Curriculum vitae and Publications
December 30, 2006

Herbert S. Wilf
Thomas A. Scott Professor of Mathematics
University of Pennsylvania
Philadelphia, PA 19104-6395

1 Education

- Primary and secondary in Philadelphia.
- B.S. M.I.T., 1952
- Ph.D. Columbia University, 1958

2 Positions held

- 1954 Manager, Engineering computing, Fairchild Engine Div.
- 1955-59 Head, Computing Section, Nuclear Development Assoc.
- 1959-62 Assistant Professor of Mathematics, U. of Illinois
- 1962-65 Associate Professor of Mathematics, U. of Pennsylvania
- 1965- Professor of Mathematics, University of Pennsylvania
- 1966-67 Affiliate, Imperial College, University of London
- 1969-70 Visiting Lecturer, IEEE
- 1970-76 Visiting Lecturer, MAA
- 1973-74 Visiting Professor of Mathematics, Rockefeller University.
- 1975 Visiting Professor of Mathematics, University of Paris.
- 1980 Visiting Professor, Computer Science, Stanford University.
- 1987-88 Visiting Professor, Computer Science, Stanford University.

3 Administrative Positions

- 1963-66 Advisory Board, U. of Illinois Conf. on Secondary Math.
- 1963-71 Chairman, University-wide Grad. Program in Appl. Math., U. of Pennsylvania
- 1966 Chairman, Faculty of Arts and Sciences Committee on the Goals of Higher Education
- 1969-71 Committee on Educational Media, MAA
- 1969 Chairman, Committee on Applied Mathematics, AMS
- 1970-72 Panel on Applied Mathematics (CUPM), MAA
- 1971-73 Chairman, Undergraduate program in Mathematics, U. of Pennsylvania
- 1974-77 Advisory Panel, Math. Sciences Section, NSF
- 1981-84 Board of Governors, Math. Assoc. Amer.
- 1981-84 Chairman, Graduate Group in Mathematics, U. of Pennsylvania
- 1987-1992 Board of Governors, Math. Assoc. Amer.
- 1997-1999 Member, DIMACS External Advisory Board
- 2002-2003 Chair, Steele Prize Committee of the A.M.S.

4 Invited addresses (selected)

- IBM Lecturer, Swarthmore College, 1963 (10 lectures)
- AMS summer meeting, 1972
- Summer Conference on Combinatorics, Bowdoin College, 1971 (five invited lectures)
- Conference on Combinatorial Analysis, Accademia dei Lincei, Rome, 1973
- University of Pittsburgh, Spring 1974 (one week series of lectures)
- Conference on Combinatorial Algorithms, Qualicum Beach, B.C., Canada, 1976

- MAA Annual Meeting, January 1977
- 'Information Day' lecturer, Carleton University, 1981
- Amherst meeting of A.M.S., October, 1981.
- Gave MAA Short Course on Algorithms and Complexity, University of Maine at Orono, June 1983
- Fifth International Conference on the Theory and Applications of Graphs, Western Michigan University, June 1984
- 'Graph Theory Day,' CUNY, Feb. 1985
- MIT Combinatorial Year, 1985.
- Conference on Theory and Applications of Graphs, Sundance, Provo, Utah, August 1985.
- Distinguished Visiting Lecturer, University of Delaware, Fall, 1985.
- American Association for the Advancement of Science, One hour invited address 'Frontiers of Science' series, annual meeting in Philadelphia, May, 1986
- Conference on Graph Theory, Jinan, People's Republic of China, June, 1986.
- Conference Board of the Mathematical Sciences lecturer for one week short course in discrete algorithms, August, 1987, Baca Grande, Colorado.
- SIAM Conference on Discrete Mathematics, San Francisco, June, 1988.
- International Conference on Analytic Number Theory, Allerton Park, University of Illinois, April 25-27, 1989.
- MIT Conference on Computers and Mathematics, MIT, June 13-17, 1989.
- 12th British Combinatorial Conference, Norwich, U.K., July 1989.
- Fifth US-China International Conference on Algorithms, graphs and combinatorics, San Francisco, July, 1989.
- Durham (England) Symposium on Probabilistic Methods in Combinatorics, July, 1991.
- Bordeaux (France), Conference on combinatorics and special functions, May, 1991.

