1. Record Nr. UNINA9910807035203321 Autore Pilyugin Sergei Yu (Sergei Yurievitch), <1947-> Titolo Spaces of dynamical systems / / Sergei Yu. Pilyugin Berlin; ; Boston, : De Gruyter, c2012 Pubbl/distr/stampa **ISBN** 1-280-57052-0 9786613600127 Edizione [1st ed.] Descrizione fisica 1 online resource (248 p.) Collana De Gruyter studies in mathematical physics;; 3 Classificazione SK 520 Disciplina 515/.39 Soggetti **Dynamics** 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 Dynamical systems -- Topologies on spaces of dynamical systems --Equivalence relations -- Hyperbolic fixed point -- Hyperbolic rest point and hyperbolic closed trajectory -- Transversality -- Hyperbolic sets --Anosov diffeomorphisms -- Smale's horseshoe and chaos -- Closing lemma -- C0-generic properties of dynamical systems -- Shadowing of pseudotrajectories in dynamical systems. Sommario/riassunto Dynamical systems are abundant in theoretical physics and engineering. Their understanding, with sufficient mathematical rigor, is vital to solving many problems. This work conveys the modern theory of dynamical systems in a didactically developed fashion. In addition to topological dynamics, structural stability and chaotic dynamics, also generic properties and pseudotrajectories are covered, as well as

based on years of teaching.

nonlinearity. The author is an experienced book writer and his work is