1. Record Nr. UNINA9910309665303321 Autore Bonanome Marianna C Titolo A Sampling of Remarkable Groups: Thompson's, Self-similar, Lamplighter, and Baumslag-Solitar / / by Marianna C. Bonanome, Margaret H. Dean, Judith Putnam Dean Cham:,: Springer International Publishing:,: Imprint: Birkhäuser,, Pubbl/distr/stampa 2018 3-030-01978-0 ISBN Edizione [1st ed. 2018.] 1 online resource (XII, 188 p. 170 illus., 13 illus. in color.) Descrizione fisica Collana Compact Textbooks in Mathematics, , 2296-4568 Disciplina 512.2 Soggetti Group theory Group Theory and Generalizations Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Preface -- Introduction -- Preliminaries -- Thompsons Group F -- The Lamplighter Group -- Braid Groups -- Baumslag-Solitar Groups --Automatic Groups -- Conclusion -- Bibliography. . Sommario/riassunto This textbook offers students with a basic understanding of group theory a preview of several interesting groups they would not typically encounter until later in their academic careers. By presenting these advanced concepts at this stage, they will gain a deeper understanding of the subject and be motivated to explore more of it. Groups covered include Thompson's groups, self-similar groups, Lamplighter groups, and Baumslag-Solitar groups. Each chapter focuses on one of these groups, and begins by discussing why they are interesting, how they originated, and why they are important mathematically. A collection of specific references for additional reading, topics for further research, and exercises are included at the end of every chapter to encourage students' continued education. With its accessible presentation and engaging style, A Sampling of Remarkable Groups is suitable for students in upper-level undergraduate or beginning graduate abstract algebra courses. It will also be of interest to researchers in

mathematics, computer science, and related fields.