- International Conference on Random Mappings, Partitions and Permutations, University of Southern California, January, 1992.
- SIAM International Conference on Optimization and Combinatorics, University of British Columbia, Vancouver, Canada, June, 1992.
- Hans Rademacher Centenary Conference, Penn State University, July, 1992.
- One week of invited lectures at Weizmann Institute, Rehovot, Israel, March 1992.
- Invited talk, Conference in honor of the eightieth birthday of Paul Erdös, Cambridge University, U.K., March 1993.
- Invited series of six lectures, SPICE Conference, U. S. National Security Agency, September, 1993.
- Scholar in residence, University of New Hampshire, December, 1993.
- International Conference on Random Selection of Combinatorial Objects, Bordeaux, France, January, 1994.
- Distiguished Visiting Scholar, Simon Fraser University, Burnaby, B.C., Canada, March, 1995.
- International Conference on Graph Theory and Algorithms, Bled, Slovenia, Summer, 1995
- International Combinatorial Conference, Melbourne, Australia, and another in Auckland, N.Z., Summer, 1997.
- International Conference on Graph Theory and Combinatorics, Prague, Czech Republic, Summer, 1998.
- SIAM Annual Meeting, Atlanta, GA, Spring, 1999.
- Fifth International Seminar on the Mathematical Analysis of Algorithms, Bellaterra, Spain, June, 1999.
- Scholar in residence, University of Victoria, Victoria, B.C., Canada, June, 2000.
- Charles University, Prague, Czech Republic, Invited Lectures, April 2001

- Conference on Formal Power Series and Algebraic Combinatorics, Phoenix, AZ, May 2001.
- Discrete Mathematics Conference, University of Montana, September, 2001
- Discrete Mathematics Day, Carleton University, Ottawa, Canada, April 2002.
- Bay Area Discrete Mathematics Day, Berkeley, October, 2002.
- Keynote address, Conference on Permutation Patterns, University of Otago, Dunedin, New Zealand, February 2003.
- 50th Anniversary meeting of the Seminaire Lotharingien Combinatoire, Strasbourg, France, March, 2003
- New England Discrete Mathematics Day, Worcester, MA, May 2003
- Waldemar Tritjinsky Lecture Series (three lectures), University of Illinois, delivered October, 2003.
- *Stanfest*, a conference at MIT in honor of the sixtieth birthday of Richard Stanley; invited address, June 2004.
- FPSAC 2005, Invited address for session in honor of 75th birthday of Adriano Garsia.
- Visiting Scholar, Institute for Combinatorics, Nankai University, Tienjin, China, Apr.-May 2006.
- East Coast Computer Algebra Day 2006, May 6, 2006
- Sixth Czech-Slovak International Symposium on Combinatorics, Graph Theory, Algorithms and Applications, Dedicated to Jarik Nešetřil on the occasion of his 60th birthday, Prague, July 10-15, 2006
- Discrete Mathematics Day, September 30, 2006, Skidmore College.
- International Conference on Discrete Mathematics, Bangalore, India (plenary speaker), Dec. 2006.

