Vita
Joel H. Spencer

Professor of Mathematics and Computer Science
Courant Institute
251 Mercer St.
New York, NY 10012
212-998-3219
Email: spencer@cims.nyu.edu
Website: www.cs.nyu.edu/cs/faculty/spencer/index.html
Born: April 20, 1946
Married, Two Children
Citizen of U.S.
Degrees:
B.S. Massachusetts Institute of Technology, 1965
Ph.D. Harvard University (advisor A. Gleason), 1970

Member of A.M.S., M.A.A., and S.I.A.M.
Putnam Competition Winner 1962
M.A.A. Olympiad Committee 1975-78
N.A.S. Exchange Fellow, Budapest 1976-77
Sloane Foundation Fellow, 1977-81
Editor: Combinatorica, 1979-present
Putnam Competition Committee, 1980
Weizmann Institute (Israel) visitor, 1980
University of Reading (U.K.) visitor, 1981
IREX Exchange Fellow, Budapest, 1984
Ford Award, 1984
Budapest Semesters in Math Advisory Board, 1984-present
Associate Editor: American Math Monthly, 1986-1991
Ford Prize Committee, 1986-89
NSF-CBMS Lecturer, Durango, 1986
M.I.T. visitor, 1987, 1990, 2001
Microsoft visitor, 2003
Editor: SIAM J. of Discrete Math, 1987-1995
Brain Bogglers (as Maxwell Carver), Discover, 1987-89

Editor: Discrete Mathematics, 1988-1996
ARIDAM lecturer, 1988
Polya Prize Committee, 1990
Vice Chair, SIAM Disc Math Group, 1991-1993
Editor, The Annals of Applied Probability, 1990-1994
St. Flour (France) Probability School, Lecturer 1991
Cofounder: Random Structures and Algorithms, 1990-??
Institute for Mathematics and Its Applications, visitor 1993
AMS Program Committee for National Meetings 1994-5, chair 1995
Invited Speaker, International Congress of Mathematicians, Zürich, 1994
Nachdiplom Lectures, ETH (Zurich), Summer 1995
Institute for Advanced Study, visitor 1997, 1998
Chair, SIAM Disc Math Group, 1997-1999
Erdos Memorial Lectures, Hebrew University 2001
Fellow of the American Mathematical Society 2013

Publications of Joel H. Spencer

1. Intentionally complemented distributive lattices, Portugalie Mathematics, vol. 25, Fasc. 2, 99-104 (1966) (with N.E. Belnap, Jr.).
2. Maximal consistent families of triples, Journal of Combinatorial Theory 5, 1-8 (1968).
3. A characterization of clique graphs, Journal of Combinatorial Theory Series B, 10, 102-108 (1971) (with Fred S. Roberts).
4. Minimal completely separating systems, Journal of Combinatorial Theory, 8, 446-447 (1970).
5. Minimization of $\pm$ 1 matrices under line shifts, Colloquium Mathematicum (Poland) 23, 165-171 (1971) (with Tom Brown).
6. Optimal ranking of tournaments, Networks 1, 135-138 (1972).
7. Imbalances in k-colorations, Networks 1, 379-385 (1972) (with P. Erdős).
8. A constructive solution to a tournament problem, Canadian Math Bulletin 14, 45-47 (1971) (with R.L. Graham).
9. On cliques in graphs, Israel Journal of Math. 9, 419-421 (1971).
10. Directed graphs as unions of partial orders, Pacific Journal of Math. 39, 149-161 (1971) (with P. Fishburn).
11. A remark on coloring integers, Canadian Math. Bulletin 14, 45-47 (1971).
12. On small graphs with forced monochromatic triagles, in Lecture Notes in Mathematics, vol. 186, Recent Trends in Graph Theory, Springer Verlag 1971, 137-141 (with R.L. Graham).
13. Turan's Theorem for k-graphs, Discrete Mathematics 2, 183-186 (1972).
14. Minimal scrambling sets of simple orders, Acta Math. Hung. 22, 349-353 (1971).
15. Probabilistic methods in combinatorial math (book) (with P. Erdős) (1974) Academic Press/Akadamia Kiado, Publishers.

