References

[AB05] D. Aldous and A. Bandyopadhyay. "A survey of max-type recursive distributional equations". *Ann. Appl. Prob.* **15** (2005), 1047–1110 (cit. on p. 75).

[AB13] B. Adamczewski and J. P. Bell. "Diagonalization and rationalization of algebraic Laurent series". *Ann. Sci. Éc. Norm. Supér. (4)* **46** (2013), 963–1004 (cit. on p. 56).

[ABG70] M. F. Atiyah, R. Bott, and L. Gårding. "Lacunas for hyperbolic differential operators with constant coefficients I". *Acta Mathematica* **124** (1970), 109–189 (cit. on pp. 15, 126, 211, 217, 340, 353, 355, 365, 379, 522).

[AF59] A. Andreotti and T. Frankel. "The Lefschetz theorem on hyperplane sections". *Ann. of Math. (2)* **69** (1959), 713–717 (cit. on p. 477).

[AG72] R. Askey and G. Gasper. "Certain rational functions whose power series have positive coefficients". *Amer. Math. Monthly* **79** (1972), 327–341 (cit. on p. 376).

[Ald98] D. Aldous. "A Metropolis-Type Optimization Algorithm on the Infinite Tree". *Algorithmica* **22** (1998), 388–412 (cit. on p. 75).

[Amb+01] A. Ambainis et al. "One-dimensional quantum walks". In: *Proceedings of the 33rd Annual ACM Symposium on Theory of Computing*. New York: ACM Press, 2001, 37–49 (cit. on p. 286).

[And89] Y. André. *G-functions and geometry*. Aspects of Mathematics, E13. Friedr. Vieweg & Sohn, Braunschweig, 1989 (cit. on p. 241).

[AY83] I. A. Aĭzenberg and A. P. Yuzhakov. *Integral representations and residues in multidimensional complex analysis*. Vol. 58. Translations of Mathematical Monographs. Providence, RI:

https://doi.org/10.1017/9781108874144.023 Published online by Cambridge University Press

American Mathematical Society, 1983, x+283 (cit. on pp. 9, 328, 337, 489, 490, 511).

[Ban+01] C. Banderier et al. “Random maps, coalescing saddles, singularity analysis, and Airy phenomena”. *Random Structures Algorithms* **19** (2001), 194–246 (cit. on p. 426).

[Bar+10] Y. Baryshnikov et al. “Two-dimensional quantum random walk”. *J. Stat. Phys.* **142** (2010), 78–107 (cit. on pp. 219, 281, 286, 289, 398, 422).

[Bar+18] Y. Baryshnikov et al. “Diagonal asymptotics for symmetric rational functions via ACSV”. In: *29th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2018)*. Vol. 110. Dagstuhl, 2018, 12 (cit. on p. 434).

[Bar94] A. Barvinok. “A polynomial time algorithm for counting integral points in polyhedra when the dimension is fixed.” *Math. of Operations Res.* **19** (1994), 769–779 (cit. on p. 338).

[Bas08] S. Basu. “Algorithmic semi-algebraic geometry and topology—recent progress and open problems”. In: *Surveys on discrete and computational geometry*. Vol. 453. Contemp. Math. Amer. Math. Soc., Providence, RI, 2008, 139–212 (cit. on p. 468).

[BB09] J. Borcea and P. Brändén. “The Lee-Yang and Pólya-Schur programs, II: Theory of stable polynomials and applications”. *Comm. Pure Appl. Math.* **62** (2009), 1595–1631 (cit. on pp. 159, 434).

[BBL09] J. Borcea, P. Brändén, and T. Liggett. “Negative dependence and the geometry of polynomials”. *J. AMS* **22** (2009), 521–567 (cit. on p. 379).

[Ben+12] I. Bena et al. “Scaling BPS solutions and pure-Higgs states”. *J. High Energy Phys.* (2012), 171, front matter + 36 (cit. on p. 289).

[Ben73] E. A. Bender. “Central and local limit theorems applied to asymptotic enumeration”. *J. Combinatorial Theory Ser. A* **15** (1973), 91–111 (cit. on pp. 8, 386).

[Ben74] E. A. Bender. “Asymptotic methods in enumeration”. *SIAM Rev.* **16** (1974), 485–515 (cit. on p. 8).

[Ber71] G. M. Bergman. “The logarithmic limit-set of an algebraic variety”. *Trans. Amer. Math. Soc.* **157** (1971), 459–469 (cit. on p. 164).

[BER99] S. Baouendi, P. Ebenfelt, and J. Rothschild. *Real Submanifolds in Complex Space and Their Mappings*. Princeton: Princeton University Press, 1999, xi1+404 (cit. on p. 126).

[BG91] C. A. Berenstein and R. Gay. *Complex variables*. Vol. 125. Graduate Texts in Mathematics. New York: Springer-Verlag, 1991, xii+650 (cit. on p. 8).

[BH12] C. Banderier and P. Hitczenko. “Enumeration and asymptotics of restricted compositions having the same number of parts”. *Discrete Appl. Math.* **160** (2012), 2542–2554 (cit. on p. 423).

[BH86] N. Bleistein and R. A. Handelsman. *Asymptotic expansions of integrals*. Second edition. New York: Dover Publications Inc., 1986, xvi+425 (cit. on pp. 13, 112, 131).

[BJ82] T. Bröcker and K. Jänich. *Introduction to Differential Topology*. New York: Cambridge University Press, 1982, vii+160 (cit. on p. 272).

[BJP23] Y. Baryshnikov, K. Jin, and R. Pemantle. “Coefficient asymptotics of algebraic multivariable generating functions”. *Preprint* (2023), 30 (cit. on pp. 431, 436).

[BLS13] A. Bostan, P. Lairez, and B. Salvy. “Creative telescoping for rational functions using the Griffiths-Dwork method”. In: *ISSAC 2013—Proceedings of the 38th International Symposium on Symbolic and Algebraic Computation*. ACM, New York, 2013, 93–100 (cit. on p. 241).

[BM93] A. Bertozzi and J. McKenna. “Multidimensional residues, generating functions, and their application to queueing networks”. *SIAM Rev.* **35** (1993), 239–268 (cit. on pp. 10, 310, 337).

[BM97] E. Bierstone and P. Millman. “Canonical desingularization in characteristic zero by blowing up the maximum strata of a local invariant”. *Inventiones Mathematicae* **128** (1997), 207–302 (cit. on p. 380).

