

Bibliography

- [1] N. Alon, M. Dietzfelbinger, P.B. Miltersen, E. Petrank and G. Tardos, *Linear Hashing*, BRICS Report Series RS-97-16, University of Aarhus (1997). [2.24](#)
- [2] I Anderson, *A First Course in Combinatorial Mathematics*. Clarendon Press, Oxford (1974).
- [3] T.M. Apostol, *Mathematical Analysis, 2nd ed.*, Addison-Wesley Publishing Company (1974). [6.15.2](#), [6.15.2](#), [6.15.2](#), [11.8.5](#)
- [4] J.W. Archbold, *Algebra, 4th ed.*, Pitman (1969). [6.43](#)
- [5] Y. Azar, A.Z. Broder, A.R. Karlin, E. Upfal, *Balanced Allocations*, SIAM J. on Comp., **29** (1999), 180-200. Preliminary version also appeared in Proc. Twenty-Sixth Annual ACM Symp. on the Theory of Comp. (1994). [17.3.9](#)
- [6] *Australia/New Zealand Gaming Machine National Standards, Revision 6.0*, (December 6, 2002). [2.12](#)
- [7] W.W. Bell, *Special Functions for Scientists and Engineers*, D. Van Nostrand Company Ltd (1968). [4.9](#), [13.9](#)
- [8] H.C.P. Berbee, C.G.E. Boender, A.H.G. Rinooy Kan, C.L. Sheffer, R.L. Smith and J. Telgen, *Hit-and-Run Algorithms for the Identification of Nonredundant Linear Inequalities*, Mathematical Programming, (1987) 184-207. [2.3.5](#)
- [9] Daniel Bernoulli, *De usu algorithmi infinitesimalis in arte coniectandi specimen*. In David Speiser (ed.), *Die Werke*, Vol. 2 of *Die Gesammelten Werke der Mathematiker und Physiker der Familie Bernoulli*, 276-278. Birkhauser, Basel, Boston, 1982. [2.4](#), [2.6.1](#), [6.20.1](#)
- [10] Daniel Bernoulli, *De duratione media matrimoniorum, pro quacunq;ue coniugum aetate, aliisque quaestionibus affnibus*. In David Speiser (ed.), *Die Werke*, Vol. 2 of *Die Gesammelten Werke der Mathematiker und Physiker der Familie Bernoulli*, Birkhauser, Basel, Boston, (1982), 290–303. [2.5](#)

-
- [11] A. Boneh, M. Hofri, *The Coupon-Collector Problem Revisited — A Survey of Engineering Problems and Computational Methods*, *Stochastic Models* **13**(1) (1997), 39-66. [2.3.2](#)
- [12] S. Boneh, V. Papanicolaou, *General Asymptotic Estimates for the Coupon Collector Problem*, *J. Comp. Appl. Math.* **67** (1996), 277-289. [2.3.2](#)
- [13] C.E. Bonferroni, *Teoria statistica della classi e calcolo delle probabilità*, Pubblicazioni del R. Istituto Superiore di Scienze Economiche e Commerciali di Firenze **8** (1936), 1-62. [1](#)
- [14] G. Boole, *An Investigation of the Laws of Thought on which are Founded the Mathematical Theories of Logic and Probabilities*, Dover 1st printing, 1854. [1](#)
- [15] G. Blom and L. Holst, *Embedding Procedures for Discrete Problems in Probability*, *Math. Scientist*, **16** 29-40 (1991). [2.6.3](#)
- [16] M. Bowron, *Matching Socks*, *Amer. Math. Monthly*, **95** (1988), 357. [2.6.1](#), [11.6.3](#)
- [17] A. Calderbank and P. Fishburn, *Maximal Three-Independent Subsets of $\{0, 1, 2\}^n$* , *Designs, Codes, and Cryptography* **4**(3) (1994), 203-211. [2.8.4](#)
- [18] R.J. Caron, M. Hlynka and J.F. McDonald, *Minimizing the Expected Number of Trials in the Coupon Collector's Problem*, Windsor Mathematics Report 88-03, Department of Mathematics, Windsor, Ontario, Canada, February, 1988. [2.3.1](#), [2.3.5](#)
- [19] C.A. Charalambides, *Enumerative Combinatorics*, Chapman & Hall/CRC, Boca Raton, Florida (2002). [1.3](#)
- [20] P. Chinn, D. Oliver, *Mathematical Fun and Challenges in the Game of SET*, www.setgame.com/set/fun.htm. [2.8.4](#)
- [21] V. Chvátal, *Almost All Graphs with $1.44n$ Edges are 3-Colorable*, *Random Structures Algorithms*, **2** (1991) 11-28. [2.3.5](#)
- [22] A. Cuoco, M. Manes, K. Levasseur, N. Shteingold, J. Abrams, *Results from the Game of Set Problem*, www2.edc.org/makingmath/mathprojects/gameOfSet/set-results.asp. Supported by a grant from the National Science Foundation (ESI-9818736) (1999-2002). [2.8.4](#), [2.8.4](#)
- [23] F.N. David and D.E. Barton, *Combinatorial Chance*. Griffin, London (1962). [2.3.2](#), [11.2.1](#)
- [24] A. de Moivre, *Doctrine of Chances*, Reprinted, Chelsea Press, New York (1967). [2.16.1](#)

