Publications with references to Normaliz   March 25, 2022

[1] ABBOTT, J., AND BIGATTI, A. M. What is new in CoCoA? In *Mathematical software – ICMS 2014. 4th international congress, Seoul, South Korea, August 5–9, 2014. Proceedings*. Berlin: Springer, 2014, pp. 352–358.

[2] ABBOTT, J., AND BIGATTI, A. M. New in CoCoA-5.2.2 and CoCoALib-0.99560 for SC-Square. In *SC²ISSAC* (2017).

[3] AHMED, M., DE LOERA JESÚS, AND HEMMECKE, R. Polyhedral cones of magic cubes and squares. In *Discrete and computational geometry. The Goodman-Pollack Festschrift*. Berlin: Springer, 2003, pp. 25–41.

[4] AHMED, M. M. *Algebraic combinatorics of magic squares*. PhD thesis, University of California, Davis, 2004.

[5] AL-AYYOUB, I., JARADAT, I., AND AL-ZOUBI, K. On the normality of a class of monomial ideals via the Newton polyhedron. *Mediterr. J. Math. 16*, 3 (2019), 16. Id/No 77.

[6] AL-AYYOUB, I., NASERNEJAD, M., AND ROBERTS, L. G. Normality of cover ideals of graphs and normality under some operations. *Result. Math. 74*, 4 (2019), 26. Id/No 140.

[7] ALCÁNTAR, A. The equations of the cone associated to the rees algebra of the ideal of square-free k-products. *Morfismos 5*, 1 (2001), 17–27.

[8] ALIEV, I., DE LOERA, J. A., AND LOUVEAUX, Q. Integer programs with prescribed number of solutions and a weighted version of Doignon-Bell-Scarf's theorem. In *Integer programming and combinatorial optimization*, vol. 8494 of *Lecture Notes in Comput. Sci.* Springer, Cham, 2014, pp. 37–51.

1

[9] ALIEV, I., DE LOERA, J. A., AND LOUVEAUX, Q. Parametric polyhedra with at least *k* lattice points: their semigroup structure and the *k*-Frobenius problem. In *Recent trends in combinatorics*, vol. 159 of *IMA Vol. Math. Appl.* Springer, [Cham], 2016, pp. 753–778.

[10] ALTMANN, K., AND KASTNER, L. Negative deformations of toric singularities that are smooth in codimension two. In *Deformations of surface singularities*. Berlin: Springer; Budapest: János Bolyai Mathematical Society, 2013, pp. 13–55.

[11] ARKANI-HAMED, N., LAM, T., AND SPRADLIN, M. Non-perturbative geometries for planar $\mathcal{N} = 4$ sym amplitudes. *J. High Energy Phys. 2021*, 3 (2021), 15. Id/No 65.

[12] ASSARF, B., GAWRILOW, E., HERR, K., JOSWIG, M., LORENZ, B., PAFFENHOLZ, A., AND REHN, T. Computing convex hulls and counting integer points with polymake. *Mathematical Programming Computation 9*, 1 (2017), 1–38.

[13] ASSI, A., D'ANNA, M., AND GARCÍA-SÁNCHEZ, P. A. *Numerical semigroups and applications*, vol. 3. Cham: Springer, 2020.

[14] ASSI, A., AND GARCÍA-SÁNCHEZ, P. A. *Numerical semigroups and applications.* Cham: Springer, 2016.

[15] AVIS, D., AND JORDAN, C. mplrs: a scalable parallel vertex/facet enumeration code. *Math. Program. Comput. 10*, 2 (2018), 267–302.

[16] BÄCHLE, A., AND CAICEDO, M. On the prime graph question for almost simple groups with an alternating socle. *Internat. J. Algebra Comput. 27*, 3 (2017), 333–347.

[17] BÄCHLE, A., HERMAN, A., KONOVALOV, A., MARGOLIS, L., AND SINGH, G. The status of the Zassenhaus conjecture for small groups. *Exp. Math. 27*, 4 (2018), 431–436.

[18] BÄCHLE, A., KIMMERLE, W., AND MARGOLIS, L. Algorithmic aspects of units in group rings. In *Algorithmic and experimental methods in algebra, geometry, and number theory*. Springer, Cham, 2017, pp. 1–22.

[19] BÄCHLE, A., AND MARGOLIS, L. On the prime graph question for integral group rings of 4-primary groups I. *Internat. J. Algebra Comput. 27*, 6 (2017), 731–767.

[20] BÄCHLE, A., AND MARGOLIS, L. HeLP: a GAP package for torsion units in integral group rings. *J. Softw. Algebra Geom. 8* (2018), 1–9.

[21] BÄCHLE, A., AND MARGOLIS, L. From examples to methods: Two cases from the study of units in integral group rings. *Indian J. Pure Appl. Math. 52*, 3 (2021), 669–686.

[22] BARTHÉLÉMY, F., AND MARTIN, M. Dummy players and the quota in weighted voting games: some further results. In *Evaluating voting systems with probability models—essays by and in honor of William Gehrlein and Dominique Lepelley*, Stud. Choice Welf. Springer, Cham, [2021] ©2021, pp. 299–315.

[23] BAYER, M., GOECKNER, B., HONG, S. J., MCALLISTER, T., OLSEN, M., PINCKNEY, C., VEGA, J., AND YIP, M. Lattice polytopes from Schur and symmetric Grothendieck polynomials. *Electron. J. Combin. 28*, 2 (2021), Paper No. 2.45, 36.

[24] BECK, M., BRAUN, B., AND VINDAS-MELÉNDEZ, A. R. Decompositions of Ehrhart h^*-polynomials for rational polytopes. *Discrete & Computational Geometry* (2022), 1–22.

[25] BECK, M., HAASE, C., AND SAM, S. V. Grid graphs, Gorenstein polytopes, and domino stackings. *Graphs Comb. 25*, 4 (2009), 409–426.

[26] BECK, M., ROBINS, S., AND SAM, S. V. Positivity theorems for solid-angle polynomials. *Beitr. Algebra Geom. 51*, 2 (2010), 493–507.

[27] BERNSTEIN, D. I., AND SULLIVANT, S. Normal binary hierarchical models. *Exp. Math. 26*, 2 (2017), 153–164.

[28] BESSON, M., JERALDS, S., AND KIERS, J. Weight polytopes and saturation of Demazure characters. *arXiv e-prints* (Feb. 2022), arXiv:2202.05405.

[29] BIGDELI, M., HERZOG, J., HIBI, T., QURESHI, A. A., AND SHIKAMA, A. Isotonian algebras. *Nagoya Math. J. 230* (2018), 83–101.

[30] BINH, H. N. An effective characterization of complete monomial ideals in two variables. *Int. J. Algebra Comput. 29*, 7 (2019), 1311–1317.

[31] BOFFI, G., AND LOGAR, A. Computing Gröbner bases of pure binomial ideals via submodules of $\mathbb{Z}^n$. *J. Symb. Comput. 47*, 10 (2012), 1297–1308.

[32] BOFFI, G., AND LOGAR, A. Border bases for lattice ideals. *J. Symbolic Comput. 79*, part 1 (2017), 43–56.

[33] BOGART, T., HAASE, C., HERING, M., LORENZ, B., NILL, B., PAFFENHOLZ, A., ROTE, G., SANTOS, F., AND SCHENCK, H. Finitely many smooth d-polytopes with n lattice points. *Isr. J. Math. 207* (2015), 301–329.

[34] BOGART, T., RAYMOND, A., AND THOMAS, R. Small Chvátal rank. *Math. Program. 124*, 1-2 (B) (2010), 45–68.

[35] BÖHM, J., DECKER, W., KEICHER, S., AND REN, Y. Current challenges in developing open source computer algebra systems. In *Mathematical aspects of computer and information sciences. 6th international conference, MACIS 2015, Berlin, Germany, November 11–13, 2015. Revised selected papers*. Cham: Springer, 2016, pp. 3–24.