[BMP19] Y. Baryshnikov, S. Melczer, and R. Pemantle. “Asymptotics of multivariate sequences in the presence of a lacuna”. *arXiv preprint arXiv:1905.04174* (2019) (cit. on p. 376).

[BMP22] Y. Baryshnikov, S. Melczer, and R. Pemantle. “Stationary points at infinity for analytic combinatorics”. *Found. Comput. Math.* **22** (2022), 1631–1664 (cit. on pp. 200, 215–217, 219, 234, 235, 289, 530).

[BMP23] Y. Baryshnikov, S. Melczer, and R. Pemantle. “Asymptotics of multivariate sequences IV: generating functions with poles on a hyperplane arrangement". *Accepted to Annals of Combinatorics* (2023) (cit. on pp. 302, 307, 312, 335, 337).

[Bos+07] A. Bostan et al. "Differential equations for algebraic functions". In: *ISSAC 2007*. New York: ACM, 2007, 25–32 (cit. on p. 56).

[BP00] M. Bousquet-Mélou and M. Petkovšek. "Linear recurrences with constant coefficients: the multivariate case". *Discrete Math.* **225** (2000), 51–75 (cit. on pp. 32, 35, 36, 56).

[BP07] A. Bressler and R. Pemantle. "Quantum random walks in one dimension via generating functions". In: *2007 Conference on Analysis of Algorithms, AofA 07*. Discrete Math. Theor. Comput. Sci. Proc., AH. Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2007, 403–412 (cit. on pp. 259, 395, 422).

[BP11] Y. Baryshnikov and R. Pemantle. "Asymptotics of multivariate sequences, part III: quadratic points". *Advances in Mathematics* **228** (2011), 3127–3206 (cit. on pp. 15, 212, 219, 289, 340, 341, 352–354, 359, 361, 365, 366, 374, 375, 379, 380, 433, 522).

[BP21] Y. Baryshnikov and R. Pemantle. "Elliptic and hyper-elliptic asymptotics of trivariate generating functions with singularities of degree 3 and 4". *Manuscript in progress* (2021) (cit. on p. 212).

[BPR03] S. Basu, R. Pollack, and M.-F. Roy. *Algorithms in real algebraic geometry*. Vol. 10. Algorithms and Computation in Mathematics. Springer-Verlag, Berlin, 2003 (cit. on pp. 184, 227, 466).

[BR83] E. A. Bender and L. B. Richmond. "Central and local limit theorems applied to asymptotic enumeration. II. Multivariate generating functions". *J. Combin. Theory Ser. A* **34** (1983), 255–265 (cit. on pp. xiv, 8, 9, 288, 385, 386).

[BR99] E. A. Bender and L. B. Richmond. "Multivariate asymptotics for products of large powers with applications to Lagrange inversion". *Electron. J. Combin.* **6** (1999), Research Paper 8, 21 pp. (electronic) (cit. on pp. 9, 386).

[Bri10] E. Briand. "Covariants vanishing on totally decomposable forms". In: *Liaison, Schottky problem and invariant theory*. Vol. 280. Progr. Math. Basel: Birkhäuser Verlag, 2010, 237–256 (cit. on p. 325).

[Bri73] E. Brieskorn. "Sur les groupes de tresses". In: *Séminaire Boubaki*. Vol. 317. Berlin: Springer-Verlag, 1973, 21–44 (cit. on p. 478).

[BRW83] E. A. Bender, L. B. Richmond, and S. G. Williamson. "Central and local limit theorems applied to asymptotic enumeration. III.

https://doi.org/10.1017/9781108874144.023 Published online by Cambridge University Press

Matrix recursions". *J. Combin. Theory Ser. A* **35** (1983), 263–278 (cit. on p. 9).

[Bry77] T. Brylawski. "The broken-circuit complex". *Trans. AMS* **234** (1977), 417–433 (cit. on p. 311).

[Buc65] B. Buchberger. "Ein Algorithmus zum Auffinden der Basiselemente des Restklassenringes nach einem nulldimensionalen Polynomideal". PhD thesis. University of Innsbruck, 1965 (cit. on p. 243).

[BW59] F. Bruhat and H. Whitney. "Quelques propriétés fondamentales des ensembles analytiques-réels". *Comment. Math. Helvetici* **33** (1959), 132–160 (cit. on p. 126).

[BW93] T. Becker and V. Weispfenning. *Gröbner bases*. Vol. 141. Graduate Texts in Mathematics. Springer-Verlag, New York, 1993 (cit. on p. 226).

[CDE06] W. Y. C. Chen, E. Deutsch, and S. Elizalde. "Old and young leaves on plane trees". *European Journal of Combinatorics* **27** (2006), 414–427 (cit. on p. 59).

[Chr15] G. Christol. "Diagonals of rational fractions". *Eur. Math. Soc. Newsl* **97** (2015), 37–43 (cit. on p. 57).

[CIR03] H. A. Carteret, M. E. H. Ismail, and L. B. Richmond. "Three routes to the exact asymptotics for the one-dimensional quantum walk". *J. Phys. A* **36** (33 2003), 8775–8795 (cit. on p. 421).

[CLO05] D. Cox, J. Little, and D. O'Shea. *Using algebraic geometry*. Second edition. Vol. 185. Graduate Texts in Mathematics. New York: Springer, 2005, xii+572 (cit. on p. 244).

[CLO07] D. Cox, J. Little, and D. O'Shea. *Ideals, varieties, and algorithms*. Third edition. Undergraduate Texts in Mathematics. New York: Springer, 2007, xvi+551 (cit. on pp. 222, 224, 233, 243).

[CLP04] S. Corteel, G. Louchard, and R. Pemantle. "Common intervals of permutations". In: *Mathematics and computer science. III*. Trends Math. Basel: Birkhäuser, 2004, 3–14 (cit. on p. 24).

[CM09] E. R. Canfield and B. McKay. "The asymptotic volume of the Birkhoff polytope". *Online J. Anal. Comb.* **4** (2009), 4 (cit. on p. 338).

[Com64] L. Comtet. "Calcul pratique des coefficients de Taylor d'une fonction algébrique". *Enseignement Math. (2)* **10** (1964), 267–270 (cit. on p. 56).

[Com74] L. Comtet. *Advanced combinatorics*. Enlarged edition. Dordrecht: D. Reidel Publishing Co., 1974, xi+343 (cit. on pp. 24, 251, 406).

[Con78a] C. Conley. *Isolated invariant sets and the Morse index*. Vol. 38. CBMS Regional Conference Series in Mathematics. Springer-Verlag, 1978 (cit. on p. 204).