16. The number of semigroups of order n, Proc. Amer. Math. Soc. 55 (1976) 227-232 (with D.J. Kleitman and B. Rothschild).

17. Families of k-independent sets, Discrete Mathematics (with D. Kleitman) 6 (1973) 255-262.

18. Editor, The Art of Counting (book) 1973 (M.I.T. Press).

19. Random regular tournaments, Period Math. Hung., 5 (2) (1974) 105-120.

20. On a conjecture of Erdős and Hajnal, Math. Lapok, 22, (1973) 1-2 (in Hungarian).

21. Puncture sets, J. Comb. Theory, (A), 17 (1974) 329-336.

22. A deception game, Amer. Math. Monthly 80 (1973) 416-417.

23. Maximal asymmetry of graphs, Acta Math. Hung., 27 (1976) 47-53.

24. Euclidean Ramsey Theorems I, J. Comb. Theory A. 14 (1973) 241-363 (with P. Erdős, R.L. Graham, P. Montgomery, B.L. Rothschild, E.G. Straus).

25. Euclidean Ramsey Theorems II, Infinite and Finite Sets, Keszthely (Hungary) 1973, 529-557 (with P. Erdős, et. al.).

26. Euclidean Ramsey Theorems III. Infinite and Finite Sets, Keszthely (Hungary) 1973, 529-557 (with P. Erdős et.al.).

27. A generalized Rota conjecture for partitions, Studies in Applied Math., 53 (1974) 239-242.

28. Ramsey Theorems for multiple copies of graphs, Trans. Amer. Math. Soc. 209 (1975) 87-99 (with P. Erdős, S. Burr).

29. Ramsey's Theorem - A new lower bound, J. Comb. Th. Ser. A 18 (1975) 108-115.

30. Nonconstructive methods in discrete mathematics (in Studies in Combinatorics, MAA 1978, G.C. Rota ed.), pp. 142-178.

31. Restricted Ramsey configurations, J. Comb. Th., Ser. A., 19 (1975) 278-286.

32. Factoring the complete graph into factors with large star number, J. Comb. Th. Ser. B. 18 (1975) 180-183 (with P. Erdős, N. Sauer, J. Schaer).

33. Optimal doubling in backgammon, Operations Research 23 (1975) 1063-1071 (with E.B. Keeler).

34. Intersection Theorems for Systems of Sets, Canadian Math Bulletin 20 (2) 1977, 249-254.

35. Asymptotic Lower Bounds for Ramsey Functions, Discrete Math 20 (1977), 69-76.

36. Edge Disjoint Placements of Graphs, J. Comb. Theory B 25 (1978), 295-302.

37. Balancing Families of Sets, J. Comb. Theory A 25 (1978), 29-37 (with J.E. Olson).

38. On Extremal Density Theorems for Linear Forms (in Number Theory and Algebra, Academic Press, 1977), 103-107 (with R.L. Graham and H.S. Witsenhausen).

39. Balancing Games, J. Comb. Theory B 23 (1977), 68-74.

40. An Elementary Proof of a Theorem of Kronecker, The Fibronacci Quaterly 15 (1977), 9-10.

41. Optimally Ranking Unrankable Tournaments, Periodica Math Hung 11 (1980), 131-144.

42. All Finite Configurations are Almost Ramsey, J. Comb. Theory A 27 (1979), 401-403.

43. Strong Independence of Graph Copy Functions (in Graph Theory and Related Topics, Academic Press, 1978; J.A. Bondy, U.S.R. Murty, eds.) pp. 165-172 (with P. Erdős and L. Lovász).

44. Ramsey's Theorem for Spaces, Trans. Amer. Math. Soc. 249 (1979), 363-371.

45. A General Ramsey Product Theorem, Proc. Amer. Math. Soc. 73 (1979), 137-139 (with R.L. Graham).

46. Coping with Errors in Binary Search Procedures, J. Computer and Syst. Sci. 20 (1980), 396-404 (with D.J. Kleitman, A.R. Meyer, R.L. Rivest, K. Winklman).