[36] BÖHM, J., EISENBUD, D., AND NITSCHE, M. J. Decomposition of semigroup algebras. *Exp. Math. 21*, 4 (2012), 385–394.

[37] BONANZINGA, V., ESCOBAR, C. A., AND VILLARREAL, R. H. On the normality of Rees algebras associated to totally unimodular matrices. *Result. Math. 41*, 3-4 (2002), 258–264.

[38] BOROWKA, S., HEINRICH, G., JAHN, S., JONES, S., KERNER, M., AND SCHLENK, J. A gpu compatible quasi-monte carlo integrator interfaced to pysecdec. *Computer Physics Communications 240* (2019), 120–137.

[39] BOROWKA, S., HEINRICH, G., JAHN, S., JONES, S., KERNER, M., SCHLENK, J., AND ZIRKE, T. pySecDec: a toolbox for the numerical evaluation of multi-scale integrals. *Computer Physics Communications 222* (2018), 313–326.

[40] BOROWKA, S., HEINRICH, G., JAHN, S., JONES, S. P., KERNER, M., AND SCHLENK, J. Numerical evaluation of two-loop integrals with pySecDec. *arXiv e-prints* (Dec. 2017), arXiv:1712.05755.

[41] BOROWKA, S., HEINRICH, G., JONES, S., KERNER, M., SCHLENK, J., AND ZIRKE, T. Secdec-3.0: numerical evaluation of multi-scale integrals beyond one loop. *Computer Physics Communications 196* (2015), 470–491.

[42] BORZÌ, A., AND D'ALÌ, A. Graded algebras with cyclotomic Hilbert series. *J. Pure Appl. Algebra 225*, 12 (2021), 9. Id/No 106764.

[43] BOUCKAERT, R., HEMMECKE, R., LINDNER, S., AND STUDENÝ, M. Efficient algorithms for conditional independence inference. *J. Mach. Learn. Res. 11* (2010), 3453–3479.

[44] BRANDT, F., GEIST, C., AND STROBEL, M. Analyzing the practical relevance of voting paradoxes via Ehrhart theory, computer simulations, and empirical data. In *Proceedings of the 2016 International Conference on Autonomous Agents & Multiagent Systems* (2016), International Foundation for Autonomous Agents and Multiagent Systems, pp. 385–393.

[45] BRANDT, F., GEIST, C., AND STROBEL, M. Analyzing the practical relevance of the condorcet loser paradox and the agenda contraction paradox. In *Evaluating Voting Systems with Probability Models*. Springer, 2021, pp. 97–115.

[46] BRANDT, F., HOFBAUER, J., AND STROBEL, M. Exploring the No-Show Paradox for Condorcet extensions. In *Evaluating voting systems with probability models—essays by and in honor of William Gehrlein and Dominique Lepelley*, Stud. Choice Welf. Springer, Cham, [2021] ©2021, pp. 251–273.

[47] BRAUN, B., AND DAVIS, B. Antichain simplices. *J. Integer Seq. 23*, 1 (2020), article 20.1.1, 24.

[48] BRENNAN, J. P., DUPONT, L. A., AND VILLARREAL, R. H. Duality, *a*-invariants and canonical modules of rings arising from linear optimization problems. *Bull. Math. Soc. Sci. Math. Roum., Nouv. Sér. 51*, 4 (2008), 279–305.

[49] BRENNER, H., AND STEINBUCH, J. Deciding Stability of Sheaves on Curves. *arXiv e-prints* (Mar. 2021), arXiv:2103.12493.

[50] BREUER, F. An invitation to Ehrhart theory: polyhedral geometry and its applications in enumerative combinatorics. In *Computer algebra and*

polynomials, vol. 8942 of *Lecture Notes in Comput. Sci.* Springer, Cham, 2015, pp. 1–29.

[51] BREUER, F., AND ZAFEIRAKOPOULOS, Z. Polyhedral omega: a new algorithm for solving linear Diophantine systems. *Ann. Comb. 21*, 2 (2017), 211–280.

[52] BRUNS, W. On the integral Carathéodory property. *Exp. Math. 16*, 3 (2007), 359–365.

[53] BRUNS, W. The quest for counterexamples in toric geometry. In *Commutative algebra and algebraic geometry. Proceedings of the international conference (CAAG-2010), Bangalore, India, December 6–10, 2010, in honour of Balwant Singh, Uwe Storch and Rajendra V. Gurjar*. Mysore: Ramanujan Mathematical Society, 2013, pp. 45–61.

[54] BRUNS, W. Binomial regular sequences and free sums. *Acta Math. Vietnam. 40*, 1 (2015), 71–83.

[55] BRUNS, W., AND CONCA, A. Linear resolutions of powers and products. In *Singularities and computer algebra*. Springer, Cham, 2017, pp. 47–69.

[56] BRUNS, W., AND CONCA, A. Products of Borel fixed ideals of maximal minors. *Adv. Appl. Math. 91* (2017), 1–23.

[57] BRUNS, W., GARCÍA-SÁNCHEZ, P., O'NEILL, C., AND WILBURNE, D. Wilf's conjecture in fixed multiplicity. *Int. J. Algebra Comput. 30*, 4 (2020), 861–882.

[58] BRUNS, W., GARCÍA-SÁNCHEZ, P. A., AND MOCI, L. The monoid of monotone functions on a poset and quasi-arithmetic multiplicities for uniform matroids. *J. Algebra 569* (2021), 377–400.

[59] BRUNS, W., AND GUBELADZE, J. Normality and covering properties of affine semigroups. *J. Reine Angew. Math. 510* (1999), 161–178.

[60] BRUNS, W., AND GUBELADZE, J. *Polytopes, rings, and K-theory*. New York, NY: Springer, 2009.

[61] BRUNS, W., GUBELADZE, J., HENK, M., MARTIN, A., AND WEISMANTEL, R. A counterexample to an integer analogue of Carathéodory's theorem. *J. Reine Angew. Math. 510* (1999), 179–185.

[62] BRUNS, W., GUBELADZE, J., AND MICHAŁEK, M. Quantum jumps of normal polytopes. *Discrete Comput. Geom. 56*, 1 (2016), 181–215.

[63] BRUNS, W., GUBELADZE, J., AND NGÔ VIÊT TRUNG. Problems and algorithms for affine semigroups. *Semigroup Forum 64*, 2 (2002), 180–212.

[64] BRUNS, W., AND ICHIM, B. Computations of volumes in five candidates elections. *arXiv e-prints* (Sept. 2021), arXiv:2109.00473.

[65] BRUNS, W., AND ICHIM, B. Polytope volume by descent in the face lattice and applications in social choice. *Math. Program. Comput. 13*, 2 (2021), 415–442.

[66] BRUNS, W., ICHIM, B., AND SÖGER, C. Computations of volumes and Ehrhart series in four candidates elections. *Ann. Oper. Res. 280*, 1-2 (2019), 241–265.

[67] BRUNS, W., AND RESTUCCIA, G. Canonical modules of Rees algebras. *J. Pure Appl. Algebra 201*, 1-3 (2005), 189–203.

[68] BUBBOLONI, D., DISS, M., AND GORI, M. Extensions of the simpson voting rule to the committee selection setting. *Public Choice 183*, 1 (2020), 151–185.

[69] BURR, M. A., AND LIPMAN, D. J. Quadratic-monomial generated domains from mixed signed, directed graphs. *Int. J. Algebra Comput. 29*, 2 (2019), 279–308.

[70] BURTON, B. A. Computational topology with Regina: algorithms, heuristics and implementations. In *Geometry and topology down under. A conference in honour of Hyam Rubinstein, Melbourne, Australia, July 11–22, 2011. Proceedings*. Providence, RI: American Mathematical Society (AMS), 2013, pp. 195–224.

