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Altri autori (Persone)	AbramskySamson
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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 -- BetterScalable 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 Chained 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.

Sommario/riassunto

ICALP 2010, the 37th edition of the International Colloquium on Automata, Languages and Programming was held July 6-10, 2010 in Bordeaux, France. ICALP is a series of annual conference of the European Association for Theoretical Computer Science (EATCS) which first took place in 1972, organized by Maurice Nivat and his colleagues in Paris. This year, the program consisted of the established track A, focusing on Algorithms, Complexity and Games, chaired by Paul G. Spirakis; Track B, focusing on Logic, Semantics, Automata and Theory of Programming, chaired by Samson Abramsky; Track C focusing this year on Foundations of Networked Computation: Models, Algorithms and Information Management, chaired by Friedhelm Meyer auf der Heide. The three Program Committees received a total of 389 submissions: 222 for Track A, 114 for Track B and 53 for Track C, written by authors from 45 different countries. Of these, 60, 30 and 16, respectively, were selected for inclusion in the scientific program. Each paper got on average 3.5 referee reports. The Program also included six invited talks by Pierre Fraigniaud (CNRS and Univ. Paris Diderot), Jean Goubault-Larrecq (ENS Cachan and LSV), Burkhard Monien (Univ. Paderborn), Joel Ouaknine (Oxford Univ. Computing Lab.), Roger Wattenhofer (ETH Zurich), and Emo Welzl (ETH Zurich). These 112 contributed and invited papers are presented in two proceedings volumes. The first contains the contributed papers of Track A and the invited talks of Burkhard Monien and Emo Welzl. The second volume contains the contributed papers of Tracks B and C as well as the invited talks of Pierre Fraigniaud, Jean Goubault-Larrecq, Joel Ouaknine and Roger Wattenhofer.