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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 11639
Disciplina	004.36 005.1
Soggetti	Algorithms Computer engineering Computer networks Operating systems (Computers) Robotics Computer science - Mathematics Discrete mathematics Artificial intelligence - Data processing Computer Engineering and Networks Operating Systems Discrete Mathematics in Computer Science Data Science
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Note generali	Includes index.
Nota di contenuto	A Topological Perspective on Distributed Network Algorithms -- On Sense of Direction and Mobile Agents -- Locality of not-so-weak coloring -- Near-gathering of energy-constrained mobile agents -- Optimal Multi Broadcast with Beeps using Group Testing -- Tracking Routes in Communication Networks -- Positional Encoding by Robots with Non-Rigid Movements -- Arbitrary Pattern Formation by Asynchronous Opaque Robots with Lights -- Breaking the Linear-

Memory Barrier in MPC: Fast MIS on Trees with Strongly Sublinear Memory -- Collaborative Delivery on a Fixed Path with Homogeneous Energy-Constrained Robots -- Asynchronous Rendezvous with Different Maps -- Gathering Synchronous Robots in Graphs: from general properties to dense and symmetric topologies -- Time-Energy Tradeoffs for Evacuation by Two Robots in the Wireless Model -- Evacuating Two Robots from a Disk: A Second Cut -- Distributed pattern formation in a ring -- On Distributed Merlin-Arthur Decision Protocols -- Anonymous Read/Write Memory: Leader Election and Desanonymization -- Faster Construction of Overlay Networks -- Partial gathering of mobile agents without identifiers or global knowledge in asynchronous unidirectional rings -- Set Agreement Power is not a Precise Characterization for Oblivious Deterministic Anonymous Objects -- Making Randomized Algorithms Self-Stabilizing -- How to Color a French Flag{Biologically Inspired Algorithms for Scale-Invariant Patterning -- Self-Adjusting Line Networks -- Mutual Visibility for Asynchronous Robots -- Infinite Grid Exploration by Disoriented Robots -- A Bounding Box Overlay for Competitive Routing in Hybrid Communication Networks -- Mobile Robots with Uncertain Visibility Sensors: Possibility Results and Lower Bounds -- A strongly-stabilizing protocol for spanning tree construction against a mobile Byzantine fault -- Average-based Population Protocols : Explicit and Tight Bounds of the Convergence Time -- Visiting Infinitely Often the Unit Interval while Minimizing the Idle-time of High Priority Points.

Sommario/riassunto

This book constitutes the refereed conference proceedings of the 26th International Colloquium on Structural Information and Communication Complexity, SIROCCO 2019, held in L’Aquila, Italy, in July 2019. The 19 full papers and 9 short papers presented in this book were carefully reviewed and selected from 39 submissions. They are devoted to the study of the interplay between structural knowledge, communication, and computing in decentralized systems of multiple communicating entities.