

1. Record Nr.	UNINA9910309662803321
Titolo	Algebraic Methods in General Rough Sets // edited by A. Mani, Gianpiero Cattaneo, Ivo Düntsch
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2018
ISBN	3-030-01162-3
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XVI, 733 p. 120 illus., 4 illus. in color.)
Collana	Trends in Mathematics, , 2297-0215
Disciplina	512
Soggetti	Algebra Logic, Symbolic and mathematical Information theory General Algebraic Systems Mathematical Logic and Formal Languages Information and Communication, Circuits
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Algebraic Methods for Rough Approximation Spaces by Lattice Interior–Closure Operations -- Algebraic Methods for Granular Rough Sets -- Three Lessons on the Topological and Algebraic Hidden Core of Rough Set Theory -- Irredundant Coverings, Tolerances, and Related Algebras -- Algebraic Representation, Dualities and Beyond.- Algebraic Methods for Orthopairs and Induced Rough Approximation Spaces -- Rough Objects in Monoidal Closed Categories -- Rough Algebraic Structures Corresponding to Ring Theory -- S-approximation Spaces -- Index.
Sommario/riassunto	This unique collection of research papers offers a comprehensive and up-to-date guide to algebraic approaches to rough sets and reasoning with vagueness. It bridges important gaps, outlines intriguing future research directions, and connects algebraic approaches to rough sets with those for other forms of approximate reasoning. In addition, the book reworks algebraic approaches to axiomatic granularity. Given its scope, the book offers a valuable resource for researchers and teachers in the areas of rough sets and algebras of rough sets, algebraic logic,

non classical logic, fuzzy sets, possibility theory, formal concept analysis, computational learning theory, category theory, and other formal approaches to vagueness and approximate reasoning. Consultants in AI and allied fields will also find the book to be of great practical value.
