## Monique Laurent

## List of Publications by Year

 in descending orderSource: https:|/exaly.com/author-pdf/1664613/publications.pdf
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1 Sum-of-squares hierarchies for binary polynomial optimization. Mathematical Programming, 2023, 197, 621-660.

Convergence analysis of a Lasserre hierarchy of upper bounds for polynomial minimization on the sphere. Mathematical Programming, 2022, 193, 665-685.

Improved convergence analysis of Lasserreâ€ $\mathrm{TM}_{\mathrm{S}}$ measure-based upper bounds for polynomial minimization on compact sets. Mathematical Programming, 2022, 193, 831-871.

Bounding the separable rank via polynomial optimization. Linear Algebra and Its Applications, 2022, 648, 1-55.

Near-optimal analysis of Lasserreâ $€^{\mathrm{TM}}$ s univariate measure-based bounds for multivariate polynomial optimization. Mathematical Programming, 2021, 188, 443-460.

Sum-of-Squares Hierarchies for Binary Polynomial Optimization. Lecture Notes in Computer Science, 2021, , 43-57.

7 Perfect elimination orderings for symmetric matrices. Optimization Letters, 2020, 14, 339-353.

Worst-Case Examples for Lasserreâ€ ${ }^{T M} s$ Measureâ $\epsilon^{\prime B}$ Based Hierarchy for Polynomial Optimization on the
Hypercube. Mathematics of Operations Research, 2020, 45, 86-98.

Lower Bounds on Matrix Factorization Ranks via Noncommutative Polynomial Optimization.
Foundations of Computational Mathematics, 2019, 19, 1013-1070.

A Survey of Semidefinite Programming Approaches to the Generalized Problem of Moments and Their Error Analysis. Association for Women in Mathematics Series, 2019, , 17-56.

Bounds on entanglement dimensions and quantum graph parameters via noncommutative polynomial
optimization. Mathematical Programming, 2018, 170, 5-42.

Comparison of Lasserreâ $€^{\mathrm{TM}}$ s Measure-Based Bounds for Polynomial Optimization to Bounds Obtained by
Simulated Annealing. Mathematics of Operations Research, 2018, 43, 1317-1325.

On the convergence rate of grid search for polynomial optimization over the simplex. Optimization Letters, 2017, 11, 597-608.

Improved Convergence Rates for Lasserre-Type Hierarchies of Upper Bounds for Box-Constrained Polynomial Optimization. SIAM Journal on Optimization, 2017, 27, 347-367.

A Lex-BFS-based recognition algorithm for Robinsonian matrices. Discrete Applied Mathematics, 2017, 222, 151-165.

Bound-Constrained Polynomial Optimization Using Only Elementary Calculations. Mathematics of Operations Research, 2017, 42, 834-853.

Similarity-First Search: A New Algorithm with Application to Robinsonian Matrix Recognition. SIAM
Journal on Discrete Mathematics, 2017, 31, 1765-1800.
0.8

Convergence analysis for Lasserreâ $€^{T M}$ s measure-based hierarchy of upper bounds for polynomial optimization. Mathematical Programming, 2017, 162, 363-392.

19 Matrices with high completely positive semidefinite rank. Linear Algebra and Its Applications, 2017, 513,
122-148.

A Structural Characterization for Certifying Robinsonian Matrices. Electronic Journal of Combinatorics, 2017, 24, .

Conic Approach to Quantum Graph Parameters Using Linear Optimization Over the Completely Positive Semidefinite Cone. SIAM Journal on Optimization, 2015, 25, 2461-2493.

The quadratic assignment problem is easy for Robinsonian matrices with Toeplitz structure.
Operations Research Letters, 2015, 43, 103-109.

An alternative proof of a PTAS for fixed-degree polynomial optimization over the simplex.
Mathematical Programming, 2015, 151, 433-457.

An Error Analysis for Polynomial Optimization over the Simplex Based on the Multivariate
Hypergeometric Distribution. SIAM Journal on Optimization, 2015, 25, 1498-1514.

Handelmanâ $€^{T M}$ s hierarchy for the maximum stable set problem. Journal of Clobal Optimization, 2014, 60,
393-423.

A new graph parameter related to bounded rank positive semidefinite matrix completions.
Mathematical Programming, 2014, 145, 291-325.

Forbidden minor characterizations for low-rank optimal solutions to semidefinite programs over the
elliptope. Journal of Combinatorial Theory Series B, 2014, 108, 40-80.

Moment matrices, border bases and real radical computation. Journal of Symbolic Computation, 2013,
51, 63-85.

Complexity of the Positive Semidefinite Matrix Completion Problem with a Rank Constraint. Fields
Institute Communications, 2013, , 105-120.

