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Altri autori (Persone)	DolevShlomi CobbJorge FischerMichael
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Nota di contenuto	Invited Talks Abstracts -- Arcane Information, Solving Relations, and Church Censorship -- Computation of Equilibria and Stable Solutions -- A Geometry of Networks -- Contributed Papers -- Systematic Correct Construction of Self-stabilizing Systems: A Case Study -- A

Fault-Resistant Asynchronous Clock Function -- Self-stabilizing Leader Election in Dynamic Networks -- Loop-Free Super-Stabilizing Spanning Tree Construction -- A New Technique for Proving Self-stabilizing under the Distributed Scheduler -- A Tranformational Approach for Designing Scheduler-Oblivious Self-stabilizing Algorithms -- On Byzantine Containment Properties of the min?+?1 Protocol -- Efficient Self-stabilizing Graph Searching in Tree Networks -- Adaptive Containment of Time-Bounded Byzantine Faults -- Brief Announcement: Fast Convergence in Route-Preservation -- Authenticated Broadcast with a Partially Compromised Public-Key Infrastructure -- On Applicability of Random Graphs for Modeling Random Key Predistribution for Wireless Sensor Networks -- “Slow Is Fast” for Wireless Sensor Networks in the Presence of Message Losses -- Modeling and Analyzing Periodic Distributed Computations -- Complexity Issues in Automated Model Revision without Explicit Legitimate State -- Algorithmic Verification of Population Protocols -- Energy Management for Time-Critical Energy Harvesting Wireless Sensor Networks -- Stably Decidable Graph Languages by Mediated Population Protocols -- Broadcasting in Sensor Networks of Unknown Topology in the Presence of Swamping -- Brief Announcement: Configuration of Actuated Camera Networks for Multi-target Coverage -- Brief Announcement: On the Hardness of Topology Inference -- Self-stabilizing Algorithm of Two-Hop Conflict Resolution -- Low Memory Distributed Protocols for 2-Coloring.-Connectivity-Preserving Scattering of Mobile Robots with Limited Visibility -- Computing in Social Networks -- On Transactional Scheduling in Distributed Transactional Memory Systems -- Recursion in Distributed Computing -- On Adaptive Renaming under Eventually Limited Contention -- RobuSTM: A Robust Software Transactional Memory -- A Provably Starvation-Free Distributed Directory Protocol -- Lightweight Live Migration for High Availability Cluster Service -- Approximation of ?-Timeliness -- A Framework for Adaptive Optimization of Remote Synchronous CSCW in the Cloud Computing Era -- Chameleon-MAC: Adaptive and Self-? Algorithms for Media Access Control in Mobile Ad Hoc Networks -- A Comparative Study of Rateless Codes for P2P Persistent Storage -- Dynamically Reconfigurable Filtering Architectures -- A Quantitative Analysis of Redundancy Schemes for Peer-to-Peer Storage Systems -- A Framework for Secure and Private P2P Publish/Subscribe -- Snap-Stabilizing Linear Message Forwarding -- Vulnerability Analysis of High Dimensional Complex Systems -- Storage Capacity of Labeled Graphs -- Safe Flocking in Spite of Actuator Faults.

Sommario/riassunto

The papers in this volume were presented at the 12th International Sym- sium on Stabilization, Safety, and Security of Distributed Systems (SSS), held September 20–22, 2010 at Columbia University, NYC, USA. The SSS symposium is an international forum for researchersand practiti- ers in the design and development of distributed systems with self-* properties: (theclassical)self-stabilizing,self-con?guring,self-organizing,self-managing,se- repairing,self-healing,self-optimizing, self-adaptive,andself-protecting. Research in distributed systems is now at a crucial point in its evolution, marked by the importance of dynamic systems such as peer-to-peer networks, large-scale wi-lesssensornetworks,mobileadhocnetworks,cloudcomputing, roboticnetworks, etc. Moreover, new applications such as grid and web services, banking and- commerce, e-health and robotics, aerospaceand avionics, automotive, industrial process control, etc. , have joined the traditional applications of distributed s- tems. SSS started as the Workshop on Self-Stabilizing Systems (WSS), the ?rst two of which were

held in Austin in 1989 and in Las Vegas in 1995. Starting in 1995, the workshop began to be held biennially; it was held in Santa Barbara (1997), Austin (1999), and Lisbon (2001). As interest grew and the community expanded, the title of the forum was changed in 2003 to the Symposium on Self- Stabilizing Systems (SSS). SSS was organized in San Francisco in 2003 and in Barcelona in 2005. As SSS broadened its scope and attracted researchers from other communities, a couple of changes were made in 2006. It became an - nual event, and the name of the conference was changed to the International Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS).