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Nota di contenuto	Session I: Upward Drawings -- On the Upward Planarity of Mixed Plane Graphs -- Upward Planarity Testing: A Computational Study -- Session II: Planarity -- Characterizing Planarity by the Splittable Deque -- Strip Planarity Testing -- Morphing Planar Graph Drawings Efficiently -- Invited Talk I -- Graph Drawing through the Lens of a Framework for Analyzing Visualization Methods (Invited Talk, Extended Abstract) -- Session III: Beyond Planarity -- A Linear-Time Algorithm for Testing Outer-1-Planarity.-Straight-Line Grid Drawings of 3-Connected 1-Planar Graphs .-New Bounds on the Maximum Number of Edges in k-Quasi-Planar Graphs -- Recognizing Outer 1-Planar Graphs in Linear Time -- Session IV: Geometric Representations -- Straight Line Triangle Representations -- Extending Partial Representations of Circle Graphs -- On Balanced -Contact Representations -- Strongly-Connected Outerplanar Graphs with Proper Touching Triangle

Representations -- Session V: 3D et al -- Achieving Good Angular Resolution in 3D Arc Diagrams -- A Duality Transform for Constructing Small Grid Embeddings of 3D.-Polytopes -- Block Additivity of Z2-Embeddings -- Session VI: Universality -- Exploiting Air-Pressure to Map Floorplans on Point Sets -- Superpatterns and Universal Point Sets -- Simultaneous Embedding: Edge Orderings, Relative Positions, Cutvertices -- Session VII: Practical Graph Drawing -- Sketched Graph Drawing: A Lesson in Empirical Studies -- Many-to-One Boundary Labeling with Backbones -- Streamed Graph Drawing and the File Maintenance Problem -- COAST: A Convex Optimization Approach to Stress-Based Embedding -- Session VIII: Subgraphs -- Colored Spanning Graphs for Set Visualization -- Drawing Non-planar Graphs with Crossing-Free Subgrap -- Exploring Complex Drawings via Edge Stratification -- Drawing Planar Graphs with a Prescribed Inner Face -- Session IX: Crossings -- Metro-Line Crossing Minimization: Hardness, Approximations, and Tractable Cases -- Fixed Parameter Tractability of Crossing Minimization ofAlmost-Trees -- Strict Confluent Drawing -- Session X: Geometric Graphs and Geographic Networks -- A Ramsey-Type Result for Geometric -hypergraphs -- Minimum Length Embedding of Planar Graphs at Fixed Vertex Locations -- Stub Bundling and Confluent Spirals for Geographic Networks -- Session XI: Angular Restrictions -- On Orthogonally Convex Drawings of Plane Graphs (Extended Abstract) -- Planar and Plane Slope Number of Partial 2-Trees -- Slanted Orthogonal Drawings -- Session XII: Grids -- Drawing Arrangement Graphs in Small Grids, or How to Play Planarity -- Incremental Grid-like Layout Using Soft and Hard Constraints -- Using ILP/SAT to Determine Pathwidth, Visibility Representations, and other Grid-Based Graph Drawings -- Session XIII: Curves and Routes -- Untangling Two Systems of Noncrossing Curves -- Drawing Permutations with Few Corners -- Dynamic Traceroute Visualization at Multiple Abstraction Levels -- Graph Drawing Contest -- Graph Drawing Contest Report -- Posters -- 3D Graph Printing in GLuskap -- Optical Graph Recognition on a Mobile Device -- Browser-Based Graph Visualization of Dynamic Data with VisGraph -- Exact and Fixed-Parameter Algorithms for Metro-Line Crossing Minimization Problems.- Convex-Arc Drawings of Pseudolines -- The Density of Classes of 1-Planar Graphs -- BGPlay3D: Exploiting the Ribbon Representation to Show the Evolution of Interdomain Routing -- Ravenbrook Chart: A New Library for Graph Layout and Visualisation -- Small Grid Embeddings of Prismatoids and the Platonic Solids -- The Graph Landscape – a Visualization of Graph Properties -- Application of Graph Layout Algorithms for the Visualization of Biological Networks in 3D.-Plane Cubic Graphs and the Air-Pressure Method.

Sommario/riassunto

This book constitutes the thoroughly refereed post-conference proceedings of the 21st International Symposium on Graph Drawing, GD 2013, held in Bordeaux, France, in September 2013. The 42 revised full papers presented together with 12 revised short papers, 3 invited talks and 1 poster description were carefully reviewed and selected from 110 submissions. The papers are organized in topical sections on upward drawings, planarity, beyond planarity, geometric representations, 3D et al., universality, practical graph drawing, subgraphs, crossings, geometric graphs and geographic networks, angular restrictions, grids, curves and routes. The book also contains a short description of the graph drawing contest.