[Con78b] J. B. Conway. *Functions of one complex variable*. Second edition. Vol. 11. Graduate Texts in Mathematics. New York: Springer-Verlag, 1978, xiii+317 (cit. on pp. 8, 62, 164, 349).

[Cox20] D. Cox. "Reflections on elimination theory". In: *ISSAC'20—Proceedings of the 45th International Symposium on Symbolic and Algebraic Computation*. ACM, New York, 2020, 1–4 (cit. on p. 244).

[CS98] F. Chyzak and B. Salvy. "Non-commutative elimination in Ore algebras proves multivariate identities". *J. Symbolic Comput.* **26** (1998), 187–227 (cit. on p. 47).

[dALN15] R. F. de Andrade, E. Lundberg, and B. Nagle. "Asymptotics of the extremal excedance set statistic". *European J. Combin.* **46** (2015), 75–88 (cit. on p. xi).

[dBru81] N. G. de Bruijn. *Asymptotic methods in analysis*. Third edition. New York: Dover Publications Inc., 1981, xii+200 (cit. on pp. 6, 12, 112).

[DeV10] T. DeVries. "A case study in bivariate singularity analysis". In: *Algorithmic probability and combinatorics*. Vol. 520. Contemp. Math. Providence, RI: Amer. Math. Soc., 2010, 61–81 (cit. on pp. 10, 270).

[DeV11] T. DeVries. "Algorithms for bivariate singularity analysis". PhD thesis. University of Pennsylvania, 2011 (cit. on pp. 262, 269).

[DH02] E. Delabaere and C. J. Howls. "Global asymptotics for multiple integrals with boundaries". *Duke Math. J.* **112** (2002), 199–264 (cit. on p. 422).

[DJ21] S. T. Dinh and Z. Jelonek. "Thom isotopy theorem for nonproper maps and computation of sets of stratified generalized critical values". *Discrete Comput. Geom.* **65** (2021), 279–304 (cit. on pp. 227, 515).

[DL87] J. Denef and L. Lipshitz. "Algebraic power series and diagonals". *J. Number Theory* **26** (1987), 46–67 (cit. on pp. 50, 56, 430).

[DL93] R. A. DeVore and G. G. Lorentz. *Constructive approximation*. Vol. 303. Grundlehren der Mathematischen Wissenschaften. Berlin: Springer-Verlag, 1993, x+449 (cit. on p. 331).

[Doš19] T. Došlić. "Block allocation of a sequential resource". *Ars Mathematica Contemporanea* **17** (2019), 79–88 (cit. on p. 388).

[DS03] J. A. De Loera and B. Sturmfels. "Algebraic unimodular counting". *Math. Program.* **96** (2003), 183–203 (cit. on pp. 338, 409).

[Du11] P. Du. *The Aztec Diamond edge-probability generating function*. Masters thesis, Department of Mathematics, University of Pennsylvania. 2011 (cit. on p. 372).

[Dur04] R. Durrett. *Probability: theory and examples*. Third edition. Belmont, CA: Duxbury Press, 2004, 497 (cit. on p. 386).

[DvdHP11] T. DeVries, J. van der Hoeven, and R. Pemantle. "Effective asymptotics for smooth bivariate generating functions". *Online J. Anal. Comb.* **6** (2011) (cit. on p. 262).

[dWol13] T. de Wolff. "On the Geometry, Topology and Approximation of Amoebas". PhD thesis. Frankfurt: Johann Wolfgang Goethe-Universität, 2013 (cit. on p. 165).

[dWol17] T. de Wolff. "Amoebas and their tropicalizations—a survey". In: *Analysis meets geometry*. Trends Math. Birkhäuser/Springer, Cham, 2017, 157–190 (cit. on p. 165).

[Eil47] S. Eilenberg. "Singular homology in differentiable manifolds". *Ann. of Math. (2)* **48** (1947), 670–681 (cit. on p. 464).

[Eis95] D. Eisenbud. *Commutative algebra*. Vol. 150. Graduate Texts in Mathematics. New York: Springer-Verlag, 1995, xvi+785 (cit. on p. 227).

[Fau+23] J.-C. Faugère et al. "Computing critical points for invariant algebraic systems". *J. Symbolic Comput.* **116** (2023), 365–399 (cit. on p. 435).

[FHS04] A. Flaxman, A. W. Harrow, and G. B. Sorkin. "Strings with maximally many distinct subsequences and substrings". *Electron. J. Combin.* **11** (2004), Research Paper 8, 10 pp. (electronic) (cit. on p. 389).

[FIM99] G. Fayolle, R. Iasnogorodski, and V. Malyshev. *Random walks in the quarter-plane*. Vol. 40. Applications of Mathematics (New York). Berlin: Springer-Verlag, 1999, xvi+156 (cit. on p. xiv).

[FL28] K. Friedrichs and H. Lewy. "Das Anfangswertproblem einer beliebigen nichtlinearen hyperbolischen Differentialgleichung beliebiger Ordnung in zwei Variablen. Existenz, Eindeutigkeit und Abhängigkeitsbereich der Lösung." *Math. Annalen* **99** (1928), 200–221 (cit. on p. 368).

[FO90] P. Flajolet and A. M. Odlyzko. "Singularity analysis of generating functions". *SIAM J. Discrete Math.* **3** (1990), 216–240 (cit. on pp. 71, 75, 84).

https://doi.org/10.1017/9781108874144.023 Published online by Cambridge University Press

[For+19] J. Forsgård et al. “Lopsided approximation of amoebas”. *Math. Comp.* **88** (2019), 485–500 (cit. on p. 165).

[FPT00] M. Forsberg, M. Passare, and A. Tsikh. “Laurent determinants and arrangements of hyperplane amoebas”. *Adv. Math.* **151** (2000), 45–70 (cit. on pp. 143, 165).

[FS09] P. Flajolet and R. Sedgewick. *Analytic combinatorics*. Cambridge University Press, 2009, 824 (cit. on pp. xiv, 12, 15, 17, 49, 56, 68, 76, 84, 112, 156, 270, 391, 392).

[Fur67] H. Furstenberg. “Algebraic functions over finite fields”. *J. Algebra* **7** (1967), 271–277 (cit. on pp. 47, 48).

[Går50] L. Gårding. “Linear hyperbolic partial differential equations with constant coefficients”. *Acta Math.* **85** (1950), 1–62 (cit. on pp. 348, 353).