47. Ramsey Theory (book), John Wiley (1980) (ix + 174 pp.), 2nd ed., John Wiley (1990) (xi+196 pp.) (with R.L. Graham and B.L. Rothschild).

48. Evolution of the n-cube, Computers and Math with Applications, 5 (1979), 33-40 (with P. Erdős).

49. Suresums, Combinatorica 1 (1981), 203-208.

50. Extremal Problems, Partition Theorems, Symmetric Hypergraphs, Combinatoria 1 (1981), 303-307.

51. Extremal Graph Theory, Bela Bollobas (book review), Bull. A.M.S. 2 (1980), 492-496.

52. Counting Magic Squares, Amer. Math. Monthly 87 (1980), 397-9.

53. Coloring n-sets Red and Blue, J. Comb. Theory A 30 (1981), 112-113.

54. Balancing Unit Vectors, J. Comb. Theory A 30 (1981) , 349-350.

55. Discrete Ham Sandwich Theorems, European J. Combinatorics 2 (1981), 291-298.

56. Extremal Uncrowded Hypergraphs, J. Comb. Theory A 32 (1982), 321-335 (with M. Ajtai, J. Komlos, J. Pintz, E. Szemeredi).

57. Ramsey Theory and Ramsey Theoreticians, J. Graph Theory 7 (1983), 15-23.

58. Sequences with small discrepency relative to n events, Compositio Math. 47 (1982) 365-392.

59. Canonical Configurations, J. Comb. Theory A 34 (1983) 325-330.

60. Unit Distances, J. Comb. Theory A, 37 (1984) 231-238 (with Joszef Beck).

61. Short Theorems with Long Proofs, Amer. Math. Monthly 90 (1983) 365-366.

62. Large Numbers and Unprovable Theorems, Amer. Math. Monthly 90 (1983) 669-675.

63. Balancing Matrices with Line Shifts, Combinatorica 3 (1983) 299-304 (with Jozsef Beck).

64. Integral Approximation Sequences, Math Programming 30 (1984) 88-98 (with Jozsef Beck).

65. Guess a Number - with Lying, Math Magazine 57 (1984) 105-108.

66. What's not Inside a Cayley Graph, Combinatorica 3 (1983) 239-241.

67. Well-distributed two-colorings of integers relative to long arithmetic progressions, Acta Arithmetica, 43 (1984) 287-294 (with Jozsef Beck).

68. On graphs which contain all sparse graphs, Annals Disc. Math 12 (1982), 21-26 (with L. Babai, F.R.K. Chung, P. Erdős, R.L. Graham).

69. On the decomposition of graphs into complete bipartite subgraphs, in Studies in Pure Mathematics, Akademiai Kiado 1983, 95-101 (with F.R.K. Chung and P. Erdős).

70. Unit Distances in the Euclidean Plane, in Graph Theory and Combinatorics, Academic Press 1984, B. Bollobas, ed., 294-304 (with E. Szemeredi and W.T. Trotter, Jr.).

71. Asymptotically good coverings, Pacific J. Mathematics, 118 (1985), 575-586.

72. Six Standard Deviations Suffice, Trans. Amer. Math. Soc., 289 (1985), 679-706.

73. Balancing Vectors in the Max Norm, Combinatorica 6 (1986), 55-65.

74. Extremal Subgraphs for Two Graphs, J. Comb. Th. Ser B 38 (1985) 248-260 (with F.R.K. Chung and P. Erdös).

75. Discrepancy of set-systems and matrices, Europ. J. of Comb.7 (1986) 151-160 (with L. Lovász and K. Vesztergombi).

76. Probabilistic Methods, Graphs and Combinatorics 1 (1985) 357-382.

77. On a Method for Random Graphs, Discrete Math. (1987) (with Z. Palka and A. Rucinski).

78. Four Roads to the Ramsey Function, Annals of Discrete Math. 28 (1985), 243-250.

79. Sharp concentration of the chromatic number on random graphs $G_{n,p}$. Combinatorica 7 (1987) 121-129 (with E. Shamir).

