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Nota di contenuto	Regular Papers -- The Mailbox Problem -- Matrix Signatures: From MACs to Digital Signatures in Distributed Systems -- How to Solve Consensus in the Smallest Window of Synchrony -- Local Terminations and Distributed Computability in Anonymous Networks -- A Self-stabilizing Algorithm with Tight Bounds for Mutual Exclusion on a Ring -- Fast Distributed Approximations in Planar Graphs -- Closing the Complexity Gap between FCFS Mutual Exclusion and Mutual Exclusion -- The Weakest Failure Detector for Message Passing Set-Agreement -- Local Maps: New Insights into Mobile Agent Algorithms -- r 3: Resilient Random Regular Graphs -- Online, Dynamic, and Distributed Embeddings of Approximate Ultrametrics -- Constant-Space Localized Byzantine Consensus -- Optimistic Erasure-Coded Distributed Storage -- On the Emulation of Finite-Buffered Output Queued Switches Using

Combined Input-Output Queuing -- On Radio Broadcasting in Random Geometric Graphs -- Ping Pong in Dangerous Graphs: Optimal Black Hole Search with Pure Tokens -- Deterministic Rendezvous in Trees with Little Memory -- Broadcasting in UDG Radio Networks with Missing and Inaccurate Information -- Efficient Broadcasting in Known Geometric Radio Networks with Non-uniform Ranges -- On the Robustness of (Semi) Fast Quorum-Based Implementations of Atomic Shared Memory -- Permissiveness in Transactional Memories -- The Synchronization Power of Coalesced Memory Accesses -- Optimizing Threshold Protocols in Adversarial Structures -- Hopscotch Hashing -- Computing Lightweight Spanners Locally -- Dynamic Routing and Location Services in Metrics of Low Doubling Dimension -- Leveraging Linial's Locality Limit -- Continuous Consensus with Failures and Recoveries -- No Double Discount: Condition-Based Simultaneity Yields Limited Gain -- Bosco: One-Step Byzantine Asynchronous Consensus -- A Limit to the Power of Multiple Nucleation in Self-assembly -- Using Bounded Model Checking to Verify Consensus Algorithms -- Theoretical Bound and Practical Analysis of Connected Dominating Set in Ad Hoc and Sensor Networks -- Brief Announcements -- Brief Announcement: On the Solvability of Anonymous Partial Grids Exploration by Mobile Robots -- The Dynamics of Probabilistic Population Protocols -- A Distributed Algorithm for Computing and Updating the Process Number of a Forest -- Brief Announcement: Corruption Resilient Fountain Codes -- Brief Announcement: An Early-Stopping Protocol for Computing Aggregate Functions in Sensor Networks -- Easy Consensus Algorithms for the Crash-Recovery Model -- Evaluating the Quality of a Network Topology through Random Walks -- Brief Announcement: Local-Spin Algorithms for Abortable Mutual Exclusion and Related Problems -- Data Failures -- Reliable Broadcast Tolerating Byzantine Faults in a Message-Bounded Radio Network -- Brief Announcement: Eventual Leader Election in the Infinite Arrival Message-Passing System Model.

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### Sommario/riassunto

This book constitutes the refereed proceedings of the 22nd International Symposium on Distributed Computing, DISC 2008, held in Arcachon, France, in September 2008. The 33 revised full papers, selected from 101 submissions, are presented together with 11 brief announcements of ongoing works; all of them were carefully reviewed and selected for inclusion in the book. The papers address all aspects of distributed computing, including the theory, design, implementation and applications of distributed algorithms, systems and networks - ranging from foundational and theoretical topics to algorithms and systems issues and to applications in various fields.

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