-
- [25] K. Dohmen, *Improved Inclusion-Exclusion Identities and Bonferroni's Inequalities with Applications to Reliability Analysis of Coherent Systems*, Ph.D. Thesis, Humboldt University, Berlin (2000). [1.5](#), [4.3.2.1](#), [1](#), [4.8](#)
- [26] P. Erdős and A. Rényi, *On a Classical Problem of Probability Theory*, (English. Russian summary) Magyar Tud. Akad. Mat. Kutat Int. Kzl. **6** (1961), 215-220. [2.3.2](#)
- [27] M.J. Falco, *About Set*, www.setgame.com/set/history.htm. [2.8.2](#)
- [28] K.T. Fang, *A Restricted Occupancy Problem*, J. Appl. Prob., **19** (1982), 707-711. [2.16.2](#)
- [29] W. Feller, *An Introduction to Probability Theory and its Applications, Vol. I, 3rd edition*, Wiley and Sons, New York (1968). [1.1](#), [1.3](#), [2.3.1](#), [2.3.1](#), [2.3.1](#), [2.12](#), [2.16.1](#), [2.25](#), [4.3.2.1](#), [5.2](#), [5.2](#), [5.2](#), [5.3](#), [6.4.3.1](#), [6.4.4](#), [6.18.1](#), [6.20.2](#), [7.2](#), [7.2](#), [7.7](#), [7.4.2](#), [7.11.2](#), [8.2](#), [8.3](#), [8.3](#), [11.5.3](#), [11.5.3](#), [13.5.11](#), [13.8.3](#), [17.3.17](#), [17.3.21](#)
- [30] W. Feller, *An Introduction to Probability Theory and its Applications, Vol. II, 2nd edition*, Wiley and Sons, New York (1971). [17.3.21](#)
- [31] M. Finkelstein, H.G. Tucker and J.A. Veeh, *Confidence Intervals for the Number of Unseen Types*, Statistics and Probability Letters, **37** (1998). [1.1](#), [2.25](#)
- [32] P. Flajolet, D. Gardy, L. Thimonier, *Birthday Paradox, Coupon Collectors, Caching Algorithms and Self-Organizing Search*, Discrete Appl. Math. **39** (1992) 207-229. [2.3.2](#), [2.3.2](#)
- [33] N. Fountoulakis, *Thresholds and the Structure of Sparse Random Graphs*, PhD/DPhil thesis, University of Oxford (2003). [2.3.4](#), [2.11.8](#)
- [34] D. M. Friedlen, *More Socks in the Laundry*. Amer. Math. Monthly, **97** (1990), 242-244. [1.1](#), [2.6.3](#)
- [35] C-E. Fröberg, *Introduction to Numerical Analysis, 2nd edition*, Addison-Wesley Publishing Company (1970). [6.15.2](#)
- [36] J. Galambos, *Methods for proving Bonferroni type Inequalities*, J. London Math. Soc., **2** (1975), 561-564. [4.3.1](#)
- [37] D. Gardy, *Occupancy Urn Models in the Analysis of Algorithms*, Journal of Statistical Planning and Inference, special issue on the Fourth International Conference on Lattice Paths, Combinatorics and Applications, **101** (1-2) (February 2002), 95-105. [1.1](#), [2.16.2](#), [3.3.1](#)