80. Combinatorics by Coin Flipping, Coll. Math. J. 17 (1986) 407-412.

81. Functions that never agree, Eur. J. Comb. 7 (1986), 207-210 (with A.R. Calderbank, P.C. Fishburn).

82. Three Hundred Million Points Suffice, J. Comb. Th. A. 49 (1988) 210-217.

83. Zero-One Laws for Sparse Random Graphs, J. Amer. Math. Soc. 1 (1988) 97-115 (with S. Shelah).

84. Ten Lectures on the Probabilistic Method (book) 1987, 2nd Ed. (1994) SIAM.

85. Asymptotic Behavior of the Chromatic Index for Hypergraphs, J. Comb. Th. - Ser. A <u>51</u> (1989) 24-42 (with N. Pippenger).

86. Ascending Waves, J. Comb. Th. - Ser. A <u>52</u> (1989) 275-287 (with N. Alon).

87. Disks, Balls and Walls: Analysis of a Combinatorial Game, Amer. Math Monthly <u>96</u> (1989) 481-493 (with R.J. Anderson, L. Lovász, P. Shor, E. Tardos, S. Winograd).

88. Cutting a graph into Two Dissimilar Halves, J. Graph Th. <u>12</u> (1988), 121-131 (with P. Erdős, M. Goldberg, J. Pach).

89. Tournament Ranking with Expected Profit in Polynomial Time, SIAM J. on Disc. Math. <u>1</u> (1988) 372-376 (with S. Poljak and V. Rödl).

90. Threshold Functions for Extension Statements, J. Comb. Th - Ser A <u>53</u> (1990), 286-305

91. How to Make a Graph Bipartite, J. Comb. Th. - Ser B <u>45</u> (1988), 86-98 (with P. Erdős, R. Faudree, J. Pach).

92. Infinite Spectra in the First Order Theory of Graphs, Combinatorica <u>10</u> (1990), 95-102.

93. Coloring the Projective Plane, Discrete Math <u>73</u> (1988), 213-220.

94. Monochromatic Sumsets, J. Comb. Th. - Ser. A <u>50</u> (1989), 162-163. (with P. Erdős)

95. Explicit Codes with Low Covering Radius, IEEE Trans. on Information Theory. <u>34</u> (1988) 1281-1285 (with J. Pach).

96. A Useful Elementary Correlation Inequality, J. Comb. Th. - Ser. A <u>50</u>(1989), 305-307 (with R. Boppana)

97. On the Mean Distance Between Points of a Graph, Congressus Numerantium <u>63</u> (with P. Erdős and J. Pach).

98. Threshold Spectra via the Ehrenfeucht game, Discrete Appl. Math <u>30</u>(1991), 235-252

99. Undecidable Probabilities, Random Graphs '87 (M. Karonski, J. Jaworski, A. Rucinski, ed.) John Wiley 1990, pp 305-311

100. Countable Sparse Random Graphs, Random Structures and Algorithms <u>1</u>(1990) 205-214

101. Clique Coverings of the Edges of a Random Graph, Combinatorica 13 (1993), 1-6 (with B. Bollobas, P. Erdős, D. West)

102. Note on vertex-partitions of Infinite Graphs, Discrete Math., 79 (1990), 107-108 (with J. Pach)

103. Graph Distance and Euclidean Distance on the Grid *in* Topics in Combinatorics and Graph Theory (1990) (with J. Pach and R. Pollack), 555-559

104. Subgraphs of Large Minimal Degree, *in* Random Graphs, Volume 2 (A. Frieze, T. Łuczak, eds.) John Wiley, 1992, pp 59-66 (with P. Erdős, T. Łuczak)