[GE20] E. Granet and F. H. L. Essler. “A systematic $1/c$-expansion of form factor sums for dynamical correlations in the Lieb-Liniger model”. *SciPost Phys.* **9** (2020), Paper No. 082, 76 (cit. on p. xi).

[Geo21] T. George. “Grove arctic curves from periodic cluster modular transformations”. *Int. Math. Res. Not. IMRN* (2021), 15301–15336 (cit. on p. xi).

[Ges81] I. M. Gessel. “Two theorems of rational power series”. *Utilitas Math.* **19** (1981), 247–254 (cit. on p. 56).

[GFS21] O. Gordon, Y. Filmus, and O. Salzman. “Revisiting the Complexity Analysis of Conflict-Based Search: New Computational Techniques and Improved Bounds”. *Proceedings of the Fourteenth International Symposium on Combinatorial Search (SoCS 2021)* (2021) (cit. on p. xi).

[GH94] P. Griffiths and J. Harris. *Principles of algebraic geometry*. Wiley Classics Library. New York: John Wiley & Sons Inc., 1994, xiv+813 (cit. on p. 461).

[Gil22] S. Gillen. “Critical Points at Infinity for Hyperplanes of Directions”. *arXiv preprint arXiv:2210.05748* (2022) (cit. on p. 436).

[GJ04] I. P. Goulden and D. M. Jackson. *Combinatorial enumeration*. Mineola, NY: Dover Publications Inc., 2004, xxvi+569 (cit. on pp. 17, 27, 56, 406).

[GKZ08] I. M. Gel’fand, M. M. Kapranov, and A. V. Zelevinsky. *Discriminants, resultants and multidimensional determinants*. Modern Birkhäuser Classics. Birkhäuser Boston, Inc., Boston, MA, 2008 (cit. on pp. xv, 164, 165, 243).

[GM88] M. Goresky and R. MacPherson. *Stratified Morse theory*. Vol. 14. Berlin: Springer-Verlag, 1988, xiv + 272 (cit. on pp. 14, 185, 204, 217, 219, 513, 519, 524, 525, 527, 529, 530).

[Gor12] M. Goresky. "Introduction to the papers of R. Thom and J. Mather". *Bull. AMS* **49** (2012), 469–474 (cit. on p. 521).

[Gor75] G. Gordon. "The residue calculus in several complex variables". *Trans. AMS* **213** (1975), 127–176 (cit. on p. 484).

[GP74] V. Guillemin and A. Pollack. *Differential Topology*. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1974, xvi+222 (cit. on p. 272).

[GR92] Z. Gao and L. B. Richmond. "Central and local limit theorems applied to asymptotic enumeration. IV. Multivariate generating functions". *J. Comput. Appl. Math.* **41** (1992), 177–186 (cit. on pp. 9, 386).

[Gra] J. M. Grau Ribas. *What is the limit of* $a(n+1)/a(n)$*?* MathOverflow. eprint: https://mathoverflow.net/q/389034 (cit. on p. 404).

[Gre+22] T. Greenwood et al. "Asymptotics of coefficients of algebraic series via embedding into rational series (extended abstract)". *Sém. Lothar. Combin.* **86B** (2022), Art. 30, 12 (cit. on pp. 431, 436).

[Gre18] T. Greenwood. "Asymptotics of bivariate analytic functions with algebraic singularities". *J. Comb. Theory A* **153** (2018), 1–30 (cit. on p. 403).

[Gri+90] J. R. Griggs et al. "On the number of alignments of k sequences". *Graphs Combin.* **6** (1990), 133–146 (cit. on p. 409).

[GRZ83] J. Gillis, B. Reznick, and D. Zeilberger. "On elementary methods in positivity theory". *SIAM J. Math. Anal.* **14** (1983), 396–398 (cit. on p. 376).

[GS16] I. M. Gel'fand and G. E. Shilov. *Generalized functions. Vol. 1: Properties and operations. Translated from the Russian by E. Saletan. Reprint of the 1964 original published by Academic Press*. Providence, RI: AMS Chelsea Publishing, 2016, xvii + 423 (cit. on pp. 366, 375).

[GS96] X. Gourdon and B. Salvy. "Effective asymptotics of linear recurrences with rational coefficients". In: *Proceedings of the 5th Conference on Formal Power Series and Algebraic Combinatorics (Florence, 1993)*. Vol. 153. 1996, 145–163 (cit. on p. 62).

[Gül97] O. Gülen. "Hyperbolic polynomials and interior point methods for convex programming". *Math. Oper. Res.* **22** (1997), 350–377 (cit. on p. 348).

[GWW21] J. S. Geronimo, H. J. Woerdeman, and C. Y. Wong. "Spectral density functions of bivariable stable polynomials". *Ramanujan J.* **56** (2021), 265–295 (cit. on p. xi).

[Hat02] A. Hatcher. *Algebraic topology*. Cambridge University Press, Cambridge, 2002 (cit. on pp. 465–467, 472, 473, 478).

[Hay56] W. K. Hayman. "A generalisation of Stirling's formula". *J. Reine Angew. Math.* **196** (1956), 67–95 (cit. on pp. xiv, 78, 84).

[Hen88] P. Henrici. *Applied and computational complex analysis. Vol. 1*. Wiley Classics Library. New York: John Wiley & Sons Inc., 1988, xviii+682 (cit. on p. 8).

[Hen91] P. Henrici. *Applied and computational complex analysis. Vol. 2*. Wiley Classics Library. New York: John Wiley & Sons Inc., 1991, x+662 (cit. on pp. 8, 84, 112).

[Hir73] H. Hironaka. "Subanalytic sets". In: *Number theory, algebraic geometry and commutative algebra, in honor of Yasuo Akizuki*. Tokyo: Kinokuniya, 1973, 453–493 (cit. on p. 515).

[Hir76] M. W. Hirsch. *Differential topology*. Graduate Texts in Mathematics, No. 33. Springer-Verlag, New York-Heidelberg, 1976 (cit. on p. 483).

[HK71] M. L. J. Hautus and D. A. Klarner. "The diagonal of a double power series". *Duke Math. J.* **38** (1971), 229–235 (cit. on p. 47).

[HL16] E. Hubert and G. Labahn. "Computation of invariants of finite abelian groups". *Mathematics of Computation* **85** (2016), 3029–3050 (cit. on p. 435).

[HL17] J. D. Hauenstein and V. Levandovskyy. "Certifying solutions to square systems of polynomial-exponential equations". *J. Symbolic Comput.* **79** (2017), 575–593 (cit. on p. 237).

