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| 1. Record Nr.           | UNINA9910357841003321   |
| Titolo                  | Graph Drawing and Network Visualization : 27th International Symposium, GD 2019, Prague, Czech Republic, September 17–20, 2019, Proceedings // edited by Daniel Archambault, Csaba D. Tóth  |
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| ISBN                    | 3-030-35802-X   |
| Edizione                | [1st ed. 2019.]   |
| Descrizione fisica      | 1 online resource (xxiii, 626 pages) : illustrations  |
| Collana                 | Theoretical Computer Science and General Issues, , 2512-2029 ; ; 11904  |
| Disciplina              | 511.5   |
| Soggetti                | Algorithms<br>Computer science—Mathematics<br>Data structures (Computer science)<br>Information theory<br>Image processing—Digital techniques<br>Computer vision<br>Mathematics of Computing<br>Data Structures and Information Theory<br>Computer Imaging, Vision, Pattern Recognition and Graphics  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Nota di contenuto       | Cartograms and Intersection Graphs -- Stick Graphs with Length Constraints -- Representing Graphs and Hypergraphs by Touching Polygons in 3D -- Optimal Morphs of Planar Orthogonal Drawings II -- Computing Stable Demers Cartograms -- Geometric Graph Theory -- Bundled Crossings Revisited -- Crossing Numbers of Beyond-Planar Graphs -- On the 2-Colored Crossing Number -- Minimal Representations of Order Types by Geometric Graphs -- Balanced Schnyder woods for planar triangulations: an experimental study with applications to graph drawing and graph separators -- Clustering -- A Quality Metric for Visualization of Clusters in Graphs -- Multi-level Graph Drawing using Infomap Clustering -- On Strict (Outer-)Conuent Graphs -- Quality Metrics -- On the Edge-Length Ratio of Planar |

Graphs -- Node Overlap Removal Algorithms: A Comparative Study --  
Graphs with large total angular resolution -- Arrangements --  
Computing Height-Optimal Tangles Faster -- On Arrangements of  
Orthogonal Circles -- Extending Simple Drawings -- Coloring Hasse  
diagrams and disjointness graphs of curves -- A Low Number of  
Crossings -- Ecient Generation of Dierent Topological  
Representations of Graphs Beyond-Planarity -- The QuaSEFE Problem  
-- ChordLink: A New Hybrid Visualization Model -- Stress-Plus-X (SPX)  
Graph Layout -- Best Paper in Track 1 -- Exact Crossing Number  
Parameterized by Vertex Cover -- Morphing and Planarity --  
Maximizing Ink in Partial Edge Drawings of k-Plane Graphs -- Graph  
Drawing with Morphing Partial Edges -- A Note on Universal Point Sets  
for Planar Graphs -- Parameterized Complexity -- Parameterized  
Algorithms for Book Embedding Problems -- Sketched Representations  
and Orthogonal Planarity of Bounded Treewidth Graphs -- Collinearities  
-- 4-Connected Triangulations on Few Lines -- Line and Plane Cover  
Numbers Revisited -- Drawing planar graphs with few segments on a  
polynomial grid -- Variants of the Segment Number of a Graph --  
Topological Graph Theory -- Local and Union Page Numbers -- Mixed  
Linear Layouts: Complexity, Heuristics, and Experiments -- Homotopy  
height, grid-major height and graph-drawing height -- On the Edge-  
Vertex Ratio of Maximal Thrackles -- Best Paper in Track 2 --  
Symmetry Detection and Classication in Drawings of Graphs -- Level  
Planarity -- An SPQR-Tree-Like Embedding Representation for Upward  
Planarity -- A Natural Quadratic Approach to the Generalized Graph  
Layering Problem -- Graph Stories in Small Area -- Level-Planar  
Drawings with Few Slopes -- Graph Drawing Contest Report -- Graph  
Drawing Contest Report -- Poster Abstracts -- A 1-planarity Testing  
and Embedding Algorithm -- Stretching Two Pseudolines in Planar  
Straight-Line Drawings -- Adventures in Abstraction: Reachability in  
Hierarchical Drawings -- On Topological Book Embedding for k-Plane  
Graphs -- On Compact RAC Drawings -- FPQ-choosable Planarity  
Testing -- Packing Trees into 1-Planar Graphs -- Geographic Network  
Visualization Techniques: A Work-In-Progress Taxonomy -- On the  
Simple Quasi Crossing Number of  $K_{11}$  -- Minimising Crossings in a  
Tree-Based Network -- Crossing Families and Their Generalizations --  
Which Sets of Strings are Pseudospherical?.

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### Sommario/riassunto

This book constitutes the refereed proceedings of the 27th International Symposium on Graph Drawing and Network Visualization, GD 2019, held in Prague, Czech Republic, in September 2019. The 42 papers and 12 posters presented in this volume were carefully reviewed and selected from 113 submissions. They were organized into the following topical sections: Cartograms and Intersection Graphs, Geometric Graph Theory, Clustering, Quality Metrics, Arrangements, A Low Number of Crossings, Best Paper in Track 1, Morphing and Planarity, Parameterized Complexity, Collinearities, Topological Graph Theory, Best Paper in Track 2, Level Planarity, Graph Drawing Contest Report, and Poster Abstracts.

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