105. Extremal Subgraphs of Random Graphs, J. Graph Theory, 14 (1990), 599-622 (with L. Babai and M. Simonovits)

106. Counting Extensions, J. Combinatorial Th. (Ser. A), 55 (1990), 247-255

107. Gaps in difference sets, and the graph of nearly equal distances, in The Victor Klee Festschrift (P. Gritzman, B. Sturmfels, eds.), AMS, 1991 (with P. Erdős, E. Makai, J. Pach)

108. Lopsided Lovász Local Lemma and Latin Transversals, Disc. Appl. Math. ,30 (1991), 151-154 (with P. Erdős)

109. The probabilistic lens: Sperner, Turan and Bregman revisited, *in* A Tribute to Paul Erdős (A. Baker, B. Bollobas, A. Hajnal, eds.) Cambridge University Press, 1990, pp 391-396

110. Nonconvergence in the theory of random orders, Order 7 (1991), 341-348

111. Uncrowded Graphs, *in* Mathematics of Ramsey Theory, (J. Nesetril, V. Rodl, eds.) Springer-Verlag (1991) , Berlin, pp 253-262

112. Set Systems with No Union of Cardinality 0 Modulo m, Graphs and Combinatorics 7 (1991), 97-99 (with N. Alon, D. Kleitman, R. Lipton, R. Meshulam, M. Rabin)

113. When does the Zero-One Law hold?, J. Amer. Math. Soc. 4, (1991) 451-468 (with T. Łuczak)

114. Coloring Random and Semi-Random k-Colorable Graphs, J. of Algorithms 19. (1995) 204-234 (with A. Blum)

115. Three Thresholds for a Liar, Combinatorics, Probability and Computing 1 (1992) 81-93 (with P. Winkler)

116. Ulam's Searching Problems with a Fixed Number of Lies, Theoretical Computer Science 95 (1992), 307-321

117. Probabilistic Construction of Proportional Graphs, Random Structures & Algorithms, 3 (1992) 127-138 (with S. Janson)

118. Zero-One Laws with Variable Probability, Journal of Symbolic Logic 58 (1993), 1-14

119. The Probabilistic Method (book) (xiii+254 pp.) , John Wiley (1992), 2nd ed. (2000), 3rd ed. (2008) (with N. Alon)

120. Sparse Random Graphs: A Continuum of Complete Theories *in* Sets, Graphs and Numbers, Colloquia Math Soc. János Bolyai 60, Budapest 1991, pp 679-690

121. Random Sparse Unary Predicates, Random Structures & Algorithms 5 (1994), 375-394 (with S. Shelah)

122. Nine Lectures on Random Graphs, in Ecole d' Eté de Probabilités de Saint-Flour XXI-1991 (P.L. Hennequin, ed.) Lecture Notes in Mathematics 1541, Springer-Verlag. pp 293-347

123. Can You Feel the Double Jump?, Random Structures & Algorithms, 5 (1994), 191-204 (with S. Shelah)

124. Randomization, Derandomization, and Antirandomization: Three Games, Theoretical Computer Science 131 (1994), 415-430

125. The Janson Inequality, in Combinatorics, Paul Erdős is Eighty (volume 1), Keszthely (Hungary), 1993, 421-432

126. A Problem in Covering Progressions, Stud. Sci. Math. Hung. 30 (1994), 1-6 (with P. Erdős)

127. From Erdős to Algorithms, Discrete Math. 136 (1994), 295-304

128. Sidon Sets with Small Gaps (with P. Tetali) in Discrete Probability and Algorithms, (Aldous, et. al., eds) IMA Volumes in Math and its Application, vol. 72, Springer-Verlag., pp 103-110

129. Discrepancy in Arithmetic Progressions (with J. Matoušek), J. American Math. Soc. 9 (1996), 195-204

130. Probabilistic Methods in Combinatorics, *in* Proceedings of the ICM, Zürich, Switzerland 1994, Birkhäuser Verlag 1995, 1375-1383

131. Asymptotic Packing via A Branching Process, Random Structures & Algorithms 7 (1995), 167-172

132. A note on triangle-free graphs *in* Random Discrete Structures (D. Alduous, R. Pemantle, eds.), vol. 76, IMA Volumes in Mathematics and Its Applications, Springer-Verlag, 1995. pp 117-120. (with P. Erdős, S. Janson and T. Łuczak)