[HN22] M. Helmer and V. Nanda. "Conormal Spaces and Whitney Stratifications". *Foundations of Computational Mathematics* (2022) (cit. on pp. 227, 515, 516).

[Hör83] L. Hörmander. *The analysis of linear partial differential operators. I*. Vol. 256. Grundlehren der Mathematischen Wissenschaften. Berlin: Springer-Verlag, 1983, ix+391 (cit. on pp. 129, 353).

[Hör90] L. Hörmander. *An introduction to complex analysis in several variables*. Third edition. Vol. 7. North-Holland Mathematical Library. Amsterdam: North-Holland Publishing Co., 1990, xii+254 (cit. on pp. 323, 460, 461).

[HPS77] M. Hirsch, C. Pugh, and M. Shub. "Invariant manifolds". Lecture Notes in Mathematics **583** (1977) (cit. on p. 204).

[HR00a] G. H. Hardy and S. Ramanujan. “Asymptotic formulæ for the distribution of integers of various types [Proc. London Math. Soc. (2) **16** (1917), 112–132]”. In: *Collected papers of Srinivasa Ramanujan*. AMS Chelsea Publ., Providence, RI, 2000, 245–261 (cit. on p. 84).

[HR00b] G. H. Hardy and S. Ramanujan. “Une formule asymptotique pour le nombre des partitions de n [Comptes Rendus, 2 Jan. 1917]”. In: *Collected papers of Srinivasa Ramanujan*. AMS Chelsea Publ., Providence, RI, 2000, 239–241 (cit. on p. 84).

[HRS18] J. D. Hauenstein, J. I. Rodriguez, and F. Sottile. “Numerical computation of Galois groups”. *Foundations of Computational Mathematics* **18** (2018), 867–890 (cit. on p. 327).

[Huh13] J. Huh. “The maximum likelihood degree of a very affine variety”. *Compositio Math.* **149** (2013), 1245–1266 (cit. on p. 430).

[HW14] P. E. Harris and J. F. Willenbring. “Sums of squares of Littlewood–Richardson coefficients and GL_n-harmonic polynomials”. In: *Symmetry: representation theory and its applications*. Springer, 2014, 305–326 (cit. on p. 412).

[Hwa96] H.-K. Hwang. “Large deviations for combinatorial distributions. I: Central limit theorems”. *Ann. Appl. Probab.* **6** (1996), 297–319 (cit. on p. 386).

[Hwa98a] H.-K. Hwang. “Large deviations of combinatorial distributions. II: Local limit theorems”. *Ann. Appl. Probab.* **8** (1998), 163–181 (cit. on p. 386).

[Hwa98b] H.-K. Hwang. “On convergence rates in the central limit theorems for combinatorial structures”. *Eur. J. Comb.* **19** (1998), 329–343 (cit. on p. 386).

[IK94] E. Isaacson and H. B. Keller. *Analysis of numerical methods*. New York: Dover Publications Inc., 1994, xvi+541 (cit. on p. 37).

[JPS98] W. Jockusch, J. Propp, and P. Shor. “Random Domino Tilings and the Arctic Circle Theorem”. *ArXiv Mathematics e-prints* (Jan. 1998). eprint: arXiv:math/9801068 (cit. on p. 15).

[Kar79] K. Karchyauskas. *Homotopy properties of complex algebraic sets*. Leningrad: Steklov Institute, 1979 (cit. on p. 478).

[Kes78] H. Kesten. “Branching Brownian motion with absorption”. *Stochastic Processes Appl.* **7** (1978), 9–47 (cit. on p. 29).

[KLM21] J. Khera, E. Lundberg, and S. Melczer. “Asymptotic enumeration of lonesum matrices”. *Adv. in Appl. Math.* **123** (2021), 102–118 (cit. on p. xi).

[Knu06] D. Knuth. *The Art of Computer Programming*. Vol. I–IV. Upper Saddle River, NJ: Addison-Wesley, 2006 (cit. on p. xiv).

[KO07] R. Kenyon and A. Okounkov. “Limit shapes and the complex Burgers equation”. *Acta Math.* **199** (2007), 263–302 (cit. on p. 373).

[Kog02] Y. Kogan. “Asymptotic expansions for large closed and loss queueing networks”. *Math. Probl. Eng.* **8** (2002), 323–348 (cit. on p. 310).

[Kov19] M. Kovačević. “Runlength-limited sequences and shift-correcting codes: asymptotic analysis”. *IEEE Trans. Inform. Theory* **65** (2019), 4804–4814 (cit. on p. xi).

[KP16] R. Kenyon and R. Pemantle. “Double-dimers, the Ising model and the hexahedron recurrence”. *J. Comb. Theory, ser. A* **137** (2016), 27–63 (cit. on p. 212).

[Kra01] S. G. Krantz. *Function theory of several complex variables*. AMS Chelsea Publishing, Providence, RI, 2001, xvi+564 (cit. on p. 165).

[KY96] Y. Kogan and A. Yakovlev. “Asymptotic analysis for closed multichain queueing networks with bottlenecks”. *Queueing Systems Theory Appl.* **23** (1996), 235–258 (cit. on p. 10).

[KZ11] M. Kauers and D. Zeilberger. “The computational challenge of enumerating high-dimensional rook walks”. *Advances in Applied Mathematics* **47** (2011), 813–819 (cit. on p. 421).

[Lai16] P. Lairez. “Computing periods of rational integrals”. *Math. Comp.* **85** (2016), 1719–1752 (cit. on p. 241).

[Las15] J. B. Lasserre. *An introduction to polynomial and semi-algebraic optimization*. Cambridge Texts in Applied Mathematics. Cambridge University Press, Cambridge, 2015 (cit. on p. 149).

[Laz73] F. Lazzeri. “Morse theory on singular spaces”. *Astérisque* **7–8** (1973), 263–268 (cit. on p. 518).

[Lee03] J. M. Lee. *Introduction to smooth manifolds*. Vol. 218. Graduate Texts in Mathematics. New York: Springer-Verlag, 2003, xviii+628 (cit. on pp. 127, 476).

[Len+23] A. Lenz et al. “Exact Asymptotics for Discrete Noiseless Channels”. *Proceedings of the 2023 IEEE International Symposium on Information Theory (ISIT)* (2023) (cit. on p. xi).

[Ler59] J. Leray. “Le calcul différentiel et intégral sur une variété analytique complexe. (Problème de Cauchy. III)”. *Bull. Soc. Math. France* **87** (1959), 81–180 (cit. on pp. 9, 484).