5 Professional Societies

- American Mathematical Society,
- Mathematical Association of America

6 Professional Journals

- Co-founder in 1980 (with Donald E. Knuth) and Co-Editor-in-Chief, (with David S. Johnson and Donald E. Knuth) 1980-1988, of the Journal of Algorithms, published by Academic Press, New York.
- Member, Editorial Board, Journal of Algorithms, 1988-1995
- Member, Editorial Board, Discrete Mathematics and Theoretical Computer Science, 1999-
- Member, Editorial Board, The American Mathematical Monthly, 1981-1986 and 1992-
- Member, Editorial Board, Electronic Journal of Combinatorial Number Theory
- Editor in Chief of the American Mathematical Monthly, Jan. 1, 1987-1992
- Editorial Advisory Board, What's Happening in the Mathematical Sciences, publication of the American Mathematical Society.
- Co-founder (with Neil Calkin) and Editor-in-Chief, The Electronic Journal of Combinatorics, 1994-2003.

7 Contract support

- Supported by research contract from U. S. National Science Foundation every year from 1960 to 1983 (P. I.).
- Supported by research contract from U. S. Office of Naval Research, 1985-1997 (P. I.).

8 Honors and Prizes

- John Simon Guggenheim Memorial Fellow, 1973-74
- Christian and Mary Lindback Award for excellence of undergraduate teaching, 1973.
- Award for Distinguished College or University Teaching of Mathematics, Eastern Pennsylvania and Delaware Section of the Mathematical Association of America, 1995.

- Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics, the Mathematical Association of America, January, 1996.[1]
- Named to the Thomas A. Scott Professorship of Mathematics, University of Pennsylvania, January, 1998.
- The Leroy P. Steele Prize of the American Mathematical Society for Seminal Contribution to Research (jointly with Doron Zeilberger), January, 1998.
- The Euler Medal of the Institute for Combinatorics and Applications (Canada), March, 2004.

9 Doctoral students

1. Peter Sellers (1965)
2. Roy Levow (1969)
3. Eli Mandelbaum (1970)
4. Michael Albertson (1971)
5. Alex Lyczak (1971)
6. William Kuhn (1971)
7. Joseph Bolmarcich (1972)
8. Joan Hutchinson (1973)
9. Fan R. K. Chung (1974)
10. Paul Klingsberg (1977)
11. Judith Dayhoff
12. Rodica Simion (1981)
13. Janet S. Beissinger (1981)

[1] This is one of three awards of the national organization; the one immediately above is one of 23 sectional awards.

14. Kathleen O'Hara
15. Michael Wertheimer (1986)
16. Felix Lazebnik (1987)
17. Nancy Yoshimura (1987)
18. Eric Schmutz (1988)
19. Jennifer Zito (1989)
20. Richard Garfield (1993)
21. Lily Yen (1993)
22. Anthony Mikovsky (1997)
23. Alkes Price (1997)
24. Alex Burstein (1998)
25. Y.-S. Zhang (2001)
26. Aaron Jaggard (2003)
27. Irina Gheorghiciuc (2004)

10 Articles about me, written by others.

1. How the Grinch stole mathematics, by Barry A. Cipra, *Science* **245** (August 11, 1989), 595.
2. The automatic proofing machine, by Arturo Sangalli, *The New Scientist* (Oct. 21, 1989), 37.
3. 'Gorilla' tackles monster sums, by Dana McKenzie, *The American Scientist* (Nov.-Dec. 1997), 519-520.
4. Proof and beauty, by Mark Bernstein, *The Pennsylvnia Gazette* (May, 1998), 14-18.

11 Publications

1. Monte Carlo Solves Reactor Problems (with M. Kalos), *Nucleonics*, **15** (1957), 64-68.

2. An open formula for the numerical integration of first order differential equations, *Math. Tables and other Aids to Computation*, **11** (1957), 201-203.

3. An open formula for the numerical integration of first order differential equations II, *Math. Tables and other Aids to Computation*, **12** (1958), 55-58.