133. Modern probabilistic methods in Combinatorics *in* Surveys in Combinatorics 1995 (P. Rowlinson, ed.), London Math Society Lecture Note Series 218, Cambridge University Press, pp 215-231

134. Four Squares with Few Squares, *in* Number Theory: New York Seminar 1991 – 1995, (D. and C. Chudnovsky, M. Nathanson, eds.) Springer Verlag, 1996, 295-297

135. Sudden emergence of a giant k-core in a random graph. J. Combinatorial Theory, Ser B. 67 (1996), 111-151 (with B. Pittel, N. Wormald)

136. Probabilistic Methods, *in* Handbook of Combinatorics (R.L. Graham, M. Grötschel, L Lovász, eds.) Elsevier Science 1995, pp 1785-1817

137. Asymptotically Optimal Covering Designs, J. Combinatorial Theory, Ser A 75 (1996), 270-280 (with Daniel M. Gordon, Greg Kuperberg, Oren Patashnik)

138. Nearly perfect matchings in regular simple hypergraphs, Israel J. Math 100 (1997), 171-187 (with Noga Alon and Jeong-Han Kim)

139. Enumerating Graphs and Brownian Motion, Communications on Pure and Appl. Math. 50 (1997), 293-296

140. Covering with latin transversals, Discrete Applied Math., 57 (1995), 1-10 (with Noga Alon and Prasad Tetali)

141. Smoothness laws for random ordered graphs, *in* Logic and Random Structures, DIMACS series vol. 33, Amer. Math. Soc., (Ravi Boppana, James Lynch, eds.), 15-32 (with Ravi Boppana)

142. Real Time Asymptotic Packing, Electronic J. Combinatorics, 4(2) (1997) R19 (12pp)

143. The Erdős Existence Argument, *in* The Mathematics of Paul Erdős, Algorithms and Combinatorics vol. 13, Springer, 1997. (Ron Graham, Jarik Nesetril, eds.)

144. A Useful Elementary Correlation Inequality, II, J. Combinatorial Theory (Ser A) 84 (1998), 95-98

145. Random Unary Predicates: Almost Sure Theories and Countable Models, Random Structures & Algorithms 13 (1998), 229-248 (with Katherine St. John)

146. An Asymptotic Isoperimetric Inequality, GAFA, Geom. funct. anal. 8 (1998), 411-436 (with N. Alon and R. Boppana)

147. Geometric discrepancy theory, *in* Advances in Discrete and Computational Geometry (B. Chazelle, J. Goodman, R. Pollack, eds.), Contempory Mathematics vol. 223, American Math Soc., pp 355-368

148. New bounds on crossing numbers, Discrete and Computational Geometry 14 (2000), 623–644 (with J. Pach and G. Toth).

149. Uniformly Distributed Distances - A Geometric Application of Janson's Inequality, Combinatorica 19 (1999), 1-14 (with J. Pach)

150. On the limit values of probabilities for the first order properties of graphs, *in* Contemporary Trends in Discrete Mathematics, DIMACS Series vol. 49, Amer. Math. Soc., R. Graham et. al., eds., Amer. Math. Soc. 1999, pp 317-336 (with Lubos Thoma)

151. Ups and Downs of First Order Sentences on Random Graphs, Combinatorica 20 (2000), 263-280 (with G. Tardos)

152. Uniform Boundedness of Critical Crossing Probabilities implies Hyperscaling, Random Structures and Algorithms 15 (1999), 368-413 (with C. Borgs, J.T. Chayes and H. Kesten)

153. Counting Dyadic Equipartitions of the Unit Square, Discrete Mathematics 257 (2002), 481-499 (with J. Lagarias and J. Vinson)

154. Packing Ferrers Shaps, Combinatorics Probability and Computing 9 (2000), 205-211 (with N. Alon and Miklós Bóna)

155. Ultrahigh Moments for a Brownian Excursion, *in* Mathematics and Computer Science Algorithms, Trees, Combinatorics and Probabilities (Daniele Gardy, Abdelkader Mokkadem, Editors) Birkhauser Verlag, 2000, p 323-328

156. The tenacity of zero-one laws, Electronic J Combinatorics 8 (2001), R17, 15pp (with Katherine St. John)

157. Discrete Probability, *in* Mathematics Unlimited 2001 and Beyond, Springer-Verlag, 2001, Bjorn Engquist, Wilfried Schmid (Eds.), pp.1095–1104.