[Lic91] B. Lichtin. "The asymptotics of a lattice point problem associated to a finite number of polynomials. I". *Duke Math. J.* **63** (1991), 139–192 (cit. on p. 10).

[Lip88] L. Lipshitz. "The diagonal of a *D*-finite power series is *D*-finite". *J. Algebra* **113** (1988), 373–378 (cit. on p. 46).

[Lip89] L. Lipshitz. "*D*-finite power series". *J. Algebra* **122** (1989), 353–373 (cit. on pp. 44, 45, 56).

[LL99] M. Larsen and R. Lyons. "Coalescing particles on an interval". *J. Theoret. Probab.* **12** (1999), 201–205 (cit. on pp. 15, 33).

[Lla03] M. Lladser. "Asymptotic enumeration via singularity analysis". PhD thesis. The Ohio State University, 2003 (cit. on pp. 10, 426).

[Lla06] M. Lladser. "Uniform formulae for coefficients of meromorphic functions in two variables. I". *SIAM J. Discrete Math.* **20** (2006), 811–828 (electronic) (cit. on pp. 10, 426).

[LMS22] K. Lee, S. Melczer, and J. Smolčić. "Homotopy Techniques for Analytic Combinatorics in Several Variables". In: *Proceedings of the 24th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC)*. 2022, 27–34 (cit. on pp. 236, 237, 436).

[LP04] V. Limic and R. Pemantle. "More rigorous results on the Kauffman-Levin model of evolution". *Ann. Probab.* **32** (2004), 2149–2178 (cit. on p. 58).

[LT10] D. T. Lê and B. Teissier. "Geometry of characteristic varieties". In: *Algebraic approach to differential equations*. World Sci. Publ., Hackensack, NJ, 2010, 119–135 (cit. on p. 518).

[Mat12] J. Mather. "Notes on topological stability". *Bull. AMS* **49** (2012), 475–506 (cit. on pp. 521, 522).

[Mat70] J. Mather. "Notes on topological stability". *Mimeographed notes* (1970) (cit. on pp. 126, 216, 217).

[Mel21] S. Melczer. *An Invitation to Analytic Combinatorics: From One to Several Variables*. Texts & Monographs in Symbolic Computation. Springer International Publishing, 2021 (cit. on pp. xi, 10, 41, 46, 56, 57, 62, 153, 184, 227, 242–244, 408, 421).

[Mer+97] D. Merlini et al. "On some alternative characterizations of Riordan arrays". *Canad. J. Math.* **49** (1997), 301–320 (cit. on p. 386).

[Mez16] M. Mezzarobba. "Rigorous multiple-precision evaluation of D-finite functions in SageMath". *arXiv preprint arXiv:1607.01967* (2016) (cit. on p. 242).

[Mez19] M. Mezzarobba. "Truncation bounds for differentially finite series". *Ann. H. Lebesgue* **2** (2019), 99–148 (cit. on p. 237).

[Mik00] G. Mikhalkin. "Real algebraic curves, the moment map and amoebas". *Ann. of Math. (2)* **151** (2000), 309–326 (cit. on p. 165).

[Mik04] G. Mikhalkin. "Amoebas of algebraic varieties and tropical geometry". In: *Different faces of geometry*. Vol. 3. Int. Math. Ser. (N. Y.) Kluwer/Plenum, New York, 2004, 257–300 (cit. on p. 165).

[Mil63] J. Milnor. *Morse theory*. Based on lecture notes by M. Spivak and R. Wells. Annals of Mathematics Studies, No. 51. Princeton, N.J.: Princeton University Press, 1963, vi+153 (cit. on pp. 14, 185, 500, 501, 504, 511, 529).

[Mis19] M. Mishna. *Analytic Combinatorics: A Multidimensional Approach*. CRC Press, 2019 (cit. on p. xi).

[MM08] Ž. Mijajlović and B. Malešević. "Differentially transcendental functions". *Bull. Belg. Math. Soc. Simon Stevin* **15** (2008), 193–201 (cit. on p. 57).

[MM16] S. Melczer and M. Mishna. "Asymptotic lattice path enumeration using diagonals". *Algorithmica* **75** (2016), 782–811 (cit. on p. xi).

[MR91] T. Mostowski and E. Rannou. "Complexity of the computation of the canonical Whitney stratification of an algebraic set in $\mathbf{C}^n$". In: *Applied algebra, algebraic algorithms and error-correcting codes (New Orleans, LA, 1991)*. Vol. 539. Lecture Notes in Comput. Sci. Berlin: Springer, 1991, 281–291 (cit. on pp. 227, 515).

[MS21] S. Melczer and B. Salvy. "Effective Coefficient Asymptotics of Multivariate Rational Functions via Semi-Numerical Algorithms for Polynomial Systems". *Journal of Symbolic Computation* **103** (2021), 234–279 (cit. on pp. 62, 229, 236, 237).

[MS22] S. Melczer and J. Smolčić. "Rigorous two dimensional analytic combinatorics in Sage". 2022 (cit. on pp. 269, 270).

[Mum95] D. Mumford. *Algebraic geometry. I*. Classics in Mathematics. Berlin: Springer-Verlag, 1995, x+186 (cit. on p. 228).

[Mun84] J. R. Munkres. *Elements of algebraic topology*. Menlo Park, CA: Addison-Wesley Publishing Company, 1984, ix+454 (cit. on pp. 467, 469, 471, 473, 474, 478).

[MW19] S. Melczer and M. C. Wilson. "Higher dimensional lattice walks: connecting combinatorial and analytic behavior". *SIAM J. Disc. Math.* **33** (2019), 2140–2174 (cit. on pp. xi, 318).

[Nob10] R. Noble. “Asymptotics of a family of binomial sums”. *J. Number Theory* **130** (2010), 2561–2585 (cit. on p. 421).

[Odl95] A. M. Odlyzko. “Asymptotic enumeration methods”. In: *Handbook of combinatorics, Vol. 1, 2*. Amsterdam: Elsevier, 1995, 1063–1229 (cit. on pp. xiv, 9, 405).

[OT92] P. Orlik and H. Terao. *Arrangements of hyperplanes*. Vol. 300. Grundlehren der Mathematischen Wissenschaften [Fundamental Principles of Mathematical Sciences]. Berlin: Springer-Verlag, 1992, xviii+325 (cit. on pp. 297, 312).

[Pan17] J. Pantone. “The Asymptotic Number of Simple Singular Vector Tuples of a Cubical Tensor”. *Online Journal of Analytic Combinatorics* **12** (2017) (cit. on p. xi).