4. Curve fitting matrices, *Amer. Math. Monthly*, **65** (1958), 272-274.

5. Tables for Automatic Computation, *Communications of the ACM*, **1** (1958), 8-11.

6. The transmission of neutrons in multilayered slab geometry, *Nuclear Science and Engineering*, **5** (1959), 306-329.

7. Matrix inversion by annihilation of rank, *S.I.A.M. Journal*, **7** (1959), 149-151.

8. A stability criterion for numerical integration, *J. Assoc. Comp. Mach.*, **6** (1959), 363-365.

9. Mathematical Methods for Digital Computers (edited with A. Ralston), John Wiley and Sons, New York 1960.

10. Numerical integration of the transport equation with no angular truncation, *J. Math. Phys.*, **1** (1960), 225-230.

11. Matrix inversion by the method of rank annihilation, in *Mathematical Methods for Digital Computers*, 73-77.

12. The numerical solution of polynomial equations, in *Mathematical Methods for Digital Computers*, 233-241.

13. A class of linear differential-difference equations, (with M. Slater), *Pacific J. Math.*, **10** (1960), 1419-1427.

14. Maximally stable numerical integration, *S.I.A.M. Journal*, **8** (1960), 537-540.

15. Almost Diagonal Matrices, *Amer. Math. Monthly*, **67** (1960), 431-434.

16. The argument of an entire function, *Bull. Amer. Math. Soc.*, **67** (1961), 488-489.

17. Perron-Frobenius theory and the zeros of polynomials, *Proc. Amer. Math. Soc.*, **12** (1961), 247-250.

18. The possibility of Tschebycheff quadrature on infinite intervals, *Proc. Nat. Acad. Sci. U.S.A.*, **47** (1961), 209-213.

19. Subordinating factor sequences for convex maps of the circle, *Proc. Amer. Math. Soc.*, **12** (1961), 689-693.

20. Mathematics for the Physical Sciences, John Wiley and Sons, 1962.

21. Budan's theorem for a class of entire functions, *Proc. Amer. Math. Soc.*, **13** (1962), 122-125.

22. On Hilbert's inequality in n dimensions, (with N. G. de Bruijn), *Bull. Amer. Math. Soc.*, **68** (1962), 70-73.

23. On the monotonicity of certain Riesz means, *J. London Math. Soc.*, **37** (1962), 121-122.

24. On finite sections of the classical inequalities, *Koninkl. Nederl. Akad. van Wetensch.*, Proc. Ser. A, **65** (1962), 340-342.

25. The radius of univalence of certain entire functions, *Illinois J. Math.*, **6** (1962), 242-244.

26. Calculations relating to a conjecture of Pólya and Schoenberg, *Math. Comp.*, **17**, (1963), 200-201.

27. Some applications of the inequality of arithmetic and geometric means to polynomial equations, *Proc. Amer. Math. Soc.*, **14** (1963), 263-265.

