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Soggetti	Computer networks Computer systems Computers, Special purpose Operating systems (Computers) Application software Computer science—Mathematics Computer Communication Networks Computer System Implementation Special Purpose and Application-Based Systems Operating Systems Computer and Information Systems Applications Mathematics of Computing
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Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Paper: On the Characterization of Blockchain Consensus under Incentives -- Brief announcement: Forgive & Forget: Self-Stabilizing Swarms in Spite of Byzantine Robots -- Stationary and Deterministic Leader Election in Self-Organizing Particle Systems -- Robust Privacy-Preserving Gossip Averaging -- Synchronous t-Resilient Consensus in Arbitrary Graphs -- Tasks in Modular Proofs of Concurrent Algorithms -- On Gathering of Semi-Synchronous Robots in Graphs -- Brief Announcement: Analysis of a Memory-Efficient Self-Stabilizing BFS

Spanning Tree Construction -- Brief Announcement: Distributed Computing in the Asynchronous LOCAL model -- An Environment for Specifying and Model Checking Mobile Ring Robot Algorithms -- Brief Announcement: Self-Stabilizing LCM Schedulers for Autonomous Mobile Robots using Neighborhood Mutual Remainder -- Reducing the Number of Messages in Self-stabilizing Protocols -- A Loosely Self-stabilizing Protocol for Randomized Congestion Control with Logarithmic Memory -- Exploration of dynamic ring networks by a single agent with the H-hops and S-time steps view -- iperfTZ: Understanding Network Bottlenecks for TrustZone-based Trusted Applications -- Atomic Cross-Chain Swaps with Improved Space and Local Time Complexity -- Achieving Starvation-Freedom with Greater Concurrency in Multi-Version Object-based Transactional Memory Systems -- Improved-Zigzag: An improved local-information based self-optimizing routing algorithm in virtual grid networks -- Fault Tolerant Network Constructors -- Ring Exploration of Myopic Luminous Robots with Visibility More than One -- Brief Announcement: Self-Stabilizing Construction of a Minimal Weakly  $\mathcal{ST}$ -Reachable Directed Acyclic Graph -- Adaptive Versioning in Transactional Memories -- Brief Announcement: Blockguard: Adaptive Blockchain Security -- Brief Announcement: Fully Anonymous Shared Memory Algorithms -- A Topological View of Partitioning Arguments: Reducing k-Set Agreement to Consensus -- Logarithmic Expected-Time Leader Election in Population Protocol Model -- A Self-stabilizing 1-maximal Independent Set Algorithm -- Black hole search despite Byzantine agents -- Self-Adjusting Linear Networks.

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#### Sommario/riassunto

This book constitutes the refereed proceedings of the 21st International Symposium on Stabilization, Safety, and Security of Distributed Systems, SSS 2019, held in Pisa, Italy, in October 2019. The 21 full papers presented were carefully reviewed and selected from 45 submissions. The papers deal with the design and development of distributed systems with a focus on systems that are able to provide guarantees on their structure, performance, and/or security in the face of an adverse operational environment.

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