[71] BURTON, B. A., AND OZLEN, M. Computing the crosscap number of a knot using integer programming and normal surfaces. *ACM Trans. Math. Softw. 39*, 1 (2012), 18.

[72] CABOARA, M., AND FARIDI, S. Odd-cycle-free facet complexes and the König property. *Rocky Mt. J. Math. 41*, 4 (2011), 1059–1079.

[73] CAMERON, A., DINU, R., MICHAŁEK, M., AND SEYNNAEVE, T. Flag matroids: algebra and geometry. *arXiv e-prints* (Nov. 2018), arXiv:1811.00272.

[74] CASTILLO, F., LIU, F., NILL, B., AND PAFFENHOLZ, A. Smooth polytopes with negative Ehrhart coefficients. *J. Combin. Theory Ser. A 160* (2018), 316–331.

[75] CAVIGLIA, G., CHARDIN, M., McCULLOUGH, J., PEEVA, I., AND VARBARO, M. Regularity of prime ideals. *Math. Z. 291*, 1-2 (2019), 421–435.

[76] CHAHARSOOGHI, F. S., EMADI, M. J., ZAMANIGHOMI, M., AND AREF, M. R. A new method for variable elimination in systems of inequations. In *Information Theory Proceedings (ISIT), 2011 IEEE International Symposium on* (2011), IEEE, pp. 1215–1219.

[77] CHEN, Y., HU, S., QI, L., AND ZOU, W. Irreducible Function Bases of Isotropic Invariants of A Third Order Three-Dimensional Symmetric and Traceless Tensor. *arXiv e-prints* (Dec. 2017), arXiv:1712.02087.

[78] CHIMANI, M., JUHNKE-KUBITZKE, M., AND NOVER, A. On the Bond Polytope. *arXiv e-prints* (Dec. 2020), arXiv:2012.06288.

[79] CHIMANI, M., JUHNKE-KUBITZKE, M., AND NOVER, A. On the Dominant of the Multicut Polytope. *arXiv e-prints* (Dec. 2021), arXiv:2112.01095.

[80] CHRISTENSEN, T., PO, H. C., JOANNOPOULOS, J. D., AND SOLJAČIĆ, M. Location and topology of the fundamental gap in photonic crystals. *arXiv e-prints* (June 2021), arXiv:2106.10267.

[81] COLMENAREJO, L., GALUPPI, F., AND MICHAŁEK, M. Toric geometry of path signature varieties. *Adv. Appl. Math. 121* (2020), 35. Id/No 102102.

[82] COSTA, B., AND SIMIS, A. Cremona maps defined by monomials. *J. Pure Appl. Algebra 216*, 1 (2012), 202–215.

[83] COX, D. A., LITTLE, J. B., AND SCHENCK, H. K. *Toric varieties.* Providence, RI: American Mathematical Society (AMS), 2011.

[84] COYKENDALL, J., AND OMAN, G. Factorization theory of root closed monoids of small rank. *Comm. Algebra 45*, 7 (2017), 2795–2808.

[85] CRAW, A., MACLAGAN, D., AND THOMAS, R. R. Moduli of McKay quiver representations. II: Gröbner basis techniques. *J. Algebra 316*, 2 (2007), 514–535.

[86] CRAW, A., AND SMITH, G. G. Projective toric varieties as fine moduli spaces of quiver representations. *Am. J. Math. 130*, 6 (2008), 1509–1534.

[87] DAO, H., AND MONTAÑO, J. Length of local cohomology of powers of ideals. *Trans. Am. Math. Soc. 371*, 5 (2019), 3483–3503.

[88] DAVIS, B. Predicting the Integer Decomposition Property via Machine Learning. *ArXiv e-prints* (July 2018).

[89] DAVIS, B. *Lattice Simplices: Sufficiently Complicated.* PhD thesis, University of Kentucky, 2019.

[90] DAVIS, B. Predicting the integer decomposition property via machine learning. In *Algebraic and geometric combinatorics on lattice polytopes.* World Sci. Publ., Hackensack, NJ, 2019, pp. 165–181.

[91] DE LOERA, J. A. Generating functions that count t-designs with given automorphism group: algorithms and structure. In *Mathematical software. Proceedings of the 1st international congress, Beijing, China, August 17–19, 2002.* Singapore: World Scientific, 2002, pp. 296–306.

[92] DE LOERA, J. A., HEMMECKE, R., AND KÖPPE, M. *Algebraic and geometric ideas in the theory of discrete optimization.* Philadelphia, PA: Society for Industrial and Applied Mathematics (SIAM), 2013.

[93] DE LOERA, J. A., HEMMECKE, R., TAUZER, J., AND YOSHIDA, R. Effective lattice point counting in rational convex polytopes. *J. Symb. Comput. 38*, 4 (2005), 1273–1302.

[94] DELFINO, D., TAYLOR, A., VASCONCELOS, W., WEININGER, N., AND VILLARREAL, R. Monomial ideals and the computation of multiplicities. In *Commutative ring theory and applications. Proceedings of the fourth international conference, Fez, Morocco, June 7-12, 2001.* New York, NY: Marcel Dekker, 2003, pp. 87–106.

[95] DELGADO, M., AND GARCÍA-SÁNCHEZ, P. A. numericalsgps, a GAP package for numerical semigroups. *ACM Commun. Comput. Algebra 50*, 1 (2016), 12–24.

[96] Díaz-Ramírez, J. D., García-García, J. I., Marín-Aragón, D., and Vigneron-Tenorio, A. Characterizing affine $\mathscr{C}$-semigroups. *arXiv e-prints* (July 2019), arXiv:1907.03276.

[97] DiPasquale, M., and Drabkin, B. On resurgence via asymptotic resurgence. *J. Algebra 587* (2021), 64–84.

[98] Diss, M., and Gori, M. Majority properties of positional social preference correspondences. *Theory and Decision 92*, 2 (2022), 319–347.

[99] Diss, M., Kamwa, E., Moyouwou, I., and Smaoui, H. Condorcet efficiency of general weighted scoring rules under iac: indifference and abstention. In *Evaluating Voting Systems with Probability Models*. Springer, 2021, pp. 55–73.

[100] Diss, M., Kamwa, E., and Tlidi, A. The Chamberlin-Courant Rule and the k-Scoring Rules: Agreement and Condorcet Committee Consistency. Working Papers hal-01757761, HAL, Apr. 2018.

[101] Diss, M., Kamwa, E., and Tlidi, A. On some k-scoring rules for committee elections: agreement and condorcet principle. *Revue d'economie politique 130*, 5 (2020), 699–725.

[102] Diss, M., and Mahajne, M. Social acceptability of Condorcet committees. *Math. Soc. Sci. 105* (2020), 14–27.

[103] Donten-Bury, M. *Constructing algebraic varieties via finite group actions*. PhD thesis, University of Warsaw, 2013.

[104] Donten-Bury, M., and Keicher, S. Computing resolutions of quotient singularities. *J. Algebra 472* (2017), 546–572.

[105] Donten-Bury, M., and Michałek, M. Phylogenetic invariants for group-based models. *J. Algebr. Stat. 3*, 1 (2012), 44–63.

[106] Dunfield, N. M., Garoufalidis, S., and Rubinstein, J. H. Counting essential surfaces in 3-manifolds. *Inventiones mathematicae* (2022), 1–59.

[107] Dupont, L. A. *Rees algebras, Monomial Subrings and Linear Optimization Problems*. PhD thesis, Mexico City, 2010.

[108] DUPONT, L. A., AND VILLARREAL, R. H. Symbolic Rees algebras, vertex covers and irreducible representations of Rees cones. *Algebra Discrete Math. 10*, 2 (2010), 64–86.