28. Whittaker's constant for lacunary entire functions, *Proc. Amer. Math. Soc.*, **14** (1963), 238-242.

29. The stability of smoothing by least squares, *Proc. Amer. Math. Soc.*, **15** (1964), 933-937.

30. Exactness conditions in numerical quadrature, *Numerische Mathematik*, **6** (1964), 315-319.

31. On the zeros of Riesz' function in the analytic theory of numbers, *Illinois J. Math.*,**8** (1964), 639-641.

32. On Dirichlet series and Toeplitz forms, *Math. Anal. Appl.*,**8** (1964), 45-51.

33. Uniqueness theorems for periodic functions, (with N. Fine), *Proc. Amer. Math. Soc.*, **16** (1965), 109-114.

34. The interchange graph of a finite graph, (with A. van Rooij), *Acta Mathematica* (Hung.), **16** (1965), 263-269.

35. Calculus and Linear Algebra, Harcourt Brace & World Inc., 1966.

36. On the permanent of a doubly stochastic matrix, *Canadian J. Math.*, **18** (1966), 758-761.

37. Small eigenvalues of large Hankel matrices, (with H. Widom), *Proc. Amer. Math. Soc.*, **17** (1966), 338-344.

38. Mathematical Methods for Digital Computers, Vol. II, (edited with A. Ralston), John Wiley and Sons, New York, 1967.

39. Advances in numerical quadrature, in *Mathematical Methods for Digital Computers* II, 133-144.

40. The eigenvalues of a graph and its chromatic number, *J. London Math. Soc.*, **42** (1967), 330-332.

41. A mechanical counting principle and combinatorial applications, *J. Combinatorial Theory*, **4** (1968), 246-258.

42. An inequality for the chromatic number of a graph, (with G. Szekeres), *J. Combinatorial Theory*, **4** (1968), 1-3.

43. Divisibility properties of the permanent function, *J. Combinatorial Theory*, **4** (1968), 194-197.

44. Hadamard determinants, Möbius functions, and the chromatic number of a graph, *Bull. Amer. Math. Society*, **74** (1968), 960-964.

45. Programming for a digital computer in the Fortran language, Addison Wesley, 1969.

46. The Möbius function in combinatorial analysis, in *Proof Techniques in Graph Theory*, edited by F. Harary, Academic Press, 1969.

47. Finite sections of some classical inequalities, *Ergebnisse der Mathematik und ihrer Grenzgebiete* **52** Springer-Verlag, 1970.

48. On a conjecture of Ryser and Minc, *Koninkl. Nederl. Akad. van Wetensch.-Amsterdam*, Proc. Series A, **32** (1970), 151-157 (with A. Nijenhuis).

49. On a conjecture in the theory of permanents, *Bull. Amer. Math. Soc.*, **76** (1970), 738-739 (with A. Nijenhuis).

50. The friendship theorem, in *Combinatorial Mathematics and its Applications*, D. J. A. Welsh, editor, Academic Press, 1971.

51. Mathematical aspects of electrical network analysis, *Proc. Symp. Appl. Math., Amer. Math. Soc.*, 1971 (edited, with F. Harary).

52. An analogue of the chromatic polynomial for vertex assignments modulo 3, in *Combinatorial Mathematics and its Applications*, D. J. A. Welsh, editor, Academic Press, 1971.

53. Representations of integers by linear forms in nonnegative integers, *J. Number Theory*, **4** (1972), 98-106 (with A. Nijenhuis).

54. Induced Markov chains and the permanent function, *Konink. Nederl. Akad. van Wetensch.*, **75** (1972), 93-99 (with A. Nijenhuis).

55. Coalition methods in discriminant analysis, *Proc. Southeastern Conference in Combinatorics and Probability*, 1972.

56. Boundary values in chromatic graph theory, *Bull. Amer. Math. Soc.*, **79** (1973), p. 464 (with M. Albertson).

57. Boundary values in the four color problem, *Trans. Amer. Math. Soc.*, **181** (1973), 471-482 (with M. Albertson).

58. On Eulerian circuits and words with prescribed adjacency patterns, *J. Combinatorial Theory*, **18** (1975), 80-88 (with Joan Hutchinson).

59. A method and two algorithms in the theory of partitions, *J. Combinatorial Theory*, **18** (1975), 219-222 (with A. Nijenhuis).

60. Combinatorial Algorithms, Academic Press, 1975 (with A. Nijenhuis).

61. Statistical Methods for Digital Computers, John Wiley and Sons, New York, 1977 (edited, with K. Enslein and A. Ralston).

62. A method of coalitions in statistical discriminant analysis, in *Statistical Methods for Digital Computers*, 96-120.

63. Which polynomials are chromatic?, *Proc. Rome Conference on Combinatorial Theory, Accademia Nazionale dei Lincei*, 1976, Vol. I, 247-256.

64. A unified setting for sequencing, ranking and random selection of combinatorial objects, *Advances in Math.*, **24** (1977), 281-291.

65. The sequential and random selection of subspaces over a finite field, *J. Combinatorial Theory*, **22** (1977), 107-109 (with E. Calabi).

