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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 8784
Disciplina	004.36
Soggetti	Algorithms Computer networks Data structures (Computer science) Information theory Computer Communication Networks Data Structures and Information Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Concurrency -- Automatically Adjusting Concurrency to the Level of Synchrony -- Biological and Chemical Networks -- Speed Faults in Computation by Chemical Reaction Networks -- Fault-Tolerant ANTS -- Task Allocation in Ant Colonies -- Agreement Problems -- Communication-Efficient Randomized Consensus -- Tight Bound on Mobile Byzantine Agreement -- Unbeatable Consensus -- Reliable Broadcast with Respect to Topology Knowledge -- Robot Coordination, Scheduling -- Evacuating Robots via Unknown Exit in a Disk -- Randomized Pattern Formation Algorithm for Asynchronous Oblivious Mobile Robots -- A Theoretical Foundation for Scheduling and Designing Heterogeneous Processors for Interactive Applications -- Graph Distances and Routing -- Vertex Fault Tolerant Additive Spanners -- Close to Linear Space Routing Schemes -- Near-Optimal Distributed Tree Embedding -- Radio Networks -- Deterministic Leader Election in Multi-hop Beeping Networks (Extended Abstract) -- Who Are You? Secure Identities in Ad Hoc Networks -- Approximate Local Sums

and Their Applications in Radio Networks -- Radio Network Lower Bounds Made Easy -- Shared Memory -- On Correctness of Data Structures under Reads-Write Concurrency -- Solo-Fast Universal Constructions for Deterministic Abortable Objects -- Space Bounds for Adaptive Renaming -- Dynamic and Social Networks Lower Bounds for Structuring Unreliable Radio Networks -- Random Walks on Evolving Graphs with Recurring Topologies -- Randomized Rumor Spreading in Poorly Connected Small-World Networks -- Relativistic Systems -- Making Sense of Relativistic Distributed Systems -- Transactional Memory and Concurrent Data Structures -- Safety of Live Transactions in Transactional Memory: TMS is Necessary and Sufficient -- Decomposing Opacity -- The Adaptive Priority Queue with Elimination and Combining -- Improving Average Performance by Relaxing Distributed Data Structures -- Distributed Graph Algorithms -- Almost-Tight Distributed Minimum Cut Algorithms -- Distributed Algorithms for Coloring Interval Graphs -- Distributed Symmetry Breaking in Hypergraphs -- Communication -- On Streaming and Communication Complexity of the Set Cover Problem -- On the Communication Complexity of Linear Algebraic Problems in the Message Passing Model -- Near-Constant-Time Distributed Algorithms on a Congested Clique -- Brief Announcement: Replacement - Handling Failures in a Replicated State Machine -- Brief Announcement: The Power of Scheduling-Aware Synchronization -- Brief Announcement: Assignment of Different-Sized Inputs in MapReduce -- Brief Announcement: Scheduling Multiple Objects in Distributed Transactional Memory -- Brief Announcement: Relaxing Opacity in Pessimistic Transactional Memory -- Brief Announcement: A Practical Transactional Memory Interface -- Brief Announcement: On Dynamic and Multi-functional Labeling Schemes -- Brief Announcement: Update Consistency in Partitionable Systems -- Brief Announcement: Breaching the Wall of Impossibility Results on Disjoint-Access Parallel TM -- Brief Announcement: COP Composition Using Transaction Suspension in the Compiler -- Brief Announcement: Non-blocking Monitor Executions for Increased Parallelism -- Brief Announcement: Agreement in Partitioned Dynamic Networks -- Brief Announcement: The 1-2-3-Toolkit for Building Your Own Balls-into-Bins Algorithm -- Brief Announcement: k-Selection and Sorting in the SINR Model -- Brief Announcement: Distributed $3/2$ -Approximation of the Diameter -- Brief Announcement: Space-Optimal Silent Self-stabilizing Spanning Tree Constructions Inspired by Proof-Labeling Schemes -- Brief Announcement: Secure Anonymous Broadcast -- Brief Announcement: Privacy-Preserving Location-Based Services.

Sommario/riassunto

This book constitutes the proceedings of the 28th International Symposium on Distributed Computing, DISC 2014, held in Austin, TX, USA, in October 2014. The 35 full papers presented in this volume were carefully reviewed and selected from 148 full paper submissions. In the back matter of the volume a total of 18 brief announcements is presented. The papers are organized in topical sections named: concurrency; biological and chemical networks; agreement problems; robot coordination and scheduling; graph distances and routing; radio networks; shared memory; dynamic and social networks; relativistic systems; transactional memory and concurrent data structures; distributed graph algorithms; and communication.