-
- [38] D. Gardy and L. Nemirovski, *Urn models and Yao's formula*, In 7th International Conference on Database Theory, Jerusalem (Israel), (1999), 100–112. [2.16.2](#)
- [39] H.J. Godwin, *On Cartophily and Motor Cars*, *Mathematical Gazette*, **33** (1949), 169-171. [2.3.1](#)
- [40] R.E. Greenwood, *Coupon Collector's Test for Random Digits*, *Mathematical Tables and Other Aids to Computation*, **9** (1955), 1-5. [2.12](#)
- [41] R.C. Gunning and H. Rossi, *Analytical Functions of Several Complex Variables*, Prentice-Hall, Inc. (1965). [6.3.3.1](#)
- [42] P.R. Halmos, *Finite-Dimensional Vector Spaces, 2nd edition*, Van Nostrand (1958). [11.1.4.2.4](#), [11.1.4.3.4](#)
- [43] E. Hauer and J.G.C. Templeton, *Queueing in Lanes*, *Trans. Sci.* **6** (1972), 247-259. [1.2](#), [1.7](#), [2.2.1](#), [3.4.2](#), [6.1](#), [6.2](#), [6.4.6](#), [11.2.7](#), [11.4.7](#), [11.3.1](#), [11.8.4](#), [13.2.5.1](#), [13.2.6.4](#), [13.2.7.4](#)
- [44] W. Henderson, R.W. Kennington and C.E.M. Pearce, *Stochastic Processes and Combinatoric Identities*. *Combinatorial Mathematics X, Proceedings, Adelaide 1982*. Springer-Verlag (1983). [1.1](#), [1.2](#), [2.2.2](#), [1](#), [11.2.3](#)
- [45] W. Henderson, R.W. Kennington and C.E.M. Pearce, *A Second Look at a Problem of Queueing in Lanes*, *Trans. Sci.* **1** (1984), 85-93. [1.1](#), [1.2](#), [2.2.4](#), [2.11.2](#), [11.2.3](#)
- [46] C. Jordan, *The Foundations of the Theory of Probability*, *Mat. Phys. Lapok* **34** (1927), 109-136. [1](#)
- [47] C. Jordan, *Calculus of Finite Differences, 2nd edition*, Chelsea Publ. Co., New York (1947). [1.3](#), [6.3.2](#), [6.3.3](#), [6.3.4](#), [6.4.4](#), [11.2.1](#), [12.1.3.1](#)
- [48] D.E. Knuth, *Matching Socks*, *Amer. Math. Monthly*, **95** (1988), 357. [2.6.5.2](#), [11.6.2.2](#), [2](#)
- [49] D.E. Knuth. *The Art of Computer Programming Vol 2/ Seminumerical Algorithms*, Addison-Wesley, Reading, MA, (1969). [2.12](#)
- [50] V.F. Kolchin, B.A. Sevast'yanov and V.P. Christyakov, *Random Allocations*, V.H. Winston (Wiley), Washington (1978). [1.3](#), [1.5](#), [2.3.1](#), [2.12](#), [2.16.2](#), [9.9.1](#), [16.1](#)
- [51] S. Kotz and N. Balakrishnan, *Advances in Urn Models During the Past Two Decades*. In *Advances in Combinatorial Methods and Applications to Probability and Statistics*, ed. N.

- Balakrishnan, *Statistics in Industry and Technology Series*, Birkhäuser Boston (1997), 203–257. [2.16.2](#)
- [52] S.M. Kwerel, *Bounds on the Probability of the Union and Intersection of m Events*, *Adv. Appl. Prob.*, **7** (1975), 431-448. [4.4.1](#)
- [53] K. Lange, *Illustration of some Moment Identities for Order Statistics*, *Statistics & Probability Letters*, **27**(1) (1996), 91–98. [2.6.3](#)
- [54] J.D. Lindsay, *A New Solution for the Probability of Completing Sets in Random Sampling: Definition of the 'Two-Dimensional Factorial'*, *The Mathematical Scientist*, **17** (1992), 101-110. [2.3.1](#)
- [55] S. Lu and S. Skiena, *Filling a Penny Album*, *Chance Magazine*, **13**(2) (Spring 2000), 25-28. [2.3.1](#)
- [56] R. Luttmann, *Matching Socks*, *Amer. Math. Monthly*, **95** (1988), 357. [2.6.1](#)
- [57] C.C. Maley, *DNA Computation: Theory, Practice, and Prospects*, *Evolutionary Computation* **6**(3) (1998) 201-229. [2.3.5](#)
- [58] J.E. Marsden and M.J. Hoffman, *Basic Complex Analysis*, 2nd ed., W.H. Freeman and Company, New York (1987). [2.3.4](#)
- [59] F.G. Maunsell, *A Problem in Cartophily*, *Mathematical Gazette*, **22**(251) (1938). [2.3.1](#), [7.2](#)
- [60] U.M. Maurer, *A Universal Statistical Test for Random Bit Generators*, *Journal of Cryptology* **5** (1992), 89-105. [2.12](#)
- [61] R. Motvani and P. Raghavan, *Randomized Algorithms*, Cambridge University Press (1995). [2.3.2](#)
- [62] A.N. Myers and H.S. Wilf, *Some New Aspects of the Coupon-Collector's Problem*, *SIAM Journal on Discrete Math.* **17**(1) (2003), 1-17. [2.3.1](#)
- [63] D.J. Newman and L. Shepp, *The Double Dixie Cup Problem*, *Amer. Math. Monthly*, **67** (1960) 58-61. [2.3.1](#)
- [64] A.M. Odlyzko, *Asymptotic Enumeration Methods*, *Handbook of Combinatorics*, **2**, Elsevier (eds. R. L. Graham, M. Groetschel, and L. Lovasz) (1995), 1063 - 1229. [1.5](#)