30 The Approach of Moments for Polynomial Equations. Profiles in Operations Research, 2012, , 25-60.
0.4

On the Lasserre Hierarchy of Semidefinite Programming Relaxations of Convex Polynomial
2.0

35
Optimization Problems. SIAM Journal on Optimization, $2011,21,824-832$.

32 On Leonid Gurvitsâ $€^{\mathrm{TM}}$ s Proof for Permanents. American Mathematical Monthly, 2010, 117, 903.
0.3

Error Bounds for Some Semidefinite Programming Approaches to Polynomial Minimization on the Hypercube. SIAM Journal on Optimization, 2010, 20, 3104-3120.

A generalized flat extension theorem for moment matrices. Archiv Der Mathematik, 2009, 93, 87-98.
0.5

Block-diagonal semidefinite programming hierarchies for 0/1 programming. Operations Research
Letters, 2009, 37, 27-31.

A prolongationâ€"projection algorithm for computing the finite real variety of an ideal. Theoretical
Computer Science, 2009, 410, 2685-2700.

| 37 | Sums of Squares, Moment Matrices and Optimization Over Polynomials. The IMA Volumes in Mathematics and Its Applications, 2009, , 157-270. | 0.5 | 342 |
| :---: | :---: | :---: | :---: |
| 38 | Semidefinite Characterization and Computation of Zero-Dimensional Real Radical Ideals. Foundations of Computational Mathematics, 2008, 8, 607-647. | 2.5 | 77 |
| 39 | The Operator \$Psi\$ for the Chromatic Number of a Graph. SIAM Journal on Optimization, 2008, 19, 572-591. | 2.0 | 46 |
| 40 | Computing Semidefinite Programming Lower Bounds for the (Fractional) Chromatic Number Via Block-Diagonalization. SIAM Journal on Optimization, 2008, 19, 592-615. | 2.0 | 18 |
| 41 | Semidefinite representations for finite varieties. Mathematical Programming, 2007, 109, 1-26. | 2.4 | 52 |
| 42 | Strengthened semidefinite programming bounds for codes. Mathematical Programming, 2007, 109, 239-261. | 2.4 | 34 |
| 43 | Semidefinite bounds for the stability number of a graph via sums of squares of polynomials. Mathematical Programming, 2007, 110, 145-173. | 2.4 | 21 |
| 44 | A PTAS for the minimization of polynomials of fixed degree over the simplex. Theoretical Computer Science, 2006, 361, 210-225. | 0.9 | 67 |
| 45 | Revisiting two theorems of Curto and Fialkow on moment matrices. Proceedings of the American Mathematical Society, 2005, 133, 2965-2976. | 0.8 | 61 |
| 46 | Semidefinite Approximations for Clobal Unconstrained Polynomial Optimization. SIAM Journal on Optimization, 2005, 16, 490-514. | 2.0 | 39 |
| 47 | Semidefinite Programming and Integer Programming. Handbooks in Operations Research and Management Science, 2005, 12, 393-514. | 0.6 | 80 |
| 48 | A Comparison of the Sherali-Adams, LovÃjsz-Schrijver, and Lasserre Relaxations for 0ấ 1 " Programming. Mathematics of Operations Research, 2003, 28, 470-496. | 1.3 | 251 |
| 49 | Lower Bound for the Number of Iterations in Semidefinite Hierarchies for the Cut Polytope. Mathematics of Operations Research, 2003, 28, 871-883. | 1.3 | 38 |

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\begin{aligned}
& 55 \text { The real positive semidefinite completion problem for series-parallel graphs. Linear Algebra and Its } \\
& \text { Applications, 1997, 252, 347-366. }
\end{aligned}
$$57 On the Facial Structure of the Set of Correlation Matrices. SIAM Journal on Matrix Analysis andApplications, 1996, 17, 530-547.

61 Collapsing and lifting for the cut cone. Discrete Mathematics, 1994, 127, 105-130. ..... 0.7
62 Applications of cut polyhedra â€" II. Journal of Computational and Applied Mathematics, 1994, 55, 217-247. ..... 2.0 ..... 33
63 The inequicut cone. Discrete Mathematics, 1993, 119, 21-48. ..... 0.7 ..... 10
64 The even and odd cut polytopes. Discrete Mathematics, 1993, 119, 49-66. ..... 0.7 ..... 8
65 The cut cone III: On the role of triangle facets. Graphs and Combinatorics, 1993, 9, 135-152. 0.4 ..... 6
66 The cut cone III: On the role of triangle facets. Graphs and Combinatorics, 1992, 8, 125-142.0.414
67 Facets for the cut cone I. Mathematical Programming, 1992, 56, 121-160. 2.4 ..... 47
68 Facets for the cut cone II: Clique-web inequalities. Mathematical Programming, 1992, 56, 161-188. ..... 2.4 ..... 29
69 A generalization of antiwebs to independence systems and their canonical facets. Mathematical ..... 2.4 ..... 35
Programming, 1989, 45, 97-108.

