Dynamical System Synchronization / / by Albert C. J. Luo New York, NY:,: Springer New York:,: Imprint: Springer,, 2013 Pubbl/distr/stampa **ISBN** 1-4614-5097-7 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (244 p.) Nonlinear Systems and Complexity, , 2195-9994;; 3 Collana 515.39 Disciplina Soggetti Computational complexity **Physics Dynamics** Ergodic theory Complexity Applications of Graph Theory and Complex Networks Dynamical Systems and Ergodic Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction -- Discontinuity and Local Singularity -- Single Constraint Synchronization -- Multiple Constraint Synchronization -- Function Synchronization -- Discrete Systems Synchronization. Dynamical System Synchronization (DSS) meticulously presents for the Sommario/riassunto first time the theory of dynamical systems synchronization based on the local singularity theory of discontinuous dynamical systems. The book details the sufficient and necessary conditions for dynamical systems synchronizations, through extensive mathematical expression. Techniques for engineering implementation of DSS are clearly presented compared with the existing techniques. This book also: Presents novel concepts and methods for dynamical system synchronization Extends beyond the Lyapunov theory for dynamical system synchronization Introduces companion and synchronization of discrete dynamical systems Includes local singularity theory for discontinuous dynamical systems Covers the invariant domains of synchronization Features more than 75 illustrations Dynamical System

Synchronization is an ideal book for those interested in better

understanding new concepts and methodology for dynamical system

synchronization, local singularity theory for discontinuous dynamical systems, distinct dynamical system synchronization, and invariant domains of synchronization.