- [65] I. Pak, *Two Random Walks on Upper Triangular Matrices*, Journal of Theoretical Probability, **13** (2000), 1083-1100. [2.3.2](#)
- [66] K. Pearson, *Contributions to the Mathematical Theory of Evolution*, Philosophical Transactions of the Royal Society A, **185** (1894), 71-110. [Introduces the method of moments and applies it to estimating a mixture of normal distributions.] [2.3.1](#), [17.3.22.3](#)
- [67] K. Pearson, *Contributions to the Mathematical Theory of Evolution. II. Skew Variation in Homogeneous Material*, Philosophical Transactions of the Royal Society A, **186** (1895), 343-414. [Introduces the Pearson system of curves.] [2.3.1](#), [17.3.22.3](#)
- [68] M. Petkovsek, H.S. Wilf and D. Zeilberger, *A=B*, A.K. Peters Ltd (1997). [4.9](#), [4.9](#)
- [69] G. Polya, *Eine Wahrscheinlichkeitsaufgabe zur Kundenwerbung*. Z. Angew. Math. Mech., **10** (1930), 96-97. [2.3.1](#), [17.3.13](#)
- [70] J. Riordan, *An Introduction to Combinatorial Analysis*, Wiley, New York (1958). [6.4.4](#)
- [71] W. Rudin, *Principles of Mathematical Analysis, 3rd edition*, McGraw-Hill, Inc. (1976). [6.3.3](#)
- [72] E. Samuel-Cahn, *Asymptotic Distribution for the Coupon-Collector's and Sampling-Tagging Problems, when Tagging Affects Catchability*, J. Appl. Prob., **12** (1975), 625-628. [2.25](#)
- [73] F. Scheid, *Theory and Problems of Numerical Analysis*, Schaum's Outline Series, McGraw-Hill Book Company (1968). [5.2](#), [13.2.7.2](#)
- [74] Set Enterprises Inc., www.setgame.com/set/noset.htm. [2.8.4](#)
- [75] B.I. Selivanov, *On a Generalization of the Classical Allocation Problem*, Theory of Probability and its Applications, **43**(1) (1999) 256-268. [2.16.3](#)
- [76] L. Shiyong and S. Skiena, *Filling a Penny Album*, Chance, **13**(2) (2000), 25-28. [2.3.5](#)
- [77] J.C. Smith, Problem 123, Nieuw Archief voor Wiskunde, Series 3, **15** 86-87 (1967). [2.6.1](#)
- [78] S.D. Silvey, *Statistical Inference*, Monographs in Applied Probability and Statistics, Chapman and Hall (1975). [6.15](#), [16.2.3](#), [16.2.4](#)
- [79] D. Steinsaltz, *Socks & Boxes: Variations on Daniel Bernoulli's Marriage Problem*, Ph.D. Thesis, Harvard University (1996). [1.1](#), [1.5](#), [2.4](#), [2.5](#), [2.6.3](#), [2.6.5](#), [2.11.1](#), [2.11.7](#), [2.15.2](#), [4.2](#), [17.3.21](#)

-
- [80] D. Steinsaltz, *Random Time Changes for Sock-Sorting and other Stochastic Process Limit Theorems*, *Elect. J. Prob.* **4** (1999), Paper 14, 1-25. [2.6.3](#), [2.6.5](#), [17.3.21](#)
- [81] D. Strauss, *Runs of Occupied Cells*, *Biometrika*, **64**(1) (1977), 170-171. [2.16.1](#)
- [82] R.R. Stoll, *Sets, Logic and Axiomatic Theories*, W.H. Freeman and Co., San Francisco and London (1961).
- [83] I. Tomescu, *Hypertrees and Bonferroni Inequalities*, *J. Combin. Theory Ser. B* **41** (1986), 209-217. [4.3.1](#)
- [84] H. von Schelling, *Auf der Spur des Zufalls*, *Deutsch. Stat. Zentralbl.*, **26** (1934), 137-146. [2.3.1](#)
- [85] H. von Schelling, *Coupon Collecting for Unequal Probabilities*, *American Mathematics Monthly*, **61** (1954), 306-311. [2.3.1](#)
- [86] W.A. Whitworth, *Choice and Chance, 4th edition*, Deighton Bell, Cambridge (1886). [13.5.2](#)
- [87] H.S. Wilf, *Generating Functionology, 2nd edition, Internet Edition*, Academic Press, Inc. (1994). [1.5](#), [2.3.1](#), [4.9](#), [6.3.1](#), [6.3.2](#)
- [88] M.A.A. Zito, *Randomised Techniques in Combinatorial Algorithmics*, Ph.D. Thesis, The University of Warwick, United Kingdom (1999). [2.3.1](#), [2.3.5](#), [2.11.1](#)