[Par11] R. B. Paris. *Hadamard expansions and hyperasymptotic evaluation*. Vol. 141. Encyclopedia of Mathematics and its Applications. Cambridge: Cambridge University Press, 2011, viii+243 (cit. on p. 422).

[Pem00] R. Pemantle. “Generating functions with high-order poles are nearly polynomial”. In: *Mathematics and computer science (Versailles, 2000)*. Trends Math. Basel: Birkhäuser, 2000, 305–321 (cit. on p. 338).

[Pem10] R. Pemantle. “Analytic combinatorics in d variables: an overview”. In: *Algorithmic probability and combinatorics*. Vol. 520. Contemp. Math. Providence, RI: Amer. Math. Soc., 2010, 195–220 (cit. on p. 219).

[Pha11] F. Pham. *Singularities of integrals: homology, hyperfunctions and microlocal analysis*. Universitext. New York: Springer, 2011, xxii+217 (cit. on pp. 337, 511).

[Pig79] R. Pignoni. “Density and stability of Morse functions on a stratified space”. *Ann. Scuola Nor. Sup.. Pisa, ser. IV* **6** (1979), 593–608 (cit. on p. 518).

[PK01] R. B. Paris and D. Kaminski. *Asymptotics and Mellin-Barnes integrals*. Vol. 85. Encyclopedia of Mathematics and its Applications. Cambridge: Cambridge University Press, 2001, xvi+422 (cit. on p. 422).

[Poi85] H. Poincaré. “Sure les courbes définies par les équations différentielles”. *J. Math. Pure et Appliquées* **4** (1885), 167–244 (cit. on p. 443).

[Pól69] G. Pólya. “On the number of certain lattice polygons”. *J. Combinatorial Theory* **6** (1969), 102–105 (cit. on p. 405).

[Poo60] E. G. C. Poole. *Introduction to the theory of linear differential equations*. Dover Publications, Inc., New York, 1960 (cit. on p. 241).

[PPT13] M. Passare, D. Pochekutov, and A. Tsikh. "Amoebas of complex hypersurfaces in statistical thermodynamics". *Math. Phys. Anal. Geom.* **16** (2013), 89–108 (cit. on p. 165).

[PS05] T. K. Petersen and D. Speyer. "An arctic circle theorem for Groves". *J. Combin. Theory Ser. A* **111** (2005), 137–164 (cit. on p. 370).

[PS98] G. Pólya and G. Szegő. *Problems and theorems in analysis. II*. Classics in Mathematics. Berlin: Springer-Verlag, 1998, xii+392 (cit. on p. 37).

[PV19] F. Pinna and C. Viola. "The saddle-point method in $\mathbb{C}^N$ and the generalized Airy functions". *Bull. Math. Soc. France* **147** (2019), 211–257 (cit. on p. 131).

[PW02] R. Pemantle and M. C. Wilson. "Asymptotics of multivariate sequences. I. Smooth points of the singular variety". *J. Combin. Theory Ser. A* **97** (2002), 129–161 (cit. on pp. 10, 15, 219, 289, 337, 421).

[PW04] R. Pemantle and M. C. Wilson. "Asymptotics of multivariate sequences. II. Multiple points of the singular variety". *Combin. Probab. Comput.* **13** (2004), 735–761 (cit. on pp. 10, 15, 219, 317, 337).

[PW08] R. Pemantle and M. C. Wilson. "Twenty combinatorial examples of asymptotics derived from multivariate generating functions". *SIAM Rev.* **50** (2008), 199–272 (cit. on pp. 10, 421).

[PW10] R. Pemantle and M. C. Wilson. "Asymptotic expansions of oscillatory integrals with complex phase". In: *Algorithmic probability and combinatorics*. Vol. 520. Contemp. Math. Providence, RI: Amer. Math. Soc., 2010, 221–240 (cit. on pp. 10, 130).

[PWZ96] M. Petkovšek, H. S. Wilf, and D. Zeilberger. $A = B$. Wellesley, MA: A K Peters Ltd., 1996, xii+212 (cit. on p. 57).

[Ran98] E. Rannou. "The complexity of stratification computation". *Discrete Comput. Geom.* **19** (1998), 47–78 (cit. on pp. 227, 515).

[Rie49] M. Riesz. "L'intégrale de Riemann-Liouville et le problème de Cauchy". *Acta Mathematica* **81** (1949), 1–223 (cit. on p. 365).

[Roc66] R. T. Rockefellar. *Convex analysis*. Princeton: Princeton University Press, 1966, xiii+451 (cit. on p. 165).

[RT05] M. Régnier and F. Tahi. *Generating functions in computational biology*. Preprint available at http://algo.inria.fr/regnier/publis/ReTa04.ps. (2005) (cit. on p. 408).

[Rub83] L. A. Rubel. "Some research problems about algebraic differential equations". *Trans. Amer. Math. Soc.* **280** (1983), 43–52 (cit. on p. 57).

[Rub92] L. A. Rubel. "Some research problems about algebraic differential equations. II". *Illinois J. Math.* **36** (1992), 659–680 (cit. on p. 57).

[Rud69] W. Rudin. *Function theory in polydiscs*. W. A. Benjamin, Inc., New York-Amsterdam, 1969 (cit. on p. 165).

[RW08] A. Raichev and M. C. Wilson. "Asymptotics of coefficients of multivariate generating functions: improvements for smooth points". *Electron. J. Combin.* **15** (2008), Research Paper 89, 17 (cit. on pp. 10, 289).

[RW11] A. Raichev and M. C. Wilson. "Asymptotics of coefficients of multivariate generating functions: improvements for multiple points". *Online J. Anal. Comb.* **6** (2011), 21 (cit. on p. 10).

[RWZ20] S. Ramgoolam, M. C. Wilson, and A. Zahabi. "Quiver asymptotics: free chiral ring". *Journal of Physics A: Mathematical and Theoretical* **53** (2020), 105401 (cit. on pp. xi, 412).

[Saf00] K. V. Safonov. "On power series of algebraic and rational functions in $\mathbf{C}^n$". *J. Math. Anal. Appl.* **243** (2000), 261–277 (cit. on pp. 49–51, 430).

[Sha+91] L. W. Shapiro et al. "The Riordan group". *Discrete Appl. Math.* **34** (1991), 229–239 (cit. on p. 421).

[Sha13] I. Shafarevich. *Basic Algebraic Geometry 1: Varieties in Projective Space*. Third edition. New York: Springer, 2013, xviii+310 (cit. on p. 182).

