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Titolo	Stabilization, Safety, and Security of Distributed Systems [[electronic resource]] : 11th International Symposium, SSS 2009, Lyon, France, November 3-6, 2009. Proceedings / / edited by Rachid Guerraoui, Franck Petit
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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 5873
Classificazione	004 DAT 250f DAT 461f SS 4800
Disciplina	004n/a
Soggetti	Computer networks User interfaces (Computer systems) Human-computer interaction Computers, Special purpose Computer science Algorithms Data protection Computer Communication Networks User Interfaces and Human Computer Interaction Special Purpose and Application-Based Systems Theory of Computation Data and Information Security
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	International conference proceedings.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Talks -- Challenges in Personalizing and Decentralizing the Web: An Overview of GOSSPLE -- Local Algorithms: Self-stabilization on Speed -- As Good as It Gets: Competitive Fault Tolerance in Network Structures -- Regular Papers -- Multicore Constraint-Based Automated Stabilization -- A Theory of Network Tracing -- Developing Autonomic

and Secure Virtual Organisations with Chemical Programming -- Making Population Protocols Self-stabilizing -- Analysis of Wireless Sensor Network Protocols in Dynamic Scenarios -- Consensus When All Processes May Be Byzantine for Some Time -- A Superstabilizing  $\log(n)$ -Approximation Algorithm for Dynamic Steiner Trees -- Looking for the Weakest Failure Detector for  $k$ -Set Agreement in Message-Passing Systems: Is the End of the Road? -- Optimal Byzantine Resilient Convergence in Asynchronous Robots Networks -- FoG: Fighting the Achilles' Heel of Gossip Protocols with Fountain Codes -- How to Improve Snap-Stabilizing Point-to-Point Communication Space Complexity? -- Fault-Containment in Weakly-Stabilizing Systems -- Stability of Distributed Algorithms in the Face of Incessant Faults -- Dependability Engineering of Silent Self-stabilizing Systems -- Robustness and Dependability of Self-Organizing Systems - A Safety Engineering Perspective -- Efficient Robust Storage Using Secret Tokens -- An Optimal Self-stabilizing Firing Squad -- Anonymous Transactions in Computer Networks -- Nash Equilibria in Stabilizing Systems -- ACCADA: A Framework for Continuous Context-Aware Deployment and Adaptation -- A Self-stabilizing Approximation Algorithm for Vertex Cover in Anonymous Networks -- Separation of Circulating Tokens -- Visiting Gafni's Reduction Land: From the BG Simulation to the Extended BG Simulation -- Randomized Gathering of Mobile Robots with Local-Multiplicity Detection -- Scalable P2P Overlays of Very Small Constant Degree: An Emerging Security Threat -- CFlood: A Constrained Flooding Protocol for Real-time Data Delivery in Wireless Sensor Networks -- Cached Sensorset Transformation of Non-silent Self-stabilizing Algorithms with Unreliable Links -- Analysis of an Intentional Fault Which Is Undetectable by Local Checks under an Unfair Scheduler -- Exploring Polygonal Environments by Simple Robots with Faulty Combinatorial Vision -- Finding Good Partners in Availability-Aware P2P Networks -- Churn-Resilient Replication Strategy for Peer-to-Peer Distributed Hash-Tables -- Distributed Power Control with Multiple Agents in a Distributed Base Station Scheme Using Macrodiversity -- Redundancy Maintenance and Garbage Collection Strategies in Peer-to-Peer Storage Systems -- Model Checking Coalition Nash Equilibria in MAD Distributed Systems -- OpenMP Support for NBTI-Induced Aging Tolerance in MPSoCs -- A Self-stabilizing Algorithm for Graph Searching in Trees -- A Metastability-Free Multi-synchronous Communication Scheme for SoCs -- From Local Impact Functions to Global Adaptation of Service Compositions -- A Wireless Security Framework without Shared Secrets -- Read-Write-Codes: An Erasure Resilient Encoding System for Flexible Reading and Writing in Storage Networks -- Distributed Sleep Scheduling in Wireless Sensor Networks via Fractional Domatic Partitioning -- Network-Friendly Gossiping -- Black Hole Search with Tokens in Interconnected Networks -- Oracle-Based Flocking of Mobile Robots in Crash-Recovery Model -- Speculation for Parallelizing Runtime Checks -- Optimistic Fair Exchange Using Trusted Devices -- Application Data Consistency Checking for Anomaly Based Intrusion Detection -- Self Adaptive High Interaction Honeycombs Driven by Game Theory -- Cooperative Autonomic Management in Dynamic Distributed Systems -- Brief Announcements -- Brief Announcement: Consistent Fixed Points and Negative Gain -- Brief Announcement: Induced Churn to Face Adversarial Behavior in Peer-to-Peer Systems -- Safer Than Safe: On the Initial State of Self-stabilizing Systems -- Brief Announcement: Unique Permutation Hashing -- Randomization Adaptive Self-stabilization -- Brief Announcement: On the Time Complexity of Distributed Topological Self-stabilization -- Brief

Announcement: An OS Architecture for Device Self-protection -- Brief  
Announcement: Towards Secure Cloud Computing -- Brief  
Announcement: Robust Self-stabilizing Construction of Bounded Size Weight-Based Clusters -- Brief  
Announcement: A Stabilizing Algorithm for Finding Two Disjoint Paths in Arbitrary Networks -- Brief  
Analysis of Stabilizing MAC -- Brief  
Announcement: A Simple and Quiescent Omega Algorithm in the Crash-Recovery Model -- Brief  
Announcement: How to Overcome the Limits of Bounds -- Brief  
Announcement: The Design and Evaluation of a Distributed Reliable File System.

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#### Sommario/riassunto

This book constitutes the refereed proceedings of the 11th International Symposium on Stabilization, Safety, and Security of Distributed Systems, SSS 2009, held in Lyon, France, in November 2009. The 49 revised full papers and 14 brief announcements presented together with three invited talks were carefully reviewed and selected from 126 submissions. The papers address all safety and security-related aspects of self-stabilizing systems in various areas. The most topics related to self-\* systems. The special topics were alternative systems and models, autonomic computational science, cloud computing, embedded systems, fault-tolerance in distributed systems / dependability, formal methods in distributed systems, grid computing, mobility and dynamic networks, multicore computing, peer-to-peer systems, self-organizing systems, sensor networks, stabilization, and system safety and security.

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