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Nota di contenuto	Intro -- Preface -- Organization -- Abstracts of Invited Talks -- Two Dimensional Cellular Automata and Computational Complexity -- Fixed Points in Boolean Networks -- Contents -- Invited Papers -- Strict Asymptotic Nilpotency in Cellular Automata -- 1 Introduction -- 2 Nilpotency on Multidimensional Full Shifts -- 3 Nilpotency from a Subset of Configurations -- 4 Nilpotency on Multidimensional Subshifts -- 4.1 SFTs -- 4.2 Sofics (and Beyond) -- 5 Nilpotency as Uniform Convergence to a Point -- 6 Cellular Automata on Graphs and Groups

-- 6.1 What Works on General Groups? -- 7 CA with Very Sparse Spacetime Diagrams -- References -- Regular Papers -- Infinite Two-Dimensional Strong Prefix Codes: Characterization and Properties -- 1 Introduction -- 2 Preliminaries -- 3 Two-Dimensional Codes -- 4 Infinite Strong Prefix Codes -- 5 Measure of Two-Dimensional Languages and Codes -- References -- Restricted Binary Strings and Generalized Fibonacci Numbers -- 1 Introduction -- 2 A Simple Bijection and Some Applications -- 3 Number of 1's in the Strings of Fn (k) -- 4 Conclusion -- References -- Von Neumann Regular Cellular Automata -- 1 Introduction -- 2 Regular Cellular Automata -- 3 Regular Finite Cellular Automata -- 4 Regular Linear Cellular Automata -- References -- Enumerative Results on the Schroder Pattern Poset -- 1 Introduction -- 2 The Covering Relation in the Schroder Pattern Poset -- 3 Enumerative Results on Pattern Avoiding Schroder Paths -- 3.1 The Pattern (UD)k -- 3.2 The Pattern Uk Dk -- 3.3 The Pattern H2 k -- 3.4 The Pattern UH2 k-1D -- 3.5 The Pattern H2 k-1UD -- 4 Suggestions for Further Work -- References -- Canonical Form of Gray Codes in N-cubes -- 1 Introduction -- 2 Canonical Form of Gray Codes -- 2.1 Isomorphic Cycles -- 2.2 Preliminary Tools -- 2.3 Canonical Form -- 2.4 Examples of Application of C.
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Sommario/riassunto

This volume constitutes the thoroughly refereed proceedings of the 23rd IFIP WG 1.5 International Workshop on Cellular Automata and Discrete Complex Systems, AUTOMATA 2017, held in Milan, Italy, in June 2017. The 14 full papers presented together with one full-length invited paper and 2 invited talk abstracts were carefully reviewed and selected from a total of 28 submissions. The papers feature research on correlated models of automata. The topics include aspects and features of such models: dynamics; topological, ergodic, and algebraic aspects; algorithmic and complexity issues; emergent properties; formal languages; symbolic dynamics; tilings; models of parallelism and distributed systems; timing schemes; synchronous versus asynchronous models; phenomenological descriptions; scientific modelling; practical applications. .