Record Nr. UNINA9910780892903321 Braids [[electronic resource]]: introductory lectures on braids, **Titolo** configurations and their applications / / editors, A. Jon Berrick, ... [et al.] Hackensack, N.J., : World Scientific, c2010 Pubbl/distr/stampa **ISBN** 1-282-76186-2 9786612761867 981-4291-41-2 Descrizione fisica 1 online resource (414 p.) Collana Lecture notes series / Institute for Mathematical Sciences, National University of Singapore, , 1793-0758;; v. 19 Altri autori (Persone) BerrickA. J (A. Jon) Disciplina 514.224 516 Soggetti **Braid theory** Representations of groups Algebraic topology 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. Tutorial on the braid groups / Dale Rolfsen -- Simplicial objects and Nota di contenuto homotopy groups / Jie Wu -- Introduction to configuration spaces and their applications / Frederick R. Cohen -- Configuration spaces, braids, and robotics / Robert Ghrist -- Braids and magnetic fields / Mitchell A. Berger -- Braid group cryptography / David Garber. This book is an indispensable guide for anyone seeking to familarize Sommario/riassunto themselves with research in braid groups, configuration spaces and their applications. Starting at the beginning, and assuming only basic topology and group theory, the volume's noted expositors take the reader through the fundamental theory and on to current research and applications in fields as varied as astrophysics, cryptography and robotics. As leading researchers themselves, the authors write enthusiastically about their topics, and include many striking

illustrations. The chapters have their origins in tutorials give