Record Nr. UNISA996466582503316 Autore Rutter John W. <1935-> Titolo Spaces of homotopy self-equivalences: a survey / / John W. Rutter Pubbl/distr/stampa Berlin, Germany;; New York, New York:,: Springer,, [1997] ©1997 **ISBN** 3-540-69135-9 Edizione [1st ed. 1997.] Descrizione fisica 1 online resource (X, 170 p.) Lecture Notes in Mathematics, , 0075-8434; ; 1662 Collana Disciplina 510 Soggetti Homotopy groups Homotopy equivalences H-spaces Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references (pages [138]-162) and index. Nota di contenuto Preliminaries -- Building blocks -- Representations: homology and homotopy -- Surfaces -- Generators: surface, modular groups --Manifolds of dimension three or more -- ?*(X) not finitely generated --Localization -- ?*(X) finitely presented, nilpotent -- L-R duality --Cellular/homology complexes: methods -- Cellular, homology complexes: calculations -- Non-1-connected postnikov: methods --Homotopy systems, chain complexes -- Non-1-connected spaces: calculations -- Whitehead torsion, simple homotopy -- Unions and products -- Group theoretic properties -- Homotopy type, homotopy groups -- Homotopy automorphisms of H-spaces -- Fibre and equivariant HE's -- Applications. This survey covers groups of homotopy self-equivalence classes of Sommario/riassunto topological spaces, and the homotopy type of spaces of homotopy selfequivalences. For manifolds, the full group of equivalences and the mapping class group are compared, as are the corresponding spaces. Included are methods of calculation, numerous calculations, finite generation results, Whitehead torsion and other areas. Some 330 references are given. The book assumes familiarity with cell complexes, homology and homotopy. Graduate students and established

researchers can use it for learning, for reference, and to determine the

current state of knowledge.