1. Record Nr. UNINA9910349435803321 Cellular Automata and Discrete Complex Systems: 24th IFIP WG 1.5 **Titolo** International Workshop, AUTOMATA 2018, Ghent, Belgium, June 20–22, 2018, Proceedings / / edited by Jan M. Baetens, Martin Kutrib Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2018 **ISBN** 3-319-92675-6 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (IX, 143 p. 38 illus.) Collana Theoretical Computer Science and General Issues, , 2512-2029;; 10875 511.3 Disciplina Soggetti Computer science Artificial intelligence Machine theory Computer science—Mathematics Numerical analysis Theory of Computation Artificial Intelligence Formal Languages and Automata Theory Mathematical Applications in Computer Science **Numerical Analysis** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. A Gauge-Invariant Reversible Cellular Automaton -- Counter Machines Nota di contenuto and Distributed Automata -- Boolean Networks: Beyond Generalized Asynchronicity -- Evaluating the Quality of Local Structure Approximation Using Elementary Rule 14 -- On Dynamical Complexity of Surjective Ultimately Right-Expansive Cellular Automata --Sequentializing Cellular Automata -- Glider Automorphisms on Some Shifts of Finite Type and a Finitary Ryan's Theorem -- Hierarchies and Undecidability Results for Iterative Arrays with Sparse Communication -- Construction of Some Nonautomatic Sequences by Cellular Automata -- Any Shape can Ultimately Cross Information on Two-

Dimensional Abelian Sandpile Models.

## Sommario/riassunto

This volume constitutes the thoroughly refereed proceedings of the 24th IFIP WG 1.5 International Workshop on Cellular Automata and Discrete Complex Systems, AUTOMATA 2018, held in Ghent, Belgium, in June 2018. The 10 regular papers presented in this book were carefully reviewed and selected from a total of 16 submissions. The papers highlight the major advances in the field and the development of new tools, support the development of theory and applications of CA and DCS and identify and study within an inter- and multidisciplinary context, the important fundamental aspects, concepts, notions and problems concerning CA and DCS.