158. The degree sequence of a scale-free random graph process, Random Structures & Algorithms 18 (2001), 279-290 (with B. Bollobás, O. Riordan and G. Tusnady)

159. Random Graphs, Sets and Tournaments, *in* Paul Erdős and His Mathematics, vol 2. Bolyai Society Mathematical Studies, vol XI. (Eds. G. Halasz, L. Lovasz, M. Simonovits, V. T. Sos) Springer, Berlin, pp 637-648 (2002)

160. The Strange Logic of Random Graphs (book) Springer, 2001.

161. Birth of the Infinite Cluster: Finite-Size Scaling in Percolation, Communications in Mathematical Physics vol. 224 (1) 2001, pp 153-204 (with C. Borgs, J. Chayes, H. Kesten),

162. Packing Random Rectangles, Probab. Theory Relat. Fields 120 (2001), 585-599 (with E.G. Coffman, Jr., George Lueker, and Peter Winkler)

163. Crossing Numbers for Random Graphs, Random Structures & Algorithms 21 (2002), 347-358 (with Géza Toth)

164. Random Dyadic Tilings of the Unit Square, Random Structures & Algorithms, 21 (2002), 225-251 (with Svante Janson and Dana Randall)

165. A Halfliar's Game, Theoretical Computer Science, 313 (2004), 353-369 (with Ioana Dumitriu)

166. New results on the distribution of distances determined by a point set, Bolyai Soc. Math. Studies 11, Paul Erdos and his Mathematics, II, (Eds. G. Halasz, L. Lovasz, M. Simonovits, V. T. Sos) Springer, Berlin, J. Bolyai Math. Soc., Budapest, 2002, 499-511. (with E. Makai and J. Pach)

167. Branching processes with Negative Offspring Distributions, Annals of Combinatorics 7 (2003), 35-47 (with I. Dumitriu and C. Yan)

168. The Halflie Problem, Journal of Combinatorial Theory, Ser A, 103 (2003), 69-89 (with C. Yan)

169. A Scaling Result for Explosive Processes, Electronic J. Combinatorics 11(1) R31 (2004) 14pp (with Michael Mitzenmacher and Roberto Oliveira)

170. The Biplanar Crossing Number of the Random Graph, *in* Towards a Theory of Geometric Graphs, Janos Pach ed., Contemporary Mathematics 342, 2004, AMS. pp 269-272

171. Random Subgraphs of Finite Graphs: I. The Scaling Window under the Triangle Condition, Random Structures & Algorithms 27, 2005, 137-184. (with Christian Borgs, Jennifer T. Chayes, Remco van der Hofstad and Gordon Slade)

172. Random subgraphs of finite graphs: II. The lace expansion and the triangle condition, Annals of Probability 33, 2005, 1886-1944. (with Chistian Borgs, Jennifer T. Chayes, Remco van der Hofstad and Gordon Slade)

173. Random subgraphs of finite graphs: III. The phase transition for the n-cube, Combinatorica 26 (2006), 395-410. (with Chistian Borgs, Jennifer T. Chayes, Remco van der Hofstad and Gordon Slade)

174. Simulating a Random Walk with Constant Error, Combinatorics, Probability & Computing (with Joshua N. Cooper) (accepted for publication)

175. How Complex are Random Graphs in First Order Logic, Random Structures & Algorithms (with Jeong-Han Kim, Oleg Pikhurko and Oleg Verbitsky) 26, 2005, 119-145