66. A note on $P(-\lambda; G)$, *J. Combinatorial Theory*, **22** (1977).

67. A unified setting for selection algorithms, II, *Annals of Discrete Mathematics* **2**: *Algorithmic aspects of combinatorics*, North Holland (1978), 135-148.

68. A circle-of-lights algorithm for the money changing problem, *Amer. Math. Monthly*, **85** (1978), 562-565.

69. Combinatorial Algorithms (second edition), Academic Press, New York, 1978.

70. The 'why-don't-you-just...?' barrier in discrete algorithms, *Amer. Math. Monthly*, **86** (1979), 30-36.

71. A global bisection algorithm for computing the zeros of polynomials in the complex plane, *J. Assoc. Comp. Mach.*, **25** (1978), 415-420.

72. Averages by the sieve method, *J. Combinatorial Theory*, **24** (1978), 256-260.

73. A probabilistic proof of a formula for the number of Young Tableaux of a given shape, *Advances in Mathematics*, **31** (1979), 104-109 (with C. Greene and A. Nijenhuis).

74. Mathematics for the Physical Sciences, Dover, New York, 1978 (a Dover reprint of the 1962 book, [19] above).

75. The enumeration of connected graphs and linked diagrams, *J. Combinatorial Theory*, **27** (1979), 356-359 (with A. Nijenhuis).

76. The uniform selection of free trees. *J. Algorithms* **2** (1981), no. 2, 204–207.

77. An algorithm-inspired proof of the spectral theorem, *Amer. Math. Monthly*, **88** (1981), 49-50.

78. Another probabilistic method in the theory of Young Tableaux, *J. Combinatorial Theory* **37** (1984) 127-135 (with C. Greene and A. Nijenhuis).

79. The disk with the college education, *Amer. Math. Monthly*, **89** (1982), 1-8.

80. What is an answer?, *Amer. Math. Monthly*, **89** (1982), 289-292.

81. The random selection of unlabeled graphs, *J. Algorithms* **4** (1983), 205-213 (with John Dixon).

82. Sieve equivalence in generalized partition theory, *J. Combinatorial Theory* **34** (1983) 80-89.

83. Three problems in combinatorial asymptotics, *J. Combinatorial Theory* **35** (1983), 199-207.

84. Symbolic manipulation and algorithms in the curriculum of the first two years, in *The Future of College Mathematics*, A. Ralston and G. Young eds., Springer Verlag, New York, 1983.

85. Bijective methods in the theory of finite vector spaces, *J. Combinatorial Theory* **37** (1984), 80-84 (with A. Nijenhuis and A. E. Solow).

86. A bijection in the theory of derangements, *Mathematics Magazine* **57** (1984), 37-40.

87. Backtrack: An expected O(1) time algorithm for the graph coloring problem, *Inf. Proc. Lett.* **18** (1984), 119-122.

88. A theoretical analysis of backtrack in the graph coloring problem (with E. A. Bender) *J. Algorithms* **6** (1985), 275-282.

89. The number of maximal independent sets in a tree, *SIAM J. Alg. Discr. Meth.* **7** (1986), 125-130.

90. Some examples of combinatorial averaging, *Amer. Math. Monthly* **92** (1985), 250-261.

91. Bandwidths and profiles of trees (with A. Odlyzko), *J. Comb. Theory B* **42** (1987), 348-370.

92. Periodicities of partition functions and Stirling numbers modulo p (with A. Nijenhuis), *J. Number Theory* **25** (1987), 308-312.

93. Spectral bounds for clique and independence numbers of graphs, *J. Comb. Theory B*, **40** (1986), 113-117.

94. Bandwidths and profiles of trees (with A. Odlyzko), in *Graph theory with applications to algorithms and computer science*, Y. Alavi et al, eds., Wiley 1985, 605-622 (a condensed summary of [89] above).

