

|                         |  |
|-------------------------|--|
| 1. Record Nr.           | UNISA996418217103316   |
| Titolo                  | Relational and Algebraic Methods in Computer Science [[electronic resource] ] : 18th International Conference, RAMiCS 2020, Palaiseau, France, October 26–29, 2020, Proceedings // edited by Uli Fahrenberg, Peter Jipsen, Michael Winter  |
| Pubbl/distr/stampa      | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020  |
| ISBN                    | 3-030-43520-2  |
| Edizione                | [1st ed. 2020.]  |
| Descrizione fisica      | 1 online resource (XVIII, 335 p. 665 illus., 64 illus. in color.)  |
| Collana                 | Theoretical Computer Science and General Issues, , 2512-2029 ; ; 12062   |
| Disciplina              | 004.0151   |
| Soggetti                | Machine theory<br>Artificial intelligence<br>Computer networks<br>Computer science<br>Numerical analysis<br>Formal Languages and Automata Theory<br>Artificial Intelligence<br>Computer Communication Networks<br>Computer Science Logic and Foundations of Programming<br>Numerical Analysis  |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Nota di bibliografia    | Includes bibliographical references and index.   |
| Nota di contenuto       | Commutative Doubly-idempotent Semirings Determined by Chains and by Preorder Forests -- A Relation-Algebraic Treatment of the Dedekind Recursion Theorem -- Hardness of Network Satisfaction for Relation Algebras with Normal Representations -- The Theta-Join as a Join With Theta -- Bisimilarity of Diagrams -- Generating Posets Beyond N -- Automated Algebraic Reasoning for Collections and Local Variables with Lenses -- Weakening Relation Algebras and FL 2-algebras -- Verifying the Correctness of Disjoint-Set Forests with Kleene Relation Algebras -- A Hierarchy of Algebras for Boolean Subsets -- Differential Hoare Logics and Refinement Calculi for Hybrid System with Isabelle/HOL -- |

Higher-Order Categorical Substructural Logic: Expanding the Horizon of Triples Theory -- Expressive Power and Succinctness of the Positive Calculus of Relations -- Stone Dualities from Opfibrations -- Preorders, Partial Semigroups, and Quantales -- Counting and Computing Join-Endomorphisms In Lattices -- A Unary Semigroup Trace Algebra -- The Involutive Quantaloid of Completely Distributive Lattices -- Computer-Supported Exploration of a Categorical Axiomatization of Modeloids -- Sharpness in the Fuzzy World.

---

Sommario/riassunto

This book constitutes the proceedings of the 18th International Conference on Relational and Algebraic Methods in Computer Science, RAMiCS 2020, which was due to be held in Palaiseau, France, in April 2020. The conference was cancelled due to the COVID-19 pandemic. The 20 full papers presented together with 3 invited abstracts were carefully selected from 29 submissions. Topics covered range from mathematical foundations to applications as conceptual and methodological tools in computer science and beyond.

---