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Nota di contenuto	Session 1 -- Finding Small Holes -- Session 2A -- Approximate Range Searching: The Absolute Model -- Orthogonal Range Searching in Linear and Almost-Linear Space -- Spherical LSH for Approximate Nearest Neighbor Search on Unit Hypersphere -- Session 2B -- A 4/3-Approximation Algorithm for Minimum 3-Edge-Connectivity -- Approximating the Maximum Sharing Problem -- The Stackelberg Minimum Spanning Tree Game -- Session 3A -- Edges and Switches, Tunnels and Bridges -- How to Draw a Clustered Tree -- Drawing

Colored Graphs on Colored Points -- Session 3B -- Discrepancy-Sensitive Dynamic Fractional Cascading, Dominated Maxima Searching, and 2-d Nearest Neighbors in Any Minkowski Metric -- Priority Queues Resilient to Memory Faults -- Simple and Space-Efficient Minimal Perfect Hash Functions -- Session 4A -- A Near Linear Time Approximation Scheme for Steiner Tree Among Obstacles in the Plane -- A Pseudopolynomial Time O(logn)-Approximation Algorithm for Art Gallery Problems -- Optimization for First Order Delaunay Triangulations -- Session 4B -- Constant Factor Approximations for the Hotlink Assignment Problem -- Approximation Algorithms for the Sex-Equal Stable Marriage Problem -- A Stab at Approximating Minimum Subadditive Join -- Session 5 -- Algorithmic Challenges for Systems-Level Correlational Analysis: A Tale of Two Datasets -- Session 6A -- Flooding Countries and Destroying Dams -- I/O-Efficient Flow Modeling on Fat Terrains -- Computing the Visibility Map of Fat Objects -- Session 6B -- Independent Sets in Bounded-Degree Hypergraphs -- Steiner Tree in Planar Graphs: An O(nlogn) Approximation Scheme with Singly-Exponential Dependence on Epsilon -- Computing a Minimum-Depth Planar Graph Embedding in O(n 4) Time -- Session 7A -- On a Family of Strong Geometric Spanners That Admit Local Routing Strategies -- Spanners for Geometric Intersection Graphs -- On Generalized Diamond Spanners -- Session 7B -- The k-Resource Problem on Uniform and on Uniformly Decomposable Metric Spaces -- On the Robustness of Graham's Algorithm for Online Scheduling -- Improved Results for a Memory Allocation Problem -- Session 8A -- Computational and Structural Advantages of Circular Boundary Representation -- Alpha-Beta Witness Complexes -- Cauchy' s Theorem and Edge Lengths of Convex Polyhedra -- Session 8B -- Fixed-Parameter Tractability for Non-Crossing Spanning Trees -- Improved Algorithms for the Feedback Vertex Set Problems -- Kernelization Algorithms for d-Hitting Set Problems -- Session 9A -- Largest Bounding Box, Smallest Diameter, and Related Problems on Imprecise Points -- Maximizing Maximal Angles for Plane Straight-Line Graphs -- Cuttings for Disks and Axis-Aligned Rectangles -- Session 9B -- Kernelization and Complexity Results for Connectivity Augmentation Problems -- An Improved Parameterized Algorithm for the Minimum Node Multiway Cut Problem -- Branch and Recharge: Exact Algorithms for Generalized Domination -- Session 10A -- On Computing the Centroid of the Vertices of an Arrangement and Related Problems -- Optimal Algorithms for the Weighted p-Center Problems on the Real Line for Small p -- Session 10B -- Faster Approximation of Distances in Graphs -- Approximate Shortest Paths Guided by a Small Index -- Session 11A -- Initializing Sensor Networks of Non-uniform Density in the Weak Sensor Model -- Computing Best Coverage Path in the Presence of Obstacles in a Sensor Field -- 35/44-Approximation for Asymmetric Maximum TSP with Triangle Inequality -- On Euclidean Vehicle Routing with Allocation -- Session 11B -- Optimal Lightweight Construction of Suffix Arrays for Constant Alphabets -- Range Non-overlapping Indexing and Successive List Indexing -- Space-Efficient Straggler Identification in Round-Trip Data Streams Via Newton's Identities and Invertible Bloom Filters -- Dynamic TCP Acknowledgment with Sliding Window.

Sommario/riassunto

The papers in this volume were presented at the 10th Workshop on Algorithms and Data Structures (WADS 2005). The workshop took place August 15 - 17, 2007, at Dalhousie University, Halifax, Canada. The workshop alternates with the Scandinavian Workshop on Algorithm Theory (SWAT), continuing the t- dition of SWAT and WADS starting with SWAT 1988 and WADS 1989. From 142 submissions, the Program

Committee selected 54 papers for presentation at the workshop. In addition, invited lectures were given by the following dist- guished researchers: Je? Erickson (University of Illinois at Urbana-Champaign) and Mike Langston (University of Tennessee). On behalf of the Program Committee, we would like to express our sincere appreciation to the many persons whose e?ort contributed to making WADS 2007 a success. These include the invited speakers, members of the Steering and ProgramCommittees, the authorswho submitted papers, andthe manyreferees who assisted the Program Committee. We are indebted to Gerardo Reynaga for installing and modifying the submission software, maintaining the submission server and interacting with authors as well as for helping with the preparation of the program.