95. TEX, A Non-Review, *Amer. Math. Monthly*, **93** (1986), 309-314.

96. Graphs and their spectra: old and new results, *Congressus Numerantium* **50** (1985), 37-42.

97. The distribution of prefix overlap in consecutive dictionary entries (with R. Simion), SIAM J. Alg. Disc. Meth. **7** (1986), 470-475.

98. The asymptotics of $e^{P(z)}$ and the number of elements of each order in S_n, Research Announcement, Bull. Amer. Math. Soc. **15** (1986), 228-232.

99. Ranking free trees, and a graceful application (with N. Yoshimura), in *Discrete algorithms and Complexity*, Proc. Japan-US joint seminar, June 4-6, 1986, Kyoto, Japan, Academic Press, Boston, 1987, pp. 341-350.

100. Algorithms and complexity, Prentice Hall, Englewood Cliffs, NJ, May, 1986.

101. Combinatorial algorithms: an update, CBMS-NSF Regional conference series in applied mathematics No. 55, SIAM Publ., Phila., PA, 1989.

102. The power of a prime that divides a generalized binomial coefficient (with D. E. Knuth), *J. für die reine u. angew. Math.* **396** (1989), 212-219.

103. A short proof of Darboux's lemma (with D. E. Knuth), *Appl. Math. Lett.* **2** (1989), 139-140.

104. The 'Snake Oil' method for proving combinatorial identities, in Proc. 12th British Combinatorial Conference, J. Siemons, ed., Surveys in Combinatorics, London Math. Soc. Lecture Note Series **141**, Cambridge University Press, (1989), 208-217.

105. generatingfunctionology (book), Academic Press, Boston, 1990; second edition 1994.

106. Rational functions certify combinatorial identities (with D. Zeilberger), *Journal of the American Mathematical Society* **3** (1990), 147-158.

107. On 'Uniformly Filled' Determinants (with Carsten Thomassen), *College Math. J.* **21** (1990), 135-137.

108. Self esteem in mathematicians, *College Math. J.*, 1990.

109. Towards computerized proofs of combinatorial identities (with D. Zeilberger), Research Announcement, *Bull. Amer. Math. Soc.* **23** (1990), 77-84.

110. A bijection for ordered factorizations (with Richard Garfield and D. E. Knuth), *J. Combinatorial Theory A* **54** (1990), 317-318.

111. Graphical combinatorial families and unique representations of integers, in *Graph theory, combinatorics and applications*, Proc. of the 6th Quadrennial International Conference on the Theory and Applications of Graphs, Y. Alavi, G. Chartrand, O. Oellerman and A. J. Schwenk, eds., John Wiley and Sons, 1991, 1145-1150.

112. Two algorithms for the sieve, *J. Algorithms* **12** (1991), 179-182.

113. Functional iteration and the Josephus problem (with Andrew M. Odlyzko), Glasgow Math. J., 1991.

114. Ascending subsequences of permutations and the shapes of Young tableaux,*J. Combinatorial Theory, Ser. A* **60** (1992), 155-157.

115. The distribution of the binomial coefficients modulo p (with Richard Garfield), *J. Number Theory* **41** (1992), 1-5.

116. Rational function certification of multisum/integral/"q" identities (with D. Zeilberger), Research Announcement, *Bull. Amer. Math. Soc.* **27** (1992), 148-153.

117. An algorithmic proof theory for hypergeometric (ordinary and "q") multisum/integral identities (with D. Zeilberger), *Inventiones Mathematicæ* **108** (1992), 575-633.

118. Congruence problems involving Stirling numbers of the first kind (with A. J. Radcliffe and Rhodes Peele), *Fibonacci Quarterly*, **31** (1993), 73-80.

119. A footnote on two proofs of the Bieberbach-de Branges theorem, *Bull. London Math Soc.* **26** (1994), 61-63.

120. Asymptotic expansion of the Stirling numbers of the first kind, *J. Combinatorial Theory*, **64** (1993) 344-349.

121. When are subset sums equidistributed modulo m?, (with Stan Wagon), Electronic J. Combinatorics **1** (1994), #R3, 15pp.