[109] DUPONT, L. A., AND VILLARREAL, R. H. Algebraic and combinatorial properties of ideals and algebras of uniform clutters of TDI systems. *J. Comb. Optim. 21*, 3 (2011), 269–292.

[110] EL OUAFDI, A. *Analyse probabiliste des règles de vote: méthodes et résultats.* PhD thesis, Université de la Réunion, 2019.

[111] EL OUAFDI, A., LEPELLEY, D., SERAIS, J., AND SMAOUI, H. Manipulabilité coalitionnelle du vote par note à trois niveaux: quantification et comparaison à trois autres règles de vote. *Revue d'économie politique 132*, 2 (2021), 297–321.

[112] EL OUAFDI, A., LEPELLEY, D., AND SMAOUI, H. On the Condorcet efficiency of evaluative voting (and other voting rules) with trichotomous preferences. *Ann. Oper. Res. 289*, 2 (2020), 227–241.

[113] EL OUAFDI, A., LEPELLEY, D., AND SMAOUI, H. Probabilities of electoral outcomes: from three-candidate to four-candidate elections. *Theory Decis. 88*, 2 (2020), 205–229.

[114] EL OUAFDI, A., MOYOUWOU, I., AND SMAOUI, H. Iac probability calculations in voting theory: Progress report. In *Evaluating Voting Systems with Probability Models*. Springer, 2021, pp. 399–416.

[115] ELIAS, J. On the computation of the Ratliff-Rush closure. *J. Symb. Comput. 37*, 6 (2004), 717–725.

[116] EMIRIS, I. Z., AND FISIKOPOULOS, V. Practical polytope volume approximation. *ACM Transactions on Mathematical Software (TOMS) 44*, 4 (2018), 38.

[117] EMIRIS, I. Z., KALINKA, T., KONAXIS, C., AND BA, T. L. Implicitization of curves and (hyper)surfaces using predicted support. *Theor. Comput. Sci. 479* (2013), 81–98.

11

[118] EPURE, R., REN, Y., AND SCHÖNEMANN, H. The polymake interface in singular and its applications. In *Computer algebra in scientific computing*, vol. 10490 of *Lecture Notes in Comput. Sci.* Springer, Cham, 2017, pp. 109–117.

[119] ESCOBAR, C. A., MARTÍNEZ-BERNAL, J., AND VILLARREAL, R. H. Relative volumes and minors in monomial subrings. *Linear Algebra Appl. 374* (2003), 275–290.

[120] ESCOBAR, C. A., VILLARREAL, R. H., AND YOSHINO, Y. Torsion freeness and normality of blowup rings of monomial ideals. In *Commutative algebra: geometric, homological, combinatorial and computational aspects. Papers presented during the conference, Sevilla, Spain, June 18–21, 2003 and the conference on commutative algebra, Lisbon, Portugal, June 23–27, 2003*. Boca Raton, FL: Chapman & Hall/CRC, 2006, pp. 69–84.

[121] FEI, J. Cluster algebras and semi-invariant rings I. Triple flags. *Proc. Lond. Math. Soc. (3) 115*, 1 (2017), 1–32.

[122] FEI, J. Cluster algebras, invariant theory, and Kronecker coefficients I. *Adv. Math. 310* (2017), 1064–1112.

[123] FERRARO, L., GALETTO, F., GANDINI, F., HUANG, H., MASTROENI, M., AND NI, X. The InvariantRing package for Macaulay2. *arXiv e-prints* (Oct. 2020), arXiv:2010.15331.

[124] FLORES-MÉNDEZ, A., GITLER, I., AND REYES, E. Implosive graphs: square-free monomials on symbolic Rees algebras. *J. Algebra Appl. 16*, 8 (2017), 1750145, 23.

[125] FONTANA, R., AND RAPALLO, F. Unions of orthogonal arrays and their aberrations via Hilbert bases. In *New statistical developments in data science*, vol. 288 of *Springer Proc. Math. Stat.* Springer, Cham, 2019, pp. 421–434.

[126] GAO, S., ORELOWITZ, G., RESSAYRE, N., AND YONG, A. Newell-Littlewood numbers III: eigencones and GIT-semigroups. *arXiv e-prints* (July 2021), arXiv:2107.03152.

[127] GARCÍA GARCÍA, J. I., MARÍN ARAGÓN, D., AND VIGNERON-TENORIO, A. An extension of Wilf's conjecture to affine semigroups. *Semigroup Forum 96*, 2 (2018), 396–408.

[128] GARCÍA-GARCÍA, J. I., MARÍN-ARAGÓN, D., AND MORENO-FRÍAS, M. A. On divisor-closed submonoids and minimal distances in finitely generated monoids. *J. Symb. Comput. 93* (2019), 230–245.

[129] GARCÍA-GARCÍA, J. I., MARÍN-ARAGÓN, D., AND VIGNERON-TENORIO, A. A characterization of some families of Cohen-Macaulay, Gorenstein and/or Buchsbaum rings. *Discrete Appl. Math. 263* (2019), 166–176.

[130] GARCÍA-SÁNCHEZ, P. A. An overview of the computational aspects of nonunique factorization invariants. In *Multiplicative ideal theory and factorization theory*, vol. 170 of *Springer Proc. Math. Stat.* Springer, [Cham], 2016, pp. 159–181.

[131] GARCÍA-SÁNCHEZ, P. A., MARÍN-ARAGÓN, D., AND ROBLES-PÉREZ, A. M. The tree of numerical semigroups with low multiplicity. *arXiv e-prints* (Mar. 2018), arXiv:1803.06879.

[132] GARCÍA-SÁNCHEZ, P. A., O'NEILL, C., AND WEBB, G. The computation of factorization invariants for affine semigroups. *J. Algebra Appl. 18*, 1 (2019), 21. Id/No 1950019.

[133] GIMENEZ, P., MARTÍNEZ-BERNAL, J., SIMIS, A., VILLARREAL, R. H., AND VIVARES, C. E. Symbolic powers of monomial ideals and Cohen-Macaulay vertex-weighted digraphs. In *Singularities, algebraic geometry, commutative algebra, and related topics*. Springer, Cham, 2018, pp. 491–510.

[134] GITLER, I., REYES, E., AND VILLARREAL, R. H. Blowup algebras of square-free monomial ideals and some links to combinatorial optimization problems. *Rocky Mt. J. Math. 39*, 1 (2009), 71–102.

[135] GITLER, I., VALENCIA, C., AND VILLARREAL, R. H. A note on the Rees algebra of a bipartite graph. *J. Pure Appl. Algebra 201*, 1-3 (2005), 17–24.

[136] GITLER, I., AND VALENCIA, C. E. Multiplicities of edge subrings. *Discrete Math. 302*, 1-3 (2005), 107–123.

[137] GITLER, I., VALENCIA, C. E., AND VILLARREAL, R. H. A note on Rees algebras and the MFMC property. *Beitr. Algebra Geom. 48*, 1 (2007), 141–150.

[138] GODDYN, L., HUYNH, T., AND DESHPANDE, T. On Hilbert bases of cuts. *Discrete Math. 339*, 2 (2016), 721–728.

[139] GOMES, T., O'NEILL, C., AND TORRES DAVILA, E. Numerical semigroups, polyhedra, and posets III: minimal presentations and face dimension. *arXiv e-prints* (Sept. 2020), arXiv:2009.05921.

[140] GRÄBE, H.-G. Semantic-aware fingerprints of symbolic research data. In *Mathematical software – ICMS 2016. 5th international conference, Berlin, Germany, July 11–14, 2016. Proceedings.* Cham: Springer, 2016, pp. 411–418.

[141] GRÄBE, H.-G. 20 years SymbolicData. *ACM Commun. Comput. Algebra 52*, 3 (2018), 45–54.

