

Mathematical Programming SERIES A

A Publication of the Mathematical Optimization Society

Mathematical Programming Series A

Volume 141 · Numbers 1–2 · October 2013

FULL LENGTH PAPERS

On the diameter of partition polytopes and vertex-disjoint cycle cover

S. Borgwardt 1

A branch-and-cut algorithm for the maximum benefit Chinese postman problem

Á. Corberán · I. Plana · A.M. Rodríguez-Chía · J.M. Sanchis 21

Equations on monotone graphs

S.M. Robinson 49

An FPTAS for optimizing a class of low-rank functions over a polytope

S. Mittal · A.S. Schulz 103

Computing clique and chromatic number of circular-perfect graphs in polynomial time

A. Pécher · A.K. Wagler 121

Nonsmooth optimization via quasi-Newton methods

A.S. Lewis · M.L. Overton 135

Strong lift-and-project cutting planes for the stable set problem

M. Giandomenico · F. Rossi · S. Smriglio 165

Computing pure Nash and strong equilibria in bottleneck congestion games

T. Harks · M. Hoefer · M. Klimm · A. Skopalik 193

The piecewise linear optimization polytope: new inequalities and intersection with semi-continuous constraints

M. Zhao · I.R. de Farias Jr. 217

Testing additive integrality gaps

F. Eisenbrand · N. Hähnle · D. Pálvölgyi · G. Shmonin 257

(Contents continued on back cover)

Comprehensively covered by
ACM Computing Reviews,
Mathematical Reviews and
Zentrablatt MATH

(Contents continued)

Sparse solutions to random standard quadratic optimization problems

X. Chen · J. Peng · S. Zhang 273

The GUS-property of second-order cone linear complementarity problems

W.H. Yang · X. Yuan 295

A practical relative error criterion for augmented Lagrangians

J. Eckstein · P.J.S. Silva 319

Fast alternating linearization methods for minimizing the sum of two convex functions

D. Goldfarb · S. Ma · K. Scheinberg 349

Risk averse elastic shape optimization with parametrized fine scale geometry

B. Geihe · M. Lenz · M. Rumpf · R. Schultz 383

A robust optimization approach to experimental design for model discrimination of dynamical systems

D. Skanda · D. Lebiedz 405

Semidefinite relaxations for non-convex quadratic mixed-integer programming

C. Buchheim · A. Wiegele 435

A polyhedral approach to the single row facility layout problem

A.R.S. Amaral · A.N. Letchford 453

On generalizations of network design problems with degree bounds

N. Bansal · R. Khandekar · J. Könemann · V. Nagarajan · B. Peis 479

Some properties of convex hulls of integer points contained in general convex sets

S.S. Dey · D.A. Morán R. 507

A 3-approximation algorithm for the facility location problem with uniform capacities

A. Aggarwal · A. Louis · M. Bansal · N. Garg · N. Gupta · S. Gupta · S. Jain 527

A simple LP relaxation for the asymmetric traveling salesman problem

T. Nguyen 549

Unique lifting of integer variables in minimal inequalities

A. Basu · M. Campêlo · M. Conforti · G. Cornuéjols · G. Zambelli 561

SHORT COMMUNICATIONS

Simple bounds for recovering low-complexity models

E. Candès · B. Recht 577

On t -branch split cuts for mixed-integer programs

S. Dash · O. Günlük 591

ERRATUM

Erratum to: Convex approximations for complete integer recourse models

M.H. Van der Vlerk 601

Instructions for Authors can be found on the journal's website www.springer.com/10107