

Contents

Preface	vii
Discrete Geometry in Minkowski Spaces	1
Javier Alonso, Horst Martini, and Margarita Spirova	
Engineering Branch-and-Cut Algorithms for the Equicut Problem	17
Miguel F. Anjos, Frauke Liers, Gregor Pardella, and Andreas Schmutzer	
An Approach to the Dodecahedral Conjecture Based on Bounds for Spherical Codes	33
Kurt M. Anstreicher	
On Minimal Tilings with Convex Cells Each Containing a Unit Ball	45
Károly Bezdek	
On Volumes of Permutation Polytopes	55
Katherine Burggraf, Jesús De Loera, and Mohamed Omar	
Monotone Paths in Planar Convex Subdivisions and Polytopes	79
Adrian Dumitrescu, Günter Rote, and Csaba D. Tóth	
Complexity of the Positive Semidefinite Matrix Completion Problem with a Rank Constraint	105
Marianna E.-Nagy, Monique Laurent, and Antonios Varvitsiotis	
The Strong Dodecahedral Conjecture and Fejes Tóth's Conjecture on Sphere Packings with Kissing Number Twelve	121
Thomas C. Hales	
Solving Nuclear Norm Regularized and Semidefinite Matrix Least Squares Problems with Linear Equality Constraints	133
Kaifeng Jiang, Defeng Sun, and Kim-Chuan Toh	
Techniques for Submodular Maximization	163
Jon Lee	

A Further Generalization of the Colourful Carathéodory Theorem	179
Frédéric Meunier and Antoine Deza	
Expected Crossing Numbers	191
Bojan Mohar and Tamon Stephen	
EL-Labelings and Canonical Spanning Trees for Subword Complexes ...	213
Vincent Pilaud and Christian Stump	
Bandwidth, Vertex Separators, and Eigenvalue Optimization	249
Franz Rendl, Abdel Lisser, and Mauro Piacentini	
Exploiting Symmetries in Polyhedral Computations	265
Achill Schürmann	
Conditions for Correct Sensor Network Localization Using SDP Relaxation	279
Davood Shamsi, Nicole Taheri, Zhisu Zhu, and Yinyu Ye	
A Primal–Dual Smooth Perceptron–von Neumann Algorithm	303
Negar Soheili and Javier Peña	
Selected Open Problems in Discrete Geometry and Optimization	321
Károly Bezdek, Antoine Deza, and Yinyu Ye	



<http://www.springer.com/978-3-319-00199-9>

Discrete Geometry and Optimization

Bezdek, K.; Deza, A.; Ye, Y. (Eds.)

2013, X, 336 p., Hardcover

ISBN: 978-3-319-00199-9