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Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 13896
Disciplina	004.0151
Soggetti	Logic programming Database management Expert systems (Computer science) Computer science—Mathematics Artificial intelligence Data mining Logic in AI Database Management System Knowledge Based Systems Mathematics of Computing Artificial Intelligence Data Mining and Knowledge Discovery
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Nota di contenuto	Amalgamation Property for Some Varieties of BL-algebras Generated by one Finite Set of BL-chains with Finitely-many Components -- Comer Schemes, Relation Algebras, and the Flexible Atom Conjecture -- A General Method for Representing Sets of Relations by Vectors -- Contextuality in Distributed Systems -- The Structure of Locally Integral Involutive Po-monoids and Semirings -- Compatibility of Refining and Controlling Plant Automata with Bisimulation Quotients -- Dependences Between Domain Constructions in Heterogeneous

Relation Algebras -- Normal Forms for Elements of the *-Continuous Kleene Algebras $K(x)C^*$ -- Representable and Diagonally rRepresentable Weakening Relation Algebras -- Completeness and the Finite Model Property for Kleene Algebra, Reconsidered -- What Else is Undecidable About Loops -- Implication Algebras and Implication Semigroups of Binary Relations -- On the Complexity of Kleene Algebra with Domain -- Enumerating, Cataloguing and Classifying all Quantales on up to Nine Elements -- Duoidally Enriched Freyd Categories -- Towards a Theory of Conversion Relations for Prefixed Units of Measure -- Relational Algebraic Approach to the Real Numbers - The Additive Group.

Sommario/riassunto

This book constitutes the proceedings of the 20th International Conference on Relational and Algebraic Methods in Computer Science, RAMiCS 2023, which took place in Augsburg, Germany, during April 3–6, 2023. The 17 papers presented in this book were carefully reviewed and selected from 26 submissions. They deal with the development and dissemination of relation algebras, Kleene algebras, and similar algebraic formalisms. Topics covered range from mathematical foundations to applications as conceptual and methodological tools in computer science and beyond. Apart from the submitted articles, this volume features the abstracts of the presentations of the three invited speakers. .