[142] GRANGE, T., POSTINGHEL, E., AND PRENDERGAST-SMITH, A. Log Fano blowups of mixed products of projective spaces and their effective cones. *arXiv e-prints* (Sept. 2021), arXiv:2109.03736.

[143] GREUEL, G.-M., LAPLAGNE, S., AND SEELISCH, F. Normalization of rings. *J. Symb. Comput. 45*, 9 (2010), 887–901.

[144] GRIFO, E., AND SECELEANU, A. Symbolic Rees algebras. *arXiv e-prints* (Dec. 2020), arXiv:2012.01617.

[145] GRISALDE, G., SECELEANU, A., AND VILLARREAL, R. H. Rees algebras of filtrations of covering polyhedra and integral closure of powers of monomial ideals. *Res. Math. Sci. 9*, 1 (2022), 33. Id/No 13.

[146] GUARDO, E., HARBOURNE, B., AND VAN TUYL, A. Symbolic powers versus regular powers of ideals of general points in $\mathbb{P}^1 \times \mathbb{P}^1$. *Can. J. Math. 65*, 4 (2013), 823–842.

[147] GUBELADZE, J. Normal polytopes and ellipsoids. *arXiv e-prints* (Dec. 2020), arXiv:2012.11846.

[148] HÀ, H. T., AND LIN, K.-N. Normal 0-1 polytopes. *SIAM J. Discrete Math. 29*, 1 (2015), 210–223.

[149] HAASE, C., PAFFENHOLZ, A., PIECHNIK, L. C., AND SANTOS, F. *Existence of unimodular triangulations – positive results*, vol. 1321 of *Mem. Am. Math. Soc.* Providence, RI: American Mathematical Society (AMS), 2021.

[150] HAMANO, G., HAYASHI, T., HIBI, T., HIRAYAMA, K., OHSUGI, H., SATO, K., SHIKAMA, A., AND TSUCHIYA, A. The smallest normal edge polytopes with no regular unimodular triangulations. In *Homological and computational methods in commutative algebra*, vol. 20 of *Springer INdAM Ser.* Springer, Cham, 2017, pp. 163–172.

[151] HAWS, D., DEL CAMPO, A. M., TAKEMURA, A., AND YOSHIDA, R. Markov degree of the three-state toric homogeneous Markov chain model. *Beitr. Algebra Geom. 55*, 1 (2014), 161–188.

[152] HEINRICH, G., JAHN, S., JONES, S., KERNER, M., LANGER, F., MAGERYA, V., POLDARU, A., SCHLENK, J., AND VILLA, E. Expansion by regions with pysecdec. *Computer Physics Communications 273* (2022), 108267.

[153] HEMMECKE, R. On the computation of Hilbert bases of cones. In *Mathematical software. Proceedings of the 1st international congress, Beijing, China, August 17–19, 2002.* Singapore: World Scientific, 2002, pp. 307–317.

[154] HEMMECKE, R., MORTON, J., SHIU, A., STURMFELS, B., AND WIENAND, O. Three counter-examples on semi-graphoids. *Comb. Probab. Comput. 17*, 2 (2008), 239–257.

[155] HEMMECKE, R., TAKEMURA, A., AND YOSHIDA, R. Computing holes in semi-groups and its applications to transportation problems. *Contrib. Discrete Math. 4*, 1 (2009), 81–91.

[156] HERBIG, H.-C., HERDEN, D., AND SEATON, C. Hilbert series of symplectic quotients by the 2-torus. *Collectanea Mathematica* (2022), 1–28.

[157] HERBIG, H.-C., AND SEATON, C. The Hilbert series of a linear symplectic circle quotient. *Exp. Math. 23*, 1 (2014), 46–65.

[158] HERR, K., REHN, T., AND SCHÜRMANN, A. On lattice-free orbit polytopes. *Discrete Comput. Geom. 53*, 1 (2014), 144–172.

[159] HERZOG, J., HIBI, T., AND TRUNG, N. V. Symbolic powers of monomial ideals and vertex cover algebras. *Adv. Math. 210*, 1 (2007), 304–322.

[160] HERZOG, J., JAFARI, R., AND STAMATE, D. I. Ulrich elements in normal simplicial affine semigroups. *Pacific J. Math. 309*, 2 (2020), 353–380.

[161] HIBI, T., AND TSUCHIYA, A. Odd cycles and Hilbert functions of their toric rings. *Mathematics 8*, 1 (2019), 22.

[162] HIBI, T., AND TSUCHIYA, A. The depth of a reflexive polytope. *Arch. Math. 113*, 3 (2019), 265–272.

[163] HIGASHITANI, A., AND NAKAJIMA, Y. Generalized F-signatures of Hibi rings. *Ill. J. Math. 65*, 1 (2021), 97–120.

[164] HIRSCH, T. Computing the integral closure of an ideal using its Rees algebra. In *Computational commutative and non-commutative algebraic geometry. Proceedings of the NATO Advanced Research Workshop, Chisinau, Republic of Moldova, June 6–11, 2004.* Amsterdam: IOS Press, 2005, pp. 145–155.

[165] HOŞTEN, S., AND THOMAS, R. R. Gomory integer programs. *Math. Program. 96*, 2 (B) (2003), 271–292.

[166] ICHIM, B., KATTHÄN, L., AND MOYANO-FERNÁNDEZ, J. J. How to compute the Stanley depth of a module. *Math. Comput. 86*, 303 (2017), 455–472.

[167] ICHIM, B., AND MOYANO-FERNÁNDEZ, J. J. On the score sheets of a round-robin football tournament. *Adv. in Appl. Math. 91* (2017), 24–43.

[168] IMBESI, M., AND LA BARBIERA, M. Integral closure of bipartite graph ideals. *Kodai Math. J. 43*, 2 (2020), 243–255.

[169] JARRAH, A. S. Integral closures of Cohen-Macaulay monomial ideals. *Commun. Algebra 30*, 11 (2002), 5473–5478.

[170] JEFFRIES, J., MONTAÑO, J., AND VARBARO, M. Multiplicities of classical varieties. *Proc. Lond. Math. Soc. (3) 110*, 4 (2015), 1033–1055.

[171] JING, R.-J., AND MORENO MAZA, M. Computing the integer points of a polyhedron, II: Complexity estimates. In *Computer algebra in scientific computing*, vol. 10490 of *Lecture Notes in Comput. Sci.* Springer, Cham, 2017, pp. 242–256.

[172] JING, R.-J., MORENO-MAZA, M., AND TALAASHRAFI, D. Complexity estimates for Fourier-Motzkin elimination. In *Computer algebra in scientific computing*, vol. 12291 of *Lecture Notes in Comput. Sci.* Springer, Cham, [2020] ©2020, pp. 282–306.

[173] JOSWIG, M., MÜLLER, B., AND PAFFENHOLZ, A. `polymake` and lattice polytopes. In *21st International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2009)*, Discrete Math. Theor. Comput. Sci. Proc., AK. Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2009, pp. 491–502.

[174] JOSWIG, M., AND PAFFENHOLZ, A. Defect polytopes and counter-examples with polymake. *ACM Commun. Comput. Algebra 45*, 3-4 (2011), 177–179.

[175] KAHLE, D., O'NEILL, C., AND SOMMARS, J. A computer algebra system for R: Macaulay2 and the m2r package. *arXiv e-prints* (June 2017), arXiv:1706.07797.

[176] KALINKA, T. *Changing Representation of Curves and Surfaces: Exact and Approximate Methods.* PhD thesis, University of Athens, 2013.

[177] KAMWA, E., AND MOYOUWOU, I. Susceptibility to manipulation by sincere truncation: the case of scoring rules and scoring runoff systems. In *Evaluating Voting Systems with Probability Models*. Springer, 2021, pp. 275–295.