[Spr94] R. Sprugnoli. "Riordan arrays and combinatorial sums". *Discrete Math.* **132** (1994), 267–290 (cit. on pp. 386, 421).

[SS14] A. D. Scott and A. Sokal. "Complete monotonicity for inverse powers of some combinatorially defined polynomials". *Acta Mathematica* **213** (2014), 323–392 (cit. on p. 368).

[Sta15] R. P. Stanley. *Catalan numbers*. Cambridge University Press, 2015 (cit. on p. 31).

[Sta80] R. P. Stanley. "Differentiably finite power series". *European J. Combin.* **1** (1980), 175–188 (cit. on p. 56).

[Sta97] R. P. Stanley. *Enumerative combinatorics. Vol. 1*. Vol. 49. Cambridge Studies in Advanced Mathematics. Cambridge: Cambridge University Press, 1997, xii+325 (cit. on pp. 3, 15, 17, 56, 405, 409).

[Sta99] R. P. Stanley. *Enumerative combinatorics. Vol. 2*. Vol. 62. Cambridge Studies in Advanced Mathematics. Cambridge: Cambridge University Press, 1999, xii+581 (cit. on pp. 41, 42, 47, 56, 436).

[Ste93] E. M. Stein. *Harmonic analysis: real-variable methods, orthogonality, and oscillatory integrals*. Vol. 43. Princeton Mathematical Series. Princeton, NJ: Princeton University Press, 1993, xiv+695 (cit. on pp. 105, 112, 121, 131).

[Stu02] B. Sturmfels. *Solving systems of polynomial equations*. Vol. 97. CBMS regional conference series in mathematics. Providence: American Mathematical Society, 2002, viii+152 (cit. on p. 244).

[Sze33] G. Szegő. "Über gewisse Potenzreihen mit lauter positiven Koeffizienten". *Math. Z.* **37** (1933), 674–688 (cit. on pp. 368, 376).

[Tei82] B. Teissier. "Variétés polaires. II. Multiplicités polaires, sections planes, et conditions de Whitney". In: *Algebraic geometry (La Rábida, 1981)*. Vol. 961. Lecture Notes in Math. Springer, Berlin, 1982, 314–491 (cit. on p. 227).

[The02] T. Theobald. "Computing amoebas". *Experiment. Math.* **11** (2002), 513–526 (cit. on p. 165).

[Tim18] S. Timme. "Fast Computation of Amoebas, Coamoebas and Imaginary Projections in Low Dimensions". MA thesis. Technische Universität Berlin, 2018 (cit. on p. 165).

[Tu11] L. W. Tu. *An introduction to manifolds*. Second edition. Universitext. Springer, New York, 2011 (cit. on pp. 447, 461).

[Var77] A. N. Varchenko. "Newton polyhedra and estimation of oscillating integrals". *Functional Anal. Appl.* **10** (1977), 175–196 (cit. on p. 429).

[VG87] A. Varchenko and I. Gelfand. "Combinatorics and topology of configuration of affine hyperplanes in real space". *Funk. Analiz i ego Prilozh.* **21** (1987), 11–22 (cit. on p. 304).

[Vid17] R. Vidunas. "Counting derangements and Nash equilibria". *Ann. Comb.* **21** (2017), 131–152 (cit. on p. xi).

[vLW01] J. H. van Lint and R. M. Wilson. *A Course in Combinatorics*. Second edition. Cambridge: Cambridge University Press, 2001, xiv+602 (cit. on p. 17).

[Voi02] C. Voisin. *Hodge theory and complex algebraic geometry. I*. Vol. 76. Cambridge Studies in Advanced Mathematics. Cambridge University Press, Cambridge, 2002 (cit. on pp. 477, 478).

[Wag11] D. G. Wagner. “Multivariate Stable Polynomials: theory and application”. *Bull. AMS* **48** (2011), 53–84 (cit. on p. 379).

[Wan22] H.-Y. Wang. “A bivariate rational Laurent series of interest”. *Personal communication* (2022) (cit. on pp. 274, 276).

[War10] M. Ward. “Asymptotic rational approximation to Pi: Solution of an unsolved problem posed by Herbert Wilf”. *Disc. Math. Theor. Comp. Sci.* **AM** (2010), 591–602 (cit. on p. 85).

[War83] F. W. Warner. *Foundations of differentiable manifolds and Lie groups*. Vol. 94. Graduate Texts in Mathematics. New York: Springer-Verlag, 1983, ix+272 (cit. on pp. 455, 456, 461).

[Wat95] M. S. Waterman. “Applications of combinatorics to molecular biology”. In: *Handbook of combinatorics, Vol. 1, 2*. Amsterdam: Elsevier, 1995, 1983–2001 (cit. on p. 408).

[Whi65a] H. Whitney. “Local properties of analytic varieties”. In: *Differential and Combinatorial Topology*. Princeton, NJ: Princeton University Press, 1965 (cit. on p. 521).

[Whi65b] H. Whitney. “Tangents to an analytic variety”. *Annals Math.* **81** (1965), 496–549 (cit. on p. 515).

[Wil05] M. C. Wilson. “Asymptotics for generalized Riordan arrays”. In: *2005 International Conference on Analysis of Algorithms*. Discrete Math. Theor. Comput. Sci. Proc., AD. Assoc. Discrete Math. Theor. Comput. Sci., Nancy, 2005, 323–333 (cit. on pp. 10, 388, 421).

[Wil06] H. S. Wilf. *generatingfunctionology*. Third edition. Wellesley, MA: A. K. Peters, 2006, x+245 (cit. on pp. 12, 17, 405).

[Wil15] M. C. Wilson. “Diagonal Asymptotics for Products of Combinatorial Classes”. *Combinatorics, Probability and Computing* **24** (2015), 354–372 (cit. on pp. xi, 421).

[Won01] R. Wong. *Asymptotic approximations of integrals*. Vol. 34. Classics in Applied Mathematics. Philadelphia, PA: Society for Industrial and Applied Mathematics (SIAM), 2001, xviii+543 (cit. on pp. 112, 131).

[WZ85] J. Wimp and D. Zeilberger. “Resurrecting the asymptotics of linear recurrences”. *J. Math. Anal. Appl.* **111** (1985), 162–176 (cit. on p. 57).

[Zei82] D. Zeilberger. “Sister Celine’s technique and its generalizations”. *J. Math. Anal. Appl.* **85** (1982), 114–145 (cit. on p. 56).

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