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Nota di contenuto	Part I: Introduction -- 1 Introduction -- Part II: Nonpositively curved cube complexes -- 2 Polyhedral preliminaries -- 3 Right-angled spaces and groups -- Part III: Coxeter groups, Artin groups, buildings -- 4 Coxeter groups, Artin groups, buildings -- Part IV: More on NPC cube complexes -- 5 General theory of cube complexes -- 6 Hyperbolization -- 7 Morse theory and Bestvina–Brady groups -- Appendix A: Complexes of groups.
Sommario/riassunto	In the past fifteen years, the theory of right-angled Artin groups and special cube complexes has emerged as a central topic in geometric group theory. This monograph provides an account of this theory, along with other modern techniques in geometric group theory. Structured around the theme of group actions on contractible polyhedra, this book explores two prominent methods for constructing such actions: utilizing the group of deck transformations of the universal cover of a nonpositively curved polyhedron and leveraging the theory of simple complexes of groups. The book presents various approaches to obtaining cubical examples through CAT(0) cube

complexes, including the polyhedral product construction, hyperbolization procedures, and the Sageev construction. Moreover, it offers a unified presentation of important non-cubical examples, such as Coxeter groups, Artin groups, and groups that act on buildings. Designed as a resource for graduate students and researchers specializing in geometric group theory, this book should also be of high interest to mathematicians in related areas, such as 3-manifolds.