[178] KAPLAN, N., AND O'NEILL, C. Numerical semigroups, polyhedra, and posets I: the group cone. *arXiv e-prints* (Dec. 2019), arXiv:1912.03741.

[179] KAPPL, R. *The superpotential in heterotic orbifold GUTs.* PhD thesis, Technische Universität München, 2011.

[180] KAPPL, R., NILLES, H. P., AND SCHMITZ, M. *R* symmetries and a heterotic MSSM. *Nucl. Phys., B 891* (2015), 482–498.

[181] KAPPL, R., RATZ, M., AND STAUDT, C. The Hilbert basis method for *D*-flat directions and the superpotential. *J. High Energy Phys. 2011*, 10 (2011), 12.

[182] KASHIWABARA, K. Scheduling partial round robin tournaments subject to home away pattern sets. *Electron. J. Comb. 16*, 1 (2009), research paper r55, 23.

[183] KASTNER, L. Toric Ext and Tor in `polymake` and Singular: the two-dimensional case and beyond. In *Algorithmic and experimental methods in algebra, geometry, and number theory*. Springer, Cham, 2017, pp. 423–441.

[184] KATTHÄN, L. *Algebraic theory of affine monoids*. PhD thesis, Philipps-Universität Marburg, 2013.

[185] KATTHÄN, L., AND YANAGAWA, K. Graded cohen–macaulay domains and lattice polytopes with short h-vector. *Discrete & Computational Geometry* (2021), 1–10.

[186] KIERS, J. Extremal rays of the equivariant Littlewood-Richardson cone. *arXiv e-prints* (June 2021), arXiv:2106.08425.

[187] KIERS, J. On the saturation conjecture for Spin($2n$). *Exp. Math. 30*, 2 (2021), 258–267.

[188] KIM, D., KIM, S., AND PARK, E. On the structures of hive algebras and tensor product algebras for general linear groups of low rank. *Internat. J. Algebra Comput. 29*, 7 (2019), 1193–1218.

[189] KIM, D., KIM, S., AND PARK, E. On the structures of hive algebras and tensor product algebras for general linear groups of low rank. *Int. J. Algebra Comput. 29*, 7 (2019), 1193–1218.

[190] KIMMERLE, W., AND KONOVALOV, A. On the Gruenberg-Kegel graph of integral group rings of finite groups. *Internat. J. Algebra Comput. 27*, 6 (2017), 619–631.

[191] KLIEM, J., AND STUMP, C. A new face iterator for polyhedra and for more general finite locally branched lattices. *Discrete & Computational Geometry* (2022), 1–27.

[192] KOHL, F. *Lattice Polytopes-Applications and Properties: Ehrhart Theory, Graph Colorings, and Level Algebras*. PhD thesis, FU Berlin, 2018.

[193] KOHL, F., LI, Y., RAUH, J., AND YOSHIDA, R. Semigroups—a computational approach. In *The 50th anniversary of Gröbner bases*, vol. 77 of *Adv. Stud. Pure Math.* Math. Soc. Japan, Tokyo, 2018, pp. 155–170.

[194] KOHL, F., AND OLSEN, M. Birkhoff polytopes of different type and the orthant-lattice property. *arXiv e-prints* (Mar. 2019), arXiv:1903.12634.

[195] KOHL, F., AND OLSEN, M. Level algebras and *s*-lecture hall polytopes. *Electron. J. Combin. 27*, 3 (2020), Paper No. 3.50, 23.

[196] KOHL, F., OLSEN, M., AND SANYAL, R. Unconditional reflexive polytopes. *Discrete Comput. Geom. 64*, 2 (2020), 427–452.

[197] KOLEY, M., AND RÖMER, T. Seminormality, canonical modules, and regularity of cut polytopes. *J. Pure Appl. Algebra 226*, 1 (2022), 22. Id/No 106797.

[198] KÖPPE, M., AND WANG, J. Dual-feasible functions for integer programming and combinatorial optimization: algorithms, characterizations, and approximations. *Discrete Appl. Math. 308* (2022), 84–106.

[199] KÖPPE, M., AND ZHOU, Y. New computer-based search strategies for extreme functions of the Gomory-Johnson infinite group problem. *Math. Program. Comput. 9*, 3 (2017), 419–469.

[200] KRONE, R., AND KUBJAS, K. Uniqueness of nonnegative matrix factorizations by rigidity theory. *SIAM J. Matrix Anal. Appl. 42*, 1 (2021), 134–164.

[201] KRONE, R., AND KUBJAS, K. Uniqueness of nonnegative matrix factorizations by rigidity theory. *SIAM J. Matrix Anal. Appl. 42*, 1 (2021), 134–164.

[202] KUBJAS, K. Hilbert polynomial of the Kimura 3-parameter model. *J. Algebr. Stat. 3*, 1 (2012), 64–69.

[203] KUBJAS, K. Low degree minimal generators of phylogenetic semigroups. *Eur. J. Math. 1*, 1 (2015), 2–24.

[204] LA BARBIERA, M., AND PARATORE, M. Normality of monomial ideals in two sets of variables. *An. Ştiinţ. Univ. Ovidius Constanţa Ser. Mat. 13*, 2 (2005), 5–14.

[205] LASOŃ, M., AND MICHAŁ EK, M. Non-normal very ample polytopes—constructions and examples. *Exp. Math. 26*, 2 (2017), 130–137.

[206] LERCIER, R., AND OLIVE, M. Covariant algebra of the binary nonic and the binary decimic. In *Arithmetic, geometry, cryptography and coding theory*, vol. 686 of *Contemp. Math.* Amer. Math. Soc., Providence, RI, 2017, pp. 65–91.

[207] LI, P. *Seminormality and the Cohen-Macaulay property*. PhD thesis, Queen's University, 2004.

[208] LÓPEZ, H. H., AND VILLARREAL, R. H. Computing the degree of a lattice ideal of dimension one. *J. Symb. Comput. 65* (2014), 15–28.

[209] LORENZ, B. Classification of smooth lattice polytopes with few lattice points. *arXiv e-prints* (Jan. 2010), arXiv:1001.0514.

[210] LORENZ, B., AND NILL, B. On smooth Gorenstein polytopes. *Tohoku Math. J. (2) 67*, 4 (2015), 513–530.

[211] MA, Z., HE, Z., LI, Z., AND GIUA, A. Design of monitor-based supervisors in labelled Petri nets. *IFAC-PapersOnLine 51*, 7 (2018), 374–380.

[212] MA, Z., HE, Z., LI, Z., AND GIUA, A. Design of supervisors for linear marking specifications in labeled Petri nets. *Automatica 136* (2022), 12. Id/No 110031.

[213] MACLAGAN, D., AND SMITH, G. G. Multigraded Castelnuovo-Mumford regularity. *J. Reine Angew. Math. 571* (2004), 179–212.

[214] MARIA, C., AND ROUILLÉ, O. Computation of large asymptotics of 3-manifold quantum invariants. In *2021 Proceedings of the Workshop on Algorithm Engineering and Experiments (ALENEX)* (2021), SIAM, pp. 193–206.

[215] MARTÍNEZ-BERNAL, J., MOREY, S., AND VILLARREAL, R. H. Associated primes of powers of edge ideals. *Collect. Math. 63*, 3 (2012), 361–374.

[216] MARTÍNEZ-BERNAL, J., O'SHEA, E., AND VILLARREAL, R. H. Ehrhart clutters: regularity and max-flow min-cut. *Electron. J. Comb. 17*, 1 (2010), research paper r52, 18.

[217] MARTÍNEZ-BERNAL, J., RENTERÍA-MÁRQUEZ, C., AND VILLARREAL, R. H. Combinatorics of symbolic Rees algebras of edge ideals of clutters. In *Commutative algebra and its connections to geometry*, vol. 555 of *Contemp. Math.* Amer. Math. Soc., Providence, RI, 2011, pp. 151–164.