176. Discrepancy Games, Electronic Journal of Combinatorics, 12(1), R51 (2005), 9 pp (with Noga Alon, Michal Krivelevich and Tibor Szabó)

177. Succint Definitions in the First Order Theory of Graphs (with Oleg Pikhurko and Oleg Verbitsky), Annals Pure and Applied Logic 139, 2006, 74-109

178. Connectivity Transitions in Networks with Super-Linear Preferential Attachment, Internet Mathematics 2 (2005), 121-163 (with Roberto Oliveira)

179. The Liar Game over an Arbitrary Channel (with Ioana Dumitriu), Combinatorica 25 (2005), 537-559

180. The Two Batch Liar Game over an Arbitrary Channel (with Ioana Dumitriu), SIAM Journal of Discrete Math 19 (2006), 1056-1064

181. Birth Control for Giants (with Nick Wormald), Combinatorica 27 (2007), 587-628

182. Counting Connected Graphs Asymptotically (with Remco van der Hofstad), European Journal of Combinatorics 27 (2006), 1294-1320

183. Decomposable graphs and definitions with no quantifier alternation, (with Oleg Pikhurko and Oleg Verbitsky) European Journal of Combinatorics 28 (2007) 2264-2283

184. Deterministic Random Walks on the Integers (with Joshua Cooper, Benjamin Doerr and Gabor Tardos), European Journal of Combinatorics 28 (2007), 2072-2090

185. First Order Definability of Trees and Sparse Random Graphs (with Tom Bohman, Alan Frieze, Tomasz Łuczak, Clifford Smyth and Oleg Pikhurko), Combinatorics, Probability & Combinatorics 16 (2007), 375-400.

186. Logic and Random Structures, in Finite Model Theory and Its Applications, pp 231-255, Springer, 2007.

187. A Point Process Describing the Component Sizes in the Critical Window of the Random Graph Function, Combinatorics, Probability & Computing 16 (2007), 631-658 (with Svante Janson)

188. Erdős Magic, in LATIN 2002, Lecture Notes in Computer Science, volume 2286/2002, pp 111-119. Springer

189. The complexity of random order structures, Annals of Pure and Applied Logic 152 (2008), 174-179 (with Katherine St. John)

190. On the size of induced acyclic subgraphs in random digraphs, DMTCS 10 (2008), 47-54.

191. The maturation of the probabilistic method, *in* Building Bridges (M. Grötschel, G. Katona, eds.) Bolyai Society Mathematical Studies 19, Springer. pp 515-524, 2008.

192. Explosive Percolation in Random Networks, Science, 323 (5920) 1453-1455, 2009. (with Raissa D'Souza and Dmitris Achlioptas)

193. Complexity and Effective Prediction, Games and Economic Behavior (2010), 165-168 (with Abraham Neyman)

194. The Giant Component - The Golden Anniversary, Notices of the AMS 57 (2010), 720-724

195. The Elementary Proof of the Prime Number Theorem, Math Intelligencer 31 18-23 (with Ron Graham)

196. Deterministic random walks on regular trees, Random Structures & Algorithms 37 (2010) 353-366 (with Joshua Cooper, Benjamin Doerr, Tobias Friedrich)

197. The second largest component in the supercritical 2D Hamming graphs, Random Structures & Algorithms 36 (2010),80-89 (with Malvina Luczak and Remco v.d. Hofstad)

198. Dynamics of Stochastic Neuronal Networks and the Connections to Random Graph Theory, Math. Model Nat. Phenom., to appear (with Lee deVille and Charles Peskin)

199. Phase Transitions for Modified Erdős-Rényi Processes, Arkiv för Matematik 50 (2012), 305-329 (with Svante Janson)

200. Potpourri, Journal of Combinatorics, 1 (2010), 237-264

201. The Bohman-Frieze process near criticality, Random Structures & Algorithms (to appear, 2013) (with Mihyun Kang and William Perkins)

202. Deterministic Discrepancy Minimization, Algorithmica (to appear), (with Nikhil Bansal)

203. Asymptopia (book), American Math Society (2014)