122. On the crossing number of a graph and a problem in geometric probability, (with E. Scheinerman), Amer. Math. Monthly **101** (1994), 939-943.

123. On the coefficients of the Hardy-Ramanujan-Rademacher formula for $p(n)$, J. Number Theory (with Gert Almkvist) 1994.

124. The problem of the kings, Electron. J. Combinat. **2** (1995), #R4.

125. $A = B$, (with Marko Petkovšek and Doron Zeilberger), A K Peters, Ltd., Wellesley, MA, 1996.

126. Five surprisingly simple complexities, (with Volker Strehl) Symbolic computation in combinatorics Δ_1 (Ithaca, NY, 1993), *J. Symbolic Comput.* **20** (1995), no. 5-6, 725–729.

127. The computer-aided discovery of a theorem about Young tableaux, Symbolic computation in combinatorics Δ_1 (Ithaca, NY, 1993), *J. Symbolic Comput.* **20** (1995), no. 5-6, 731–735.

128. Counting pairs of lattice paths by intersections, (with Wayne Goddard, Walter Shur and Lily Yen), *J. Combin. Theory Ser. A* **74** (1996), 173–187.

129. A high-tech proof of the Mills-Robbins-Rumsey determinant identity (with Marko Petkovšek), *Electron. J. Combinat.* **3** (1996), no. 2, #R19.

130. Récents développements et problémes dans le domaine de la génération aléatoire, *Theoretical Comp. Sci.* **159** (1996), 5-13.

131. How to do Monthly problems with your computer, *The American Mathematical Monthly* **104** (June-July, 1997)

132. On crossing numbers, and some unsolved problems. Combinatorics, geometry and probability (Cambridge, 1993), 557–562, Cambridge Univ. Press, Cambridge, 1997.

133. When can the sum of $(1/p)$th of the binomial coefficients have closed form? (with Marko Petkovšek), *Electron. J. Combinat.*, **4**, no. 2 (1997), #R21.

134. On cyclic strings without long constant blocks (with Alexander Burstein), Fibonacci Quarterly **35** (1997), 240–247.

135. Basis partitions (with Jennifer Nolan and Carla Savage), Discrete Mathematics, **179** (1998), 277-283.

136. The number of independent sets in a grid graph (with Neil Calkin), SIAM J. Discr. Math. **11** (1998), 54-60.

137. A pentagonal number sieve (with Corteel, Sylvie; Savage, Carla D.; Zeilberger, Doron) J. Combin. Theory Ser. A **82** (1998), no. 2, 186–192.

138. Lattice walks in Z^d and permutations with no long ascending subsequences. Electron. J. Combin. **5** (1998), R2, 11 pp. (with Ira Gessel and Jonathan Weinstein)

139. Combinatorial families that are exponentially far from being listable in Gray code sequence (with Ted Chinburg and Carla D. Savage), Trans. Amer. Math. Soc. **351** (1999), no. 1, 379–402.

140. On the multiplicity of parts in a random partition (with S. Corteel, B. Pittel, and C. Savage), Random Structures and Algorithms **14** (1999), no. 2, 185–197.

141. Permutation patterns and continued fractions (with Aaron Robertson and Doron Zeilberger), Electron. J. Combin. **6** (1999), no. 1, #R38, 6 pp.

142. The number-theoretic content of the Jacobi triple product identity. The Andrews Festschrift (Maratea, 1998). Sm. Lothar. Combin. 42 (1999), Art. B42k, 4 pp.

143. Accelerated series for universal constants by the WZ method, Discrete Mathematics & Theoretical Computer Science **3:4** (1999), 155–158.

144. Recounting the rationals (with Neil Calkin), The American Mathematical Monthly **107** (2000), 360–363.

145. Lectures on Integer Partitions, Pacific Institute for the Mathematical Sciences, June, 2000 (monograph).

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