[218] MICHAŁ EK, M. Selected topics on toric varieties. In *The 50th anniversary of Gröbner bases*, vol. 77 of *Adv. Stud. Pure Math.* Math. Soc. Japan, Tokyo, 2018, pp. 207–252.

[219] MICHAŁEK, M. Finite phylogenetic complexity of $\mathbb{Z}_p$ and invariants for $\mathbb{Z}_3$. *Eur. J. Comb. 59* (2017), 169–186.

[220] MICHAŁEK, M., AND VENTURA, E. Phylogenetic complexity of the Kimura 3-parameter model. *Adv. Math. 343* (2019), 640–680.

[221] MILNE, A. J., BULGER, D., AND HERFF, S. A. Exploring the space of perfectly balanced rhythms and scales. *J. Math. Music 11*, 2-3 (2017), 101–133.

[222] MOREY, S., AND VILLARREAL, R. H. Edge ideals: algebraic and combinatorial properties. In *Progress in commutative algebra 1. Combinatorics and homology*. Berlin: Walter de Gruyter, 2012, pp. 85–126.

[223] MORTON, J. R. *Geometry of conditional independence*. ProQuest LLC, Ann Arbor, MI, 2007. Thesis (Ph.D.)–University of California, Berkeley.

[224] MOYANO-FERNÁNDEZ, J. J., AND ULICZKA, J. Hilbert depth of graded modules over polynomial rings in two variables. *J. Algebra 373* (2013), 130–152.

[225] NILL, B., AND PAFFENHOLZ, A. Examples of Kähler-Einstein toric Fano manifolds associated to non-symmetric reflexive polytopes. *Beitr. Algebra Geom. 52*, 2 (2011), 297–304.

[226] NILL, B., AND SCHEPERS, J. Gorenstein polytopes and their stringy *E*-functions. *Math. Ann. 355*, 2 (2013), 457–480.

[227] NIMA, A.-H., LAM, T., AND SPRADLIN, M. Non-perturbative geometries for planar N= 4 SYM amplitudes. *Journal of High Energy Physics 2021*, 3 (2021).

[228] O'CARROLL, L., PLANAS-VILANOVA, F., AND VILLARREAL, R. H. Degree and algebraic properties of lattice and matrix ideals. *SIAM J. Discrete Math. 28*, 1 (2014), 394–427.

[229] OHSUGI, H. Normality of cut polytopes of graphs is a minor closed property. *Discrete Math. 310*, 6-7 (2010), 1160–1166.

[230] OHSUGI, H., AND HIBI, T. Non-very ample configurations arising from contingency tables. *Ann. Inst. Stat. Math. 62*, 4 (2010), 639–644.

[231] OLIVE, M. *Géométrie des espaces de tenseurs-Une approche effective appliquée à la mécanique des milieux continus*. PhD thesis, Aix Marseille université, 2014.

[232] OLIVE, M. About Gordan's algorithm for binary forms. *Found. Comput. Math. 17*, 6 (2017), 1407–1466.

[233] OLIVE, M., KOLEV, B., AND AUFFRAY, N. A minimal integrity basis for the elasticity tensor. *Arch. Ration. Mech. Anal. 226*, 1 (2017), 1–31.

[234] OLSEN, M. Hilbert bases and lecture hall partitions. *Ramanujan J. 47*, 3 (2018), 509–531.

[235] OLSEN, M. J. *Hilbert Bases, Descent Statistics, and Combinatorial Semigroup Algebras*. PhD thesis, University of Kentucky, 2018.

[236] O'SHEA, E., AND THOMAS, R. R. Toric initial ideals of Δ-normal configurations: Cohen-Macaulayness and degree bounds. *J. Algebr. Comb. 21*, 3 (2005), 247–268.

[237] PAFFENHOLZ, A. `polyDB`: a database for polytopes and related objects. In *Algorithmic and experimental methods in algebra, geometry, and number theory*. Springer, Cham, 2017, pp. 533–547.

[238] PELLETIER, M., AND NICOLAS, R. Some unexpected properties of Littlewood-Richardson coefficients. *arXiv e-prints* (May 2020), arXiv:2005.09877.

[239] PHAM, T., AND VASCONCELOS, W. V. On the computation of the jdeg of blowup algebras. *J. Pure Appl. Algebra 214*, 10 (2010), 1800–1807.

[240] PINTYE, N., AND PRENDERGAST-SMITH, A. Effective cycles on some linear blowups of projective spaces. *Nagoya Math. J. 243* (2021), 243–262.

[241] PINTYE, N., AND PRENDERGAST-SMITH, A. Effective cycles on some linear blowups of projective spaces. *Nagoya Math. J. 243* (2021), 243–262.

[242] POPESCU, A. *Signature standard bases over principal ideal rings*. PhD thesis, PhD thesis, University of Kaiserslautern, 2016.

[243] RAUH, J., AND SULLIVANT, S. Lifting Markov bases and higher codimension toric fiber products. *J. Symb. Comput. 74* (2016), 276–307.

[244] REID, L., ROBERTS, L. G., AND VITULLI, M. A. Some results on normal homogeneous ideals. *Commun. Algebra 31*, 9 (2003), 4485–4506.

[245] RÖMER, T., AND SAEEDI MADANI, S. Retracts and algebraic properties of cut algebras. *European J. Combin. 69* (2018), 214–236.

[246] ROSSMANN, T. Computing topological zeta functions of groups, algebras, and modules. II. *J. Algebra 444* (2015), 567–605.

[247] ROSSMANN, T. A framework for computing zeta functions of groups, algebras, and modules. In *Algorithmic and experimental methods in algebra, geometry, and number theory*. Springer, Cham, 2017, pp. 561–586.

[248] SÁNCHEZ-ROSELLY NAVARRO, A. *Linear Diophantine equations and applications*. PhD thesis, Universidad de Granada, 2016.

[249] SCHEPERS, J., AND VAN LANGENHOVEN, L. Unimodality questions for integrally closed lattice polytopes. *Ann. Comb. 17*, 3 (2013), 571–589.

[250] SCHLENK, J., AND ZIRKE, T. Calculation of Multi-Loop Integrals with SecDec-3.0. *arXiv e-prints* (Jan. 2016), arXiv:1601.03982.

[251] SCHMITZ, M. *R-symmetries from the Orbifolded Heterotic String*. PhD thesis, Universität Bonn, 2014.

[252] SCHÜRMANN, A. Exploiting polyhedral symmetries in social choice. *Soc. Choice Welfare 40*, 4 (2013), 1097–1110.

[253] SEMENOV, S. O., AND ZOLOTYKH, N. Y. How to find the convex hull of all integer points in a polyhedron? *Optimization Letters* (2021), 1–13.

[254] SEVESO, L., GOYENECHE, D., AND ŻYCZKOWSKI, K. Coarse-grained entanglement classification through orthogonal arrays. *Journal of Mathematical Physics 59*, 7 (July 2018), 072203.

[255] SEVESO, L., GOYENECHE, D., AND ŻYCZKOWSKI, K. Coarse-grained entanglement classification through orthogonal arrays. *Journal of Mathematical Physics 59*, 7 (2018), 072203.

[256] SIMIS, A., VASCONCELOS, W. V., AND VILLARREAL, R. H. The integral closure of subrings associated to graphs. *J. Algebra 199*, 1 (1998), 281–289, art. no. ja977171.

[257] SIMIS, A., AND VILLARREAL, R. H. Constraints for the normality of monomial subrings and birationality. *Proc. Am. Math. Soc. 131*, 7 (2003), 2043–2048.

[258] SIMIS, A., AND VILLARREAL, R. H. Combinatorics of Cremona monomial maps. *Math. Comput. 81*, 279 (2012), 1857–1867.

[259] SINGH, A. K., AND SWANSON, I. An algorithm for computing the integral closure. *Algebra Number Theory 3*, 5 (2009), 587–595.

[260] SINN, R., AND SJÖBERG, H. Do alcoved lattice polytopes have unimodal h*-vector? *arXiv e-prints* (Apr. 2021), arXiv:2104.15080.

[261] SOMMARS, J. C. *Algorithms and Implementations in Computational Algebraic Geometry.* PhD thesis, University of Illinois at Urbana-Champaign, 2018.

[262] SONG, Z.-D., ELCORO, L., XU, Y.-F., REGNAULT, N., AND BERNEVIG, B. A. Fragile Phases as Affine Monoids: Classification and Material Examples. *Physical Review X 10*, 3 (July 2020), 031001.

[263] STAGLIANÒ, P. L. Integral closure of monomial ideals. In *Communications to SIMAI Congress* (2009), vol. 3, pp. 305–1.

[264] STAUDT, C. *Neutrino masses and spontaneously broken flavor symmetries.* PhD thesis, Technische Universität München, 2014.

[265] ŞTEFAN, A. The cones associated to some tranversal polymatroids. *An. Ştiinţ. Univ. "Ovidius" Constanţa, Ser. Mat. 15*, 1 (2007), 139–158.

[266] ŞTEFAN, A. *Classifications of Cohen-Macaulay modules-The base ring associated to a transversal polymatroid.* PhD thesis, Institute of Mathematics of the Romanian Academy, 2008.

[267] ŞTEFAN, A. Intersections of base rings associated to transversal polymatroids. *Bull. Math. Soc. Sci. Math. Roum., Nouv. Sér. 52*, 1 (2009), 79–86.

[268] ŞTEFAN, A. The type of the base ring associated to a product of transversal polymatroids. *Rom. J. Math. Comput. Sci. 3*, 2 (2013), 205–220.

[269] STILLMAN, M., STURMFELS, B., AND THOMAS, R. Algorithms for the toric Hilbert scheme. In *Computations in algebraic geometry with Macaulay 2*. Berlin: Springer, 2002, pp. 179–214.

[270] STURMFELS, B. Fitness, apprenticeship, and polynomials. In *Combinatorial algebraic geometry. Selected papers from the 2016 apprenticeship program, Ottawa, Canada, July–December 2016*. Toronto: The Fields Institute for Research in the Mathematical Sciences; New York, NY: Springer, 2017, pp. 1–19.

[271] STURMFELS, B., AND SULLIVANT, S. Toric geometry of cuts and splits. *Mich. Math. J. 57* (2008), 689–709.

[272] STURMFELS, B., AND WELKER, V. Commutative algebra of statistical ranking. *J. Algebra 361* (2012), 264–286.

[273] SULLIVANT, S. Normal binary graph models. *Ann. Inst. Stat. Math. 62*, 4 (2010), 717–726.

[274] SWANSON, I., AND HUNEKE, C. *Integral closure of ideals, rings, and modules.* Cambridge: Cambridge University Press, 2006.

[275] TAKEMURA, A., AND YOSHIDA, R. A generalization of the integer linear infeasibility problem. *Discrete Optim. 5*, 1 (2008), 36–52.

[276] TAKEMURA, A., AND YOSHIDA, R. Saturation points on faces of a rational polyhedral cone. In *Integer points in polyhedra—geometry, number theory, algebra, optimization, statistics. Proceedings of the AMS-IMS-SIAM joint summer research conference, Snowbird, UT, USA, June 11–15, 2006.* Providence, RI: American Mathematical Society (AMS), 2008, pp. 147–161.

[277] TEITLER, Z. Software for multiplier ideals. *J. Softw. Algebra Geom. 7* (2015), 1–8.

[278] THIEL, M. On the *H*-triangle of generalised nonnesting partitions. *Eur. J. Comb. 39* (2014), 244–255.

[279] THIEL, M., AND WILLIAMS, N. Strange expectations and simultaneous cores. *J. Algebraic Combin. 46*, 1 (2017), 219–261.

[280] TOTH, C. D., GOODMAN, J. E., AND O'ROURKE, J., Eds. *Handbook of discrete and computational geometry. 3rd revised and updated edition.*, 3rd revised and updated edition ed. Boca Raton, FL: CRC Press, 2017.

[281] VALDEZ, H. H. L. *Algebraic Methods for Parameterized and Cartesian Codes*. PhD thesis, Mexico City, 2016.

[282] VALENCIA, C. E., AND VILLARREAL, R. H. Canonical modules of certain edge subrings. *Eur. J. Comb. 24*, 5 (2003), 471–487.

[283] VAN LANGENHOVEN, L., AND VEYS, W. Semigroup and Poincaré series for a finite set of divisorial valuations. *Rev. Mat. Complut. 28*, 1 (2015), 191–225.

[284] VASCONCELOS, W. *Integral closure. Rees algebras, multiplicities, algorithms.* Berlin: Springer, 2005.

[285] VEYS, W. Semigroup and Poincaré series for divisorial valuations. In *Extended abstracts February 2016—positivity and valuations*, vol. 9 of *Trends Math. Res. Perspect. CRM Barc.* Birkhäuser/Springer, Cham, 2018, pp. 51–56.

[286] VILLARREAL, R. H. Monomial algebras and polyhedral geometry. In *Handbook of algebra. Volume 3*. Amsterdam: Elsevier, 2003, pp. 257–314.

[287] VILLARREAL, R. H. Normality of semigroups with some links to graph theory. *Discrete Math. 302*, 1-3 (2005), 267–284.

[288] VILLARREAL, R. H. Normalization of monomial ideals and Hilbert functions. *Proc. Am. Math. Soc. 136*, 6 (2008), 1933–1943.

[289] VILLARREAL, R. H. Rees algebras and polyhedral cones of ideals of vertex covers of perfect graphs. *J. Algebr. Comb. 27*, 3 (2008), 293–305.

[290] VILLARREAL, R. H. *Monomial algebras.*, 2nd ed. Boca Raton, FL: CRC Press, 2015.

[291] VILLARREAL, R. H. A duality theorem for the ic-resurgence of edge ideals. *arXiv e-prints* (Mar. 2022), arXiv:2203.01268.

[292] VITULLI, M. A. Some normal monomial ideals. In *Topics in algebraic and noncommutative geometry. Proceedings in memory of Ruth Michler, Luminy, France, July 20–22, 2001 and Annapolis, MD, USA, October 25–28, 2001*. Providence, RI: American Mathematical Society (AMS), 2003, pp. 205–217.

[293] VITULLI, M. A. Serre's condition R$_\ell$ for affine semigroup rings. *Commun. Algebra 37*, 3 (2009), 743–756.

[294] VODIČKA, M. Normality of the Kimura 3-parameter model. *SIAM J. Discrete Math. 35*, 3 (2021), 1536–1547.

[295] YOSHIDA, R. *Barvinok's Rational Functions: Algorithms and Applications to Optimization, Statistics, and Algebra.* PhD thesis, University of California at Davis, 2004.

[296] YOSHIDA, R., HARA, H., AND SALUKE, P. M. Sequential importance sampling for logistic regression model. In *Computational Models for Biomedical Reasoning and Problem Solving*. IGI Global, 2019, pp. 231–255.

[297] YOTSUTANI, N., AND ZHOU, B. Relative algebro-geometric stabilities of toric manifolds. *Tohoku Math. J. (2) 71*, 4 (2019), 495–524.

[298] YU, B. Standard pairs of monomial ideals over nonnormal affine semigroups in sagemath. *Journal of Software for Algebra and Geometry 11*, 1 (2022), 129–142.