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Altri autori (Persone) **AbramskySamson** 

005.1 Disciplina

Soggetti Machine theory

> Computer programming Robots - Programming Formal languages

Lingua di pubblicazione Inglese

**Formato** Materiale a stampa

Livello bibliografico Monografia

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Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Invited Talks -- Local Search: Simple, Successful, But Sometimes

Sluggish -- When Conflicting Constraints Can Be Resolved - The Lovász Local Lemma and Satisfiability -- Session 1-Track A. Combinatorial Optimization -- Plane Spanners of Maximum Degree Six -- The Positive Semidefinite Grothendieck Problem with Rank Constraint -- Cycle Detection and Correction -- Decomposition Width of Matroids --Session 2-Track A1. Game Theory -- The Cooperative Game Theory Foundations of Network Bargaining Games -- On the Existence of Pure Nash Equilibria in Weighted Congestion Games -- On the Limitations of Greedy Mechanism Design for Truthful Combinatorial Auctions --Mean-Payoff Games and Propositional Proofs -- Session 2-Track A2. Security -- Online Network Design with Outliers -- Efficient Completely Non-malleable Public Key Encryption -- Polynomial-Space

Approximation of No-Signaling Provers -- From Secrecy to Soundness:

Efficient Verification via Secure Computation -- Session 3-Track A1.

Data Structures -- Mergeable Dictionaries -- Faster Algorithms for Semi-matching Problems (Extended Abstract) -- Clustering with Diversity -- New Data Structures for Subgraph Connectivity -- Session 3-Track A2. Sorting & Hashing -- Tight Thresholds for Cuckoo Hashing via XORSAT -- Resource Oblivious Sorting on Multicores -- Interval Sorting -- Session 4-Track A. Graphs, Nets and Optimization --Inapproximability of Hypergraph Vertex Cover and Applications to Scheduling Problems -- Thresholded Covering Algorithms for Robust and Max-min Optimization -- Graph Homomorphisms with Complex Values: A Dichotomy Theorem -- Metrical Task Systems and the k-Server Problem on HSTs -- Session 5-Track A1. Scheduling --Scheduling Periodic Tasks in a Hard Real-Time Environment -- Scalably Scheduling Power-Heterogeneous Processors -- Better Scalable Algorithms for Broadcast Scheduling -- Max-min Online Allocations with a Reordering Buffer -- Session 5-Track A2. Graphs & Hypergraphs -- Orientability of Random Hypergraphs and the Power of Multiple Choices -- On the Inapproximability of Vertex Cover on k-Partite k-Uniform Hypergraphs -- Dynamic Programming for Graphs on Surfaces -- Interval Graphs: Canonical Representation in Logspace -- Session 6-Track A. Best Paper Award -- Approximating the Partition Function of the Ferromagnetic Potts Model -- Session 7-Track A. Algebraic Problems -- On the Relation between Polynomial Identity Testing and Finding Variable Disjoint Factors -- On Sums of Roots of Unity --Exponential Time Complexity of the Permanent and the Tutte Polynomial -- On Approximate Horn Formula Minimization -- Session 8-Track A. Networks & Communication Complexity -- Choosing, Agreeing, and Eliminating in Communication Complexity -- Additive Spanners in Nearly Quadratic Time -- Composition Theorems in Communication Complexity -- Network Design via Core Detouring for Problems without a Core -- Session 9-Track A1. Complexity & Automata -- Weak Completeness Notions for Exponential Time --Efficient Evaluation of Nondeterministic Automata Using Factorization Forests -- On the Complexity of Searching in Trees: Average-Case Minimization -- Session 9-Track A2. Finding & Testing -- Finding Is as Easy as Detecting for Quantum Walks -- Improved Constructions for Non-adaptive Threshold Group Testing -- Testing Non-uniform k-Wise Independent Distributions over Product Spaces -- Session 10-Track A1. Approximations -- A Sublogarithmic Approximation for Highway and Tollbooth Pricing -- Maximum Quadratic Assignment Problem: Reduction from Maximum Label Cover and LP-Based Approximation Algorithm -- Cell Probe Lower Bounds and Approximations for Range Mode -- SDP Gaps for 2-to-1 and Other Label-Cover Variants --Session 10-Track A2. Streaming & Preprocessing -- Data Stream Algorithms for Codeword Testing -- Streaming Algorithms for Independent Sets -- Preprocessing of Min Ones Problems: A Dichotomy -- Holographic Reduction: A Domain Changed Application and Its Partial Converse Theorems -- Session 11-Track A1. Adaptive, Knowledge & Optimality -- Optimal Trade-Offs for Succinct String Indexes -- Approximation Algorithms for Optimal Decision Trees and Adaptive TSP Problems -- Concurrent Knowledge Extraction in the Public-Key Model -- Session 11-Track A2. Covering, Graphs & Independence -- On the k-Independence Required by Linear Probing and Minwise Independence -- Covering and Packing in Linear Space --Testing 2-Vertex Connectivity and Computing Pairs of Vertex-Disjoint s-t Paths in Digraphs.