

1. Record Nr.	UNISALENTO991003636179707536
Autore	Schmidt, Gunther
Titolo	Relational topology [e-book] / by Gunther Schmidt, Michael Winter
Pubbl/distr/stampa	Cham : Springer, 2018
ISBN	3319744518 9783319744513 331974450X 9783319744506
Descrizione fisica	1 online resource (xiv, 198 p. 104 illus., 64 illus. in color)
Collana	Lecture Notes in Mathematics, 0075-8434 ; 2208
Classificazione	AMS 54-01 LC QA611
Altri autori (Persone)	Winter, Michaelauthor
Disciplina	514
Soggetti	Categories (Mathematics) Algebra, Homological Algebra Computer science - Mathematics Logic, Symbolic and mathematical Topology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1.Introduction ; 2. Prerequisites ; 3. Products of Relations ; 4. Meet and Join as Relations ; 5. Applying Relations in Topology ; 6. Construction of Topologies ; 7. Closures and their Aumann Contacts ; 8. Proximity and Nearness ; 9. Frames ; 10. Simplicial Complexes
Sommario/riassunto	This book introduces and develops new algebraic methods to work with relations, often conceived as Boolean matrices, and applies them to topology. Although these objects mirror the matrices that appear throughout mathematics, numerics, statistics, engineering, and elsewhere, the methods used to work with them are much less well known. In addition to their purely topological applications, the volume also details how the techniques may be successfully applied to spatial reasoning and to logics of computer science. Topologists will find several familiar concepts presented in a concise and algebraically manipulable form which is far more condensed than usual, but

visualized via represented relations and thus readily graspable. This approach also offers the possibility of handling